



# TWO COLUMN DIOXIN, FURAN AND PCB REV-A CALIBRATION SOLUTIONS (CS1H-6H) (UNLABELED/<sup>13</sup>C<sub>12</sub>, 99%)

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 23/02/2021

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Version: 1.0

EDF-5443-A

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Product form : Mixtures  
Product name : TWO COLUMN DIOXIN, FURAN AND PCB REV-A CALIBRATION SOLUTIONS (CS1H-6H)  
(UNLABELED/<sup>13</sup>C<sub>12</sub>, 99%)  
Product code : EDF-5443-A

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### 1.2.1. Relevant identified uses

Main use category : Professional use  
Industrial/Professional use spec : For professional use only

#### 1.2.2. Uses advised against

No additional information available

### 1.3. Details of the supplier of the safety data sheet

Cambridge Isotope Laboratories, Inc.  
50 Frontage Road  
Andover, MA 01810  
USA

USA: 1-800-322-1174 Int: 1-978-749-8000  
[cilsales@isotope.com](mailto:cilsales@isotope.com) [www.isotope.com](http://www.isotope.com)

### Emergency telephone number

Emergency numbers:

Chemtrec: 1-800-424-9300 (24 hours)  
International: 1-703-741-5970 (24 hours)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flam. Liq. 3 H226  
Acute Tox. 4 (Inhalation) H332  
Skin Irrit. 2 H315  
Eye Irrit. 2 H319  
STOT SE 3 H336  
Asp. Tox. 1 H304

Full text of hazard classes and H-statements : see section 16

#### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

R10  
Xn; R20  
Xi; R36/38  
Xn; R65  
R67

Full text of R-phrases: see section 16

#### GHS-US classification

Flam. Liq. 3 H226  
Acute Tox. 4 (Inhalation) H332  
Skin Irrit. 2 H315  
Eye Irrit. 2 H319  
STOT SE 3 H336  
Asp. Tox. 1 H304

Full text of H statements : see section 16

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### Adverse physicochemical, human health and environmental effects

No additional information available

## 2.2. Label elements

### Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



Signal word (CLP)

: Danger

Hazard statements (CLP)

: H226 - Flammable liquid and vapor  
H304 - May be fatal if swallowed and enters airways  
H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H332 - Harmful if inhaled  
H336 - May cause drowsiness or dizziness

Precautionary statements (CLP)

: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P233 - Keep container tightly closed.  
P240 - Ground/bond container and receiving equipment.  
P241 - Use explosion-proof electrical/ventilating/lighting equipment  
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.  
P264 - Wash hands, forearms and face thoroughly after handling.  
P271 - Use only outdoors or in a well-ventilated area.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

### GHS-US labeling

Hazard pictograms (GHS-US)



Signal word (GHS-US)

: Danger

Hazard statements (GHS-US)

: H226 - Flammable liquid and vapor  
H304 - May be fatal if swallowed and enters airways  
H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H332 - Harmful if inhaled  
H336 - May cause drowsiness or dizziness

Precautionary statements (GHS-US)

: P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P233 - Keep container tightly closed.  
P240 - Ground/Bond container and receiving equipment  
P241 - Use explosion-proof electrical/ventilating/lighting equipment  
P242 - Use only non-sparking tools.  
P243 - Take precautionary measures against static discharge.  
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.  
P264 - Wash hands, forearms and face thoroughly after handling.  
P271 - Use only outdoors or in a well-ventilated area.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P310 - If swallowed: Immediately call a poison center or doctor  
P302+P352 - If on skin: Wash with plenty of water  
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing  
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P312 - Call a poison center or doctor if you feel unwell  
P321 - Specific treatment (see supplemental first aid instruction on this label)  
P331 - Do NOT induce vomiting.  
P332+P313 - If skin irritation occurs: Get medical advice/attention.  
P337+P313 - If eye irritation persists: Get medical advice/attention.

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P362+P364 - Take off contaminated clothing and wash it before reuse.  
P370+P378 - In case of fire: Use media other than water to extinguish.  
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.  
P403+P235 - Store in a well-ventilated place. Keep cool.  
P405 - Store locked up.  
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Directive 67/548/EEC
N-NONANE UNLABELED	(CAS-No.) 111-84-2 (EC-No.) 203-913-4	91.7945103 - 99.995822	R10 Xn; R20 Xn; R65 Xi; R36/38 R67
ISOOCTANE UNLABELED	(CAS-No.) 540-84-1 (EC-No.) 208-759-1 (EC Index-No.) 601-009-00-8 (REACH-no) 01-2119457965-22	0.002698 - 5.378772	Xi; R38 N; R50/53 R67 F; R11 Xn; R65
TOLUENE UNLABELED	(CAS-No.) 108-88-3 (EC-No.) 203-625-9 (EC Index-No.) 601-021-00-3 (REACH-no) 01-2119471310-51	0.001417 - 2.824741	F; R11 Xi; R38 Xn; R65 Repr.Cat.3; R62 Repr.Cat.3; R63 R67 N; R51/53 Xn; R48/20
OCTACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 39001-02-0	0.00000007 - 0.0001388	Xn; R22 Xi; R36 R53
OCTACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 3268-87-9	0.00000007 - 0.0001388	T+; R28 Xi; R36 Carc.Cat.3; R40
1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 39227-28-6	0.000000028 - 0.0000555	Xn; R22 Xn; R65 R53
1,2,3,4,7,8-HEXACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 70648-26-9	0.000000028 - 0.0000555	Xn; R22 Xi; R36 R53
1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 19408-74-3	0.000000028 - 0.0000555	Xn; R20/21/22 Carc.Cat.1; R45
3,3',4,4',5,5'-HEXACB UNLABELED	(CAS-No.) 32774-16-6 (EC Index-No.) 602-039-00-4	0.000000028 - 0.0000555	N; R50/53 Xn; R22
3,3',4,4',5-PENTACB UNLABELED	(CAS-No.) 57465-28-8 (EC Index-No.) 602-039-00-4	0.000000028 - 0.0000555	R33
3,3',4,4'-TETRACB UNLABELED	(CAS-No.) 32598-13-3 (EC Index-No.) 602-039-00-4	0.000000028 - 0.0000555	R33 N; R50/53
3,4,4',5-TETRACB UNLABELED	(CAS-No.) 70362-50-4 (EC Index-No.) 602-039-00-4	0.000000028 - 0.0000555	N; R50/53 R33
2,2',3,4,4',5,5'-HEPTACB UNLABELED	(CAS-No.) 35065-29-3	0.000000028 - 0.0000555	R33
2,3,3',4,4',5-HEXACB UNLABELED	(CAS-No.) 38380-08-4 (EC Index-No.) 602-039-00-4	0.000000028 - 0.0000555	R33
2',3,4,4',5-PENTACB UNLABELED	(CAS-No.) 65510-44-3 (EC Index-No.) 602-039-00-4	0.000000028 - 0.0000555	R33

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Name	Product identifier	%	Classification according to Directive 67/548/EEC
2,3,3',4,4'-PENTACB UNLABELED	(CAS-No.) 32598-14-4 (EC Index-No.) 602-039-00-4	0.000000028 - 0.0000555	Xn; R22 R33 N; R50/53
2,3,4,4',5-PENTACB UNLABELED	(CAS-No.) 74472-37-0 (EC Index-No.) 602-039-00-4	0.000000028 - 0.0000555	Xn; R22 N; R50/53
1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 35822-46-9	0.000000028 - 0.0000555	Xn; R22 Xn; R65 R53
1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 57652-85-7	0.000000028 - 0.0000555	Xn; R22 Xn; R65 R53
1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 67562-39-4	0.000000028 - 0.0000555	Xn; R22 Xi; R36 R53
1,2,3,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 57117-44-9	0.000000028 - 0.0000555	Xn; R22 Xi; R36 R53
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 72918-21-9	0.000000028 - 0.0000555	Xn; R22 Xi; R36 R53
2,3,4,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 60851-34-5	0.000000028 - 0.0000555	Xn; R22 Xi; R36 R53
1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 55673-89-7	0.000000028 - 0.0000555	Xn; R22 Xi; R36 R53
2,3,3',4,4',5,5'-HEPTACB UNLABELED	(CAS-No.) 39635-31-9 (EC Index-No.) 602-039-00-4	0.000000028 - 0.0000555	R33
2,3',4,4',5,5'-HEXACB UNLABELED	(CAS-No.) 52663-72-6 (EC Index-No.) 602-039-00-4	0.000000028 - 0.0000555	R33
2,3,3',4,4',5'-HEXACB UNLABELED	(CAS-No.) 69782-90-7 (EC Index-No.) 602-039-00-4	0.000000028 - 0.0000555	R33
2,2',3,3',4,4',5-HEPTACB UNLABELED	(CAS-No.) 35065-30-6	0.000000028 - 0.0000555	R33
2,3',4,4',5-PENTACB UNLABELED	(CAS-No.) 31508-00-6 (EC-No.) 215-648-1 (EC Index-No.) 602-039-00-4	0.000000028 - 0.0000555	Xn; R22
2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 1746-01-6	0.000000014 - 0.0000278	Xn; R22 Xn; R65 R53
1,3,6,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 33423-92-6	0.000000014 - 0.0000278	T+; R26/27/28 Carc.Cat.1; R45
1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 40321-76-4	0.000000014 - 0.0000278	Xn; R22 Xn; R65 R53
1,2,8,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 62470-54-6	0.000000014 - 0.0000278	T+; R26/27/28 Carc.Cat.1; R45
1,3,7,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 62470-53-5	0.000000014 - 0.0000278	T+; R26/27/28 Carc.Cat.1; R45
2,3,7,8-TETRACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 51207-31-9	0.000000014 - 0.0000278	Xn; R22 Xi; R36 R53
1,2,3,7,8-PENTACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 57117-41-6	0.000000014 - 0.0000278	Xn; R22 Xi; R36 R53
2,3,4,7,8-PENTACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 57117-31-4	0.000000014 - 0.0000278	Xn; R22 Xi; R36 R53

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1,2,8,9-TETRACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 70648-22-5 (EC-No.) (EC Index-No.)	0.000000014 - 0.0000278	Xi; R36/37/38 Xn; R22 R53
1,2,7,8-TETRACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 58802-20-3	0.000000014 - 0.0000278	Xi; R36/37/38 Xn; R22 R53
1,3,6,8-TETRACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 71998-72-6	0.000000014 - 0.0000278	Xi; R36/37/38 Xn; R22 R53
1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 55673-89-7 (Unlabeled)	0.000002785 - 0.0000028	Xn; R22 Xi; R36 R53
OCTACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 39001-02-0 (Unlabeled)	0.000002785 - 0.0000028	Xn; R22 Xi; R36 R53
3,3',4,4'-TETRACB (PCB-77) (13C12, 99%)	(CAS-No.) 105600-23-5 (EC Index-No.) 602-039-00-4 (Unlabeled)	0.000001393 - 0.0000014	Xn; R48/20 N; R50/53
3,3',4,4',5-PENTACB (PCB-126) (13C12, 99%)	(CAS-No.) 208263-65-4 (EC Index-No.) 602-039-00-4	0.000001393 - 0.0000014	Xn; R48/20 N; R50/53 R33
3,3',4,4',5,5'-HEXACB (PCB-169) (13C12, 99%)	(CAS-No.) 32774-16-6 (Unlabeled) (EC Index-No.) 602-039-00-4	0.000001393 - 0.0000014	N; R50/53 Xn; R48/20/21/22
3,4,4',5-TETRACB (PCB-81) (13C12, 99%)	(CAS-No.) 208461-24-9 (EC Index-No.) 602-039-00-4	0.000001393 - 0.0000014	Xn; R48/20/21/22 N; R50/53 R33
2,3',4,4',5-PENTACB (PCB-118) (13C12, 98%)	(CAS-No.) 104130-40-7 (EC-No.) 215-648-1 (EC Index-No.) 602-039-00-4	0.000001393 - 0.0000014	Xn; R48/20/21/22 N; R50/53 R33
2',3,4,4',5-PENTACB (PCB-123) (13C12, 99%)	(CAS-No.) 208263-64-3 (EC Index-No.) 602-039-00-4	0.000001393 - 0.0000014	Xn; R48/20/21/22 N; R50/53 R33
2,3,3',4,4'-PENTACB (PCB-105) (13C12, 99%)	(CAS-No.) 208263-62-1 (EC Index-No.) 602-039-00-4	0.000001393 - 0.0000014	Xn; R48/20/21/22 Xi; R41 N; R50/53 R33
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 72918-21-9 (Unlabeled)	0.000001393 - 0.0000014	Xn; R22 Xi; R36 R53
1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) 40321-76-4 (Unlabeled)	0.000001393 - 0.0000014	Xn; R22 Xn; R65 R53
1,3,6,8-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) 33423-92-6 (Unlabeled)	0.000001393 - 0.0000014	T+; R26/27/28 Carc. Cat. 1; R45
2,3,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 89059-46-1 (Unlabeled)	0.000001393 - 0.0000014	Xn; R22 Xi; R36 R53
1,2,3,4,7,8-HexaCDD (13C12, 99%)	(CAS-No.) 109719-80-4	0.000001393 - 0.0000014	Xn; R22 Xn; R65 R53
1,2,3,6,7,8-HexaCDD (13C12, 99%)	(CAS-No.) 109719-81-5	0.000001393 - 0.0000014	N; R51/53 T; R39/23/24/25
1,2,3,7,8,9-HexaCDD (13C12, 99%)	(CAS-No.) 109719-82-6	0.000001393 - 0.0000014	Xn; R20/21/22 Carc. Cat. 1; R45
1,2,3,4,6,7,8-HeptaCDD (13C12, 99%)	(CAS-No.) 109719-83-7	0.000001393 - 0.0000014	Xn; R22 Xn; R65 R53

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OctaCDD (13C12, 99%)	(CAS-No.) 114423-97-1	0.000001393 - 0.0000014	T+; R28 Xi; R36 Carc.Cat.3; R40
1,2,3,7,8-PentaCDF (13C12, 99%)	(CAS-No.) 109719-77-9	0.000001393 - 0.0000014	Xn; R22 Xi; R36 R53
2,3,4,7,8-PentaCDF (13C12, 99%)	(CAS-No.) 116843-02-8	0.000001393 - 0.0000014	Xn; R22 Xi; R36 R53
1,2,3,4,7,8-HexaCDF (13C12, 99%)	(CAS-No.) 116843-03-9	0.000001393 - 0.0000014	Xn; R22 Xi; R36 R53
1,2,3,6,7,8-HexaCDF (13C12, 99%)	(CAS-No.) 116843-03-9	0.000001393 - 0.0000014	Xn; R22 Xi; R36 R53
2,3,4,6,7,8-HexaCDF (13C12, 99%)	(CAS-No.) 116843-05-1	0.000001393 - 0.0000014	Xn; R22 Xi; R36 R53
1,2,3,4,6,7,8-HeptaCDF (13C12, 99%)	(CAS-No.) 109719-84-8	0.000001393 - 0.0000014	Xn; R22 Xi; R36 R53
2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) 1746-01-6 (Unlabeled)	0.000001393 - 0.0000014	Xn; R65 R53 Xn; R20/22
2,2',3,4,4',5,5'-HEPTACB (PCB-180) (13C12, 99%)	(CAS-No.) 35065-29-3 (Unlabeled)	0.000001393 - 0.0000014	N; R50/53
2,2',3,3',5,5',6-HEPTACB (PCB-178) (13C12, 99%)	(CAS-No.) 232919-67-4 (EC Index-No.) 602-039-00-4 (Unlabeled)	0.000001393 - 0.0000014	N; R50/53 R48
2,3,3',4,4',5-HEXACB (PCB-156) (13C12, 99%)	(CAS-No.) 208263-68-7 (EC Index-No.) 602-039-00-4	0.000001393 - 0.0000014	N; R50/53 Xn; R48/21/22 R33
2,2',3,4,4',5'-HEXACB (PCB-138) (13C12, 99%)	(CAS-No.) 208263-66-5 (EC Index-No.) 602-039-00-4	0.000001392 - 0.0000014	Xn; R48/20/21/22 N; R50/53 R33
2,3',4',5-TETRACB (PCB-70) (13C12, 99%)	(CAS-No.) 208263-81-4 (EC Index-No.) 602-039-00-4	0.000001392 - 0.0000014	N; R50/53 R33 R48
2,3,3',5,5'-PENTACB (PCB-111) (13C12, 99%)	(CAS-No.) 235416-29-2 (EC Index-No.) 602-039-00-4	0.000001393 - 0.0000014	Xn; R48/20/21/22 N; R50/53 R33
2,2',3,3',4,4',5-HEPTACB (PCB-170) (13C12, 99%)	(CAS-No.) 35065-30-6 (Unlabeled) (EC Index-No.) 602-039-00-4	0.000001392 - 0.0000014	N; R50/53 R33
2,3,3',4,4',5,5'-HEPTACB (PCB-189) (13C12, 99%)	(CAS-No.) 208263-73-4 (EC Index-No.) 602-039-00-4	0.000001393 - 0.0000014	Xn; R48/20/21/22 N; R50/53 R33
2,3,3',4,4',5'-HEXACB (PCB-157) (13C12, 99%)	(CAS-No.) 235416-30-5 (EC Index-No.) 602-039-00-4	0.000001393 - 0.0000014	Xn; R48/20/21/22 N; R50/53 R33
2,3',4,4',5,5'-HEXACB (PCB-167) (13C12, 99%)	(CAS-No.) 208263-69-8 (EC Index-No.) 602-039-00-4	0.000001393 - 0.0000014	Xn; R48/20/21/22 N; R50/53 R33
2,3,4,4',5-PENTACB (PCB-114) (13C12, 99%)	(CAS-No.) 208263-63-2 (EC Index-No.) 602-039-00-4	0.000001393 - 0.0000014	Xn; R48/20/21/22 N; R50/53 R33
3,3',4,5'-TETRACB (PCB-79) (13C12, 99%)	(CAS-No.) 41464-48-6 (Unlabeled) (EC Index-No.) 602-039-00-4 (Unlabeled)	0.000001392 - 0.0000014	R48 N; R50/53

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1,2,3,4,6,7-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) NA	0.000001392 - 0.0000014	Xn; R22 Xn; R65 R53
1,2,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 58802-20-3 (Unlabeled)	0.000001392 - 0.0000014	Xi; R36/37/38 Xn; R22 R53
1,2,3,4-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) 114423-99-3 (Unlabeled)	0.000001392 - 0.0000014	T+; R26/27/28 Carc.Cat.1; R45
1,2,3,4,6-PENTACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 83704-47-6 (EC-No.) (EC Index-No.)	0.000001392 - 0.0000014	Xi; R36/37/38 Xn; R22 R53
1,2,3,4,6,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 69698-58-4 (EC-No.) (EC Index-No.)	0.000001392 - 0.0000014	Xi; R36/37/38 Xn; R22 R53

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
N-NONANE UNLABELED	(CAS-No.) 111-84-2 (EC-No.) 203-913-4	91.7945103 - 99.995822	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation:vapour), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H336 Asp. Tox. 1, H304
ISOOCTANE UNLABELED	(CAS-No.) 540-84-1 (EC-No.) 208-759-1 (EC Index-No.) 601-009-00-8 (REACH-no) 01-2119457965-22	0.002698 - 5.378772	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
TOLUENE UNLABELED	(CAS-No.) 108-88-3 (EC-No.) 203-625-9 (EC Index-No.) 601-021-00-3 (REACH-no) 01-2119471310-51	0.001417 - 2.824741	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304
OCTACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 39001-02-0	0.00000007 - 0.0001388	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
OCTACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 3268-87-9	0.00000007 - 0.0001388	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 39227-28-6	0.000000028 - 0.0000555	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,4,7,8-HEXACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 70648-26-9	0.000000028 - 0.0000555	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 19408-74-3	0.000000028 - 0.0000555	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:dust,mist), H332 Carc. 1A, H350
3,3',4,4',5,5'-HEXACB UNLABELED	(CAS-No.) 32774-16-6 (EC Index-No.) 602-039-00-4	0.000000028 - 0.0000555	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
3,3',4,4',5-PENTACB UNLABELED	(CAS-No.) 57465-28-8 (EC Index-No.) 602-039-00-4	0.000000028 - 0.0000555	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
3,3',4,4'-TETRACB UNLABELED	(CAS-No.) 32598-13-3 (EC Index-No.) 602-039-00-4	0.000000028 - 0.0000555	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
3,4,4',5-TETRACB UNLABELED	(CAS-No.) 70362-50-4 (EC Index-No.) 602-039-00-4	0.000000028 - 0.0000555	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,2',3,4,4',5,5'-HEPTACB UNLABELED	(CAS-No.) 35065-29-3	0.000000028 - 0.0000555	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

# TWO COLUMN DIOXIN, FURAN AND PCB REV-A CALIBRATION SOLUTIONS (CS1H-6H) (UNLABELED/13C12, 99%)

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## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2,3,3',4,4',5-HEXACB UNLABELED	(CAS-No.) 38380-08-4 (EC Index-No.) 602-039-00-4	0.000000028 - 0.0000555	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2',3,4,4',5-PENTACB UNLABELED	(CAS-No.) 65510-44-3 (EC Index-No.) 602-039-00-4	0.000000028 - 0.0000555	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3,3',4,4'-PENTACB UNLABELED	(CAS-No.) 32598-14-4 (EC Index-No.) 602-039-00-4	0.000000028 - 0.0000555	Eye Dam. 1, H318 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3,4,4',5-PENTACB UNLABELED	(CAS-No.) 74472-37-0 (EC Index-No.) 602-039-00-4	0.000000028 - 0.0000555	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 35822-46-9	0.000000028 - 0.0000555	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 57652-85-7	0.000000028 - 0.0000555	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 67562-39-4	0.000000028 - 0.0000555	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,3,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 57117-44-9	0.000000028 - 0.0000555	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 72918-21-9	0.000000028 - 0.0000555	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
2,3,4,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 60851-34-5	0.000000028 - 0.0000555	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 55673-89-7	0.000000028 - 0.0000555	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
2,3,3',4,4',5,5'-HEPTACB UNLABELED	(CAS-No.) 39635-31-9 (EC Index-No.) 602-039-00-4	0.000000028 - 0.0000555	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3',4,4',5,5'-HEXACB UNLABELED	(CAS-No.) 52663-72-6 (EC Index-No.) 602-039-00-4	0.000000028 - 0.0000555	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3,3',4,4',5'-HEXACB UNLABELED	(CAS-No.) 69782-90-7 (EC Index-No.) 602-039-00-4	0.000000028 - 0.0000555	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,2',3,3',4,4',5-HEPTACB UNLABELED	(CAS-No.) 35065-30-6	0.000000028 - 0.0000555	STOT RE 2, H373 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410
2,3',4,4',5-PENTACB UNLABELED	(CAS-No.) 31508-00-6 (EC-No.) 215-648-1 (EC Index-No.) 602-039-00-4	0.000000028 - 0.0000555	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 1746-01-6	0.000000014 - 0.0000278	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,3,6,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 33423-92-6	0.000000014 - 0.0000278	Acute Tox. 2 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 2 (Inhalation:dust,mist), H330 Carc. 1A, H350
1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 40321-76-4	0.000000014 - 0.0000278	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,8,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 62470-54-6	0.000000014 - 0.0000278	Acute Tox. 2 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 2 (Inhalation:dust,mist), H330 Carc. 1A, H350
1,3,7,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 62470-53-5	0.000000014 - 0.0000278	Acute Tox. 2 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 2 (Inhalation:dust,mist), H330 Carc. 1A, H350
2,3,7,8-TETRACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 51207-31-9	0.000000014 - 0.0000278	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413



# TWO COLUMN DIOXIN, FURAN AND PCB REV-A CALIBRATION SOLUTIONS (CS1H-6H) (UNLABELED/13C12, 99%)

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1,2,3,7,8-PENTACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 57117-41-6	0.000000014 - 0.0000278	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
2,3,4,7,8-PENTACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 57117-31-4	0.000000014 - 0.0000278	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,8,9-TETRACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 70648-22-5 (EC-No.) (EC Index-No.)	0.000000014 - 0.0000278	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 4, H413
1,2,7,8-TETRACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 58802-20-3	0.000000014 - 0.0000278	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 4, H413
1,3,6,8-TETRACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 71998-72-6	0.000000014 - 0.0000278	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 4, H413
1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 55673-89-7 (Unlabeled)	0.000002785 - 0.0000028	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
OCTACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 39001-02-0 (Unlabeled)	0.000002785 - 0.0000028	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
3,3',4,4'-TETRACB (PCB-77) (13C12, 99%)	(CAS-No.) 105600-23-5 (EC Index-No.) 602-039-00-4 (Unlabeled)	0.000001393 - 0.0000014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
3,3',4,4',5-PENTACB (PCB-126) (13C12, 99%)	(CAS-No.) 208263-65-4 (EC Index-No.) 602-039-00-4	0.000001393 - 0.0000014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
3,3',4,4',5,5'-HEXACB (PCB-169) (13C12, 99%)	(CAS-No.) 32774-16-6 (Unlabeled) (EC Index-No.) 602-039-00-4	0.000001393 - 0.0000014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
3,4,4',5-TETRACB (PCB-81) (13C12, 99%)	(CAS-No.) 208461-24-9 (EC Index-No.) 602-039-00-4	0.000001393 - 0.0000014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3',4,4',5-PENTACB (PCB-118) (13C12, 98%)	(CAS-No.) 104130-40-7 (EC-No.) 215-648-1 (EC Index-No.) 602-039-00-4	0.000001393 - 0.0000014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2',3,4,4',5-PENTACB (PCB-123) (13C12, 99%)	(CAS-No.) 208263-64-3 (EC Index-No.) 602-039-00-4	0.000001393 - 0.0000014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3,3',4,4'-PENTACB (PCB-105) (13C12, 99%)	(CAS-No.) 208263-62-1 (EC Index-No.) 602-039-00-4	0.000001393 - 0.0000014	Eye Dam. 1, H318 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 72918-21-9 (Unlabeled)	0.000001393 - 0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) 40321-76-4 (Unlabeled)	0.000001393 - 0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,3,6,8-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) 33423-92-6 (Unlabeled)	0.000001393 - 0.0000014	Acute Tox. 2 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 2 (Inhalation:dust,mist), H330 Carc. 1A, H350
2,3,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 89059-46-1 (Unlabeled)	0.000001393 - 0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,3,4,7,8-HexaCDD (13C12, 99%)	(CAS-No.) 109719-80-4	0.000001393 - 0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,6,7,8-HexaCDD (13C12, 99%)	(CAS-No.) 109719-81-5	0.000001393 - 0.0000014	Eye Irrit. 2, H319 Aquatic Chronic 2, H411
1,2,3,7,8,9-HexaCDD (13C12, 99%)	(CAS-No.) 109719-82-6	0.000001393 - 0.0000014	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:dust,mist), H332 Carc. 1A, H350

# TWO COLUMN DIOXIN, FURAN AND PCB REV-A CALIBRATION SOLUTIONS (CS1H-6H) (UNLABELED/13C12, 99%)

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1,2,3,4,6,7,8-HeptaCDD (13C12, 99%)	(CAS-No.) 109719-83-7	0.000001393 - 0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
OctaCDD (13C12, 99%)	(CAS-No.) 114423-97-1	0.000001393 - 0.0000014	Acute Tox. 2 (Oral), H300 Eye Irrit. 2, H319 Carc. 2, H351
1,2,3,7,8-PentaCDF (13C12, 99%)	(CAS-No.) 109719-77-9	0.000001393 - 0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
2,3,4,7,8-PentaCDF (13C12, 99%)	(CAS-No.) 116843-02-8	0.000001393 - 0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,3,4,7,8-HexaCDF (13C12, 99%)	(CAS-No.) 116843-03-9	0.000001393 - 0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,3,6,7,8-HexaCDF (13C12, 99%)	(CAS-No.) 116843-03-9	0.000001393 - 0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
2,3,4,6,7,8-HexaCDF (13C12, 99%)	(CAS-No.) 116843-05-1	0.000001393 - 0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,3,4,6,7,8-HeptaCDF (13C12, 99%)	(CAS-No.) 109719-84-8	0.000001393 - 0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) 1746-01-6 (Unlabeled)	0.000001393 - 0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
2,2',3,4,4',5,5'-HEPTACB (PCB-180) (13C12, 99%)	(CAS-No.) 35065-29-3 (Unlabeled)	0.000001393 - 0.0000014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,2',3,3',5,5',6-HEPTACB (PCB-178) (13C12, 99%)	(CAS-No.) 232919-67-4 (EC Index-No.) 602-039-00-4 (Unlabeled)	0.000001393 - 0.0000014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3,3',4,4',5-HEXACB (PCB-156) (13C12, 99%)	(CAS-No.) 208263-68-7 (EC Index-No.) 602-039-00-4	0.000001393 - 0.0000014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,2',3,4,4',5'-HEXACB (PCB-138) (13C12, 99%)	(CAS-No.) 208263-66-5 (EC Index-No.) 602-039-00-4	0.000001392 - 0.0000014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3',4',5-TETRACB (PCB-70) (13C12, 99%)	(CAS-No.) 208263-81-4 (EC Index-No.) 602-039-00-4	0.000001392 - 0.0000014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3,3',5,5'-PENTACB (PCB-111) (13C12, 99%)	(CAS-No.) 235416-29-2 (EC Index-No.) 602-039-00-4	0.000001393 - 0.0000014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,2',3,3',4,4',5-HEPTACB (PCB-170) (13C12, 99%)	(CAS-No.) 35065-30-6 (Unlabeled) (EC Index-No.) 602-039-00-4	0.000001392 - 0.0000014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3,3',4,4',5,5'-HEPTACB (PCB-189) (13C12, 99%)	(CAS-No.) 208263-73-4 (EC Index-No.) 602-039-00-4	0.000001393 - 0.0000014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3,3',4,4',5'-HEXACB (PCB-157) (13C12, 99%)	(CAS-No.) 235416-30-5 (EC Index-No.) 602-039-00-4	0.000001393 - 0.0000014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3',4,4',5,5'-HEXACB (PCB-167) (13C12, 99%)	(CAS-No.) 208263-69-8 (EC Index-No.) 602-039-00-4	0.000001393 - 0.0000014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3,4,4',5-PENTACB (PCB-114) (13C12, 99%)	(CAS-No.) 208263-63-2 (EC Index-No.) 602-039-00-4	0.000001393 - 0.0000014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
3,3',4,5'-TETRACB (PCB-79) (13C12, 99%)	(CAS-No.) 41464-48-6 (Unlabeled) (EC Index-No.) 602-039-00-4 (Unlabeled)	0.000001392 - 0.0000014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
1,2,3,4,6,7-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) NA	0.000001392 - 0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 58802-20-3 (Unlabeled)	0.000001392 - 0.0000014	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 4, H413

# TWO COLUMN DIOXIN, FURAN AND PCB REV-A CALIBRATION SOLUTIONS (CS1H-6H) (UNLABELED/13C12, 99%)

EDF-5443-A

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1,2,3,4-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) 114423-99-3 (Unlabeled)	0.000001392 - 0.0000014	Acute Tox. 2 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 2 (Inhalation:dust,mist), H330 Carc. 1A, H350
1,2,3,4,6-PENTACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 83704-47-6 (EC-No.) (EC Index-No.)	0.000001392 - 0.0000014	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 4, H413
1,2,3,4,6,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 69698-58-4 (EC-No.) (EC Index-No.)	0.000001392 - 0.0000014	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 4, H413

Name	Product identifier	%	GHS-US classification
N-NONANE UNLABELED	(CAS-No.) 111-84-2	91.7945103 - 99.995822	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H336 Asp. Tox. 1, H304
ISOOCTANE UNLABELED	(CAS-No.) 540-84-1	0.002698 - 5.378772	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
TOLUENE UNLABELED	(CAS-No.) 108-88-3	0.001417 - 2.824741	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 2, H401
OCTACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 39001-02-0	0.00000007 - 0.0001388	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
OCTACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 3268-87-9	0.00000007 - 0.0001388	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 39227-28-6	0.000000028 - 0.0000555	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,4,7,8-HEXACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 70648-26-9	0.000000028 - 0.0000555	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 19408-74-3	0.000000028 - 0.0000555	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Carc. 1A, H350
3,3',4,4',5,5'-HEXACB UNLABELED	(CAS-No.) 32774-16-6	0.000000028 - 0.0000555	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
3,3',4,4',5-PENTACB UNLABELED	(CAS-No.) 57465-28-8	0.000000028 - 0.0000555	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
3,3',4,4'-TETRACB UNLABELED	(CAS-No.) 32598-13-3	0.000000028 - 0.0000555	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
3,4,4',5-TETRACB UNLABELED	(CAS-No.) 70362-50-4	0.000000028 - 0.0000555	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,2',3,4,4',5,5'-HEPTACB UNLABELED	(CAS-No.) 35065-29-3	0.000000028 - 0.0000555	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3,3',4,4',5-HEXACB UNLABELED	(CAS-No.) 38380-08-4	0.000000028 - 0.0000555	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2',3,4,4',5-PENTACB UNLABELED	(CAS-No.) 65510-44-3	0.000000028 - 0.0000555	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

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Name	Product identifier	%	GHS-US classification
2,3,3',4,4'-PENTACB UNLABELED	(CAS-No.) 32598-14-4	0.000000028 - 0.0000555	Eye Dam. 1, H318 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3,4,4',5-PENTACB UNLABELED	(CAS-No.) 74472-37-0	0.000000028 - 0.0000555	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 35822-46-9	0.000000028 - 0.0000555	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 57652-85-7	0.000000028 - 0.0000555	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 67562-39-4	0.000000028 - 0.0000555	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
1,2,3,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 57117-44-9	0.000000028 - 0.0000555	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 72918-21-9	0.000000028 - 0.0000555	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
2,3,4,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 60851-34-5	0.000000028 - 0.0000555	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 55673-89-7	0.000000028 - 0.0000555	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
2,3,3',4,4',5,5'-HEPTACB UNLABELED	(CAS-No.) 39635-31-9	0.000000028 - 0.0000555	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3',4,4',5,5'-HEXACB UNLABELED	(CAS-No.) 52663-72-6	0.000000028 - 0.0000555	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3,3',4,4',5'-HEXACB UNLABELED	(CAS-No.) 69782-90-7	0.000000028 - 0.0000555	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,2',3,3',4,4',5-HEPTACB UNLABELED	(CAS-No.) 35065-30-6	0.000000028 - 0.0000555	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3',4,4',5-PENTACB UNLABELED	(CAS-No.) 31508-00-6	0.000000028 - 0.0000555	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 1746-01-6	0.000000014 - 0.0000278	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,3,6,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 33423-92-6	0.000000014 - 0.0000278	Acute Tox. 1 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 1 (Inhalation), H330 Carc. 1A, H350
1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 40321-76-4	0.000000014 - 0.0000278	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,8,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 62470-54-6	0.000000014 - 0.0000278	Acute Tox. 1 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 1 (Inhalation), H330 Carc. 1A, H350
1,3,7,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS-No.) 62470-53-5	0.000000014 - 0.0000278	Acute Tox. 1 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 1 (Inhalation), H330 Carc. 1A, H350
2,3,7,8-TETRACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 51207-31-9	0.000000014 - 0.0000278	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
1,2,3,7,8-PENTACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 57117-41-6	0.000000014 - 0.0000278	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
2,3,4,7,8-PENTACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 57117-31-4	0.000000014 - 0.0000278	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
1,2,8,9-TETRACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 70648-22-5	0.000000014 - 0.0000278	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 4, H413

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Name	Product identifier	%	GHS-US classification
1,2,7,8-TETRACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 58802-20-3	0.000000014 - 0.0000278	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 4, H413
1,3,6,8-TETRACHLORODIBENZOFURAN UNLABELED	(CAS-No.) 71998-72-6	0.000000014 - 0.0000278	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 4, H413
1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 55673-89-7 (Unlabeled)	0.000002785 - 0.0000028	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
OCTACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 39001-02-0 (Unlabeled)	0.000002785 - 0.0000028	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
3,3',4,4'-TETRACB (PCB-77) (13C12, 99%)	(CAS-No.) 105600-23-5	0.000001393 - 0.0000014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
3,3',4,4',5-PENTACB (PCB-126) (13C12, 99%)	(CAS-No.) 208263-65-4	0.000001393 - 0.0000014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
3,3',4,4',5,5'-HEXACB (PCB-169) (13C12, 99%)	(CAS-No.) 32774-16-6 (Unlabeled)	0.000001393 - 0.0000014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
3,4,4',5-TETRACB (PCB-81) (13C12, 99%)	(CAS-No.) 208461-24-9	0.000001393 - 0.0000014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3',4,4',5-PENTACB (PCB-118) (13C12, 98%)	(CAS-No.) 104130-40-7	0.000001393 - 0.0000014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2',3,4,4',5-PENTACB (PCB-123) (13C12, 99%)	(CAS-No.) 208263-64-3	0.000001393 - 0.0000014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3,3',4,4'-PENTACB (PCB-105) (13C12, 99%)	(CAS-No.) 208263-62-1	0.000001393 - 0.0000014	Eye Dam. 1, H318 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 72918-21-9 (Unlabeled)	0.000001393 - 0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) 40321-76-4 (Unlabeled)	0.000001393 - 0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,3,6,8-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) 33423-92-6 (Unlabeled)	0.000001393 - 0.0000014	Acute Tox. 1 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 1 (Inhalation), H330 Carc. 1A, H350
2,3,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 89059-46-1 (Unlabeled)	0.000001393 - 0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
1,2,3,4,7,8-HexaCDD (13C12, 99%)	(CAS-No.) 109719-80-4	0.000001393 - 0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,6,7,8-HexaCDD (13C12, 99%)	(CAS-No.) 109719-81-5	0.000001393 - 0.0000014	Eye Irrit. 2A, H319 Aquatic Chronic 2, H411
1,2,3,7,8,9-HexaCDD (13C12, 99%)	(CAS-No.) 109719-82-6	0.000001393 - 0.0000014	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Carc. 1A, H350
1,2,3,4,6,7,8-HeptaCDD (13C12, 99%)	(CAS-No.) 109719-83-7	0.000001393 - 0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
OctaCDD (13C12, 99%)	(CAS-No.) 114423-97-1	0.000001393 - 0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,7,8-PentaCDF (13C12, 99%)	(CAS-No.) 109719-77-9	0.000001393 - 0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
2,3,4,7,8-PentaCDF (13C12, 99%)	(CAS-No.) 116843-02-8	0.000001393 - 0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
1,2,3,4,7,8-HexaCDF (13C12, 99%)	(CAS-No.) 116843-03-9	0.000001393 - 0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413

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Name	Product identifier	%	GHS-US classification
1,2,3,6,7,8-HexaCDF (13C12, 99%)	(CAS-No.) 116843-03-9	0.000001393 - 0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
2,3,4,6,7,8-HexaCDF (13C12, 99%)	(CAS-No.) 116843-05-1	0.000001393 - 0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
1,2,3,4,6,7,8-HeptaCDF (13C12, 99%)	(CAS-No.) 109719-84-8	0.000001393 - 0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) 1746-01-6 (Unlabeled)	0.000001393 - 0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
2,2',3,4,4',5,5'-HEPTACB (PCB-180) (13C12, 99%)	(CAS-No.) 35065-29-3 (Unlabeled)	0.000001393 - 0.0000014	STOT SE 2, H371 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,2',3,3',5,5',6-HEPTACB (PCB-178) (13C12, 99%)	(CAS-No.) 232919-67-4	0.000001393 - 0.0000014	Carc. 1B, H350 STOT RE 2, H373 Aquatic Chronic 1, H410
2,3,3',4,4',5-HEXACB (PCB-156) (13C12, 99%)	(CAS-No.) 208263-68-7	0.000001393 - 0.0000014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,2',3,4,4',5'-HEXACB (PCB-138) (13C12, 99%)	(CAS-No.) 208263-66-5	0.000001392 - 0.0000014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3',4',5-TETRACB (PCB-70) (13C12, 99%)	(CAS-No.) 208263-81-4	0.000001392 - 0.0000014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3,3',5,5'-PENTACB (PCB-111) (13C12, 99%)	(CAS-No.) 235416-29-2	0.000001393 - 0.0000014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,2',3,3',4,4',5-HEPTACB (PCB-170) (13C12, 99%)	(CAS-No.) 35065-30-6 (Unlabeled)	0.000001392 - 0.0000014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3,3',4,4',5,5'-HEPTACB (PCB-189) (13C12, 99%)	(CAS-No.) 208263-73-4	0.000001393 - 0.0000014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3,3',4,4',5'-HEXACB (PCB-157) (13C12, 99%)	(CAS-No.) 235416-30-5	0.000001393 - 0.0000014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3',4,4',5,5'-HEXACB (PCB-167) (13C12, 99%)	(CAS-No.) 208263-69-8	0.000001393 - 0.0000014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3,4,4',5-PENTACB (PCB-114) (13C12, 99%)	(CAS-No.) 208263-63-2	0.000001393 - 0.0000014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
3,3',4,5'-TETRACB (PCB-79) (13C12, 99%)	(CAS-No.) 41464-48-6 (Unlabeled)	0.000001392 - 0.0000014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
1,2,3,4,6,7-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) NA	0.000001392 - 0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 58802-20-3 (Unlabeled)	0.000001392 - 0.0000014	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 4, H413
1,2,3,4-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS-No.) 114423-99-3 (Unlabeled)	0.000001392 - 0.0000014	Acute Tox. 1 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 1 (Inhalation), H330 Carc. 1A, H350
1,2,3,4,6-PENTACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 83704-47-6	0.000001392 - 0.0000014	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 4, H413
1,2,3,4,6,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%)	(CAS-No.) 69698-58-4	0.000001392 - 0.0000014	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 4, H413

Full text of R- and H- phrases: see section 16

# TWO COLUMN DIOXIN, FURAN AND PCB REV-A CALIBRATION SOLUTIONS (CS1H-6H) (UNLABELED/13C12, 99%)

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### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

- First-aid measures general : Call a physician immediately.
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor/physician if you feel unwell. Give oxygen or artificial respiration if necessary.
- First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. If skin irritation occurs: Get medical advice/attention.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Do not induce vomiting. Call a physician immediately.

#### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/effects : May cause drowsiness or dizziness.
- Symptoms/effects after inhalation : Harmful if inhaled. May cause respiratory irritation.
- Symptoms/effects after skin contact : Causes skin irritation. May be harmful in contact with skin.
- Symptoms/effects after eye contact : Causes serious eye irritation.
- Symptoms/effects after ingestion : May be fatal if swallowed and enters airways. Risk of lung edema.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide. Alcohol resistant foam.

#### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : Flammable liquid and vapor.
- Reactivity : Flammable liquid and vapor. Vapors may form flammable mixture with air.

#### 5.3. Advice for firefighters

- Firefighting instructions : Do not enter fire area without proper protective equipment, including respiratory protection.
- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

- Emergency procedures : Wear personal protective equipment. Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing fume, gas, mist, spray, vapors. Avoid contact with skin and eyes.

##### 6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

- For containment : Dike and contain spill. Dispose as hazardous waste. Comply with local regulations for disposal.
- Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
- Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Additional hazards when processed : Avoid all contact with skin, eyes, or clothing. Keep away from sources of ignition - No smoking. Do not breathe gas/fumes/vapor/spray (appropriate wording to be specified by the manufacturer). Take precautionary measures against static discharges.

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Precautions for safe handling	: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing fume, gas, mist, spray, vapors. Avoid contact with skin and eyes.
Hygiene measures	: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Store in a well-ventilated place. Keep container tightly closed. Keep dry. Ground/bond container and receiving equipment.
Storage conditions	: Store at room temperature away from light and moisture.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

N-NONANE UNLABELED (111-84-2)		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	200.00000000 ppm USA. ACGIH Threshold Limit Values (TLV)
Italy - Portugal - USA ACGIH	Remark (ACGIH)	CNS impair
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	1050 mg/m <sup>3</sup> USA. NIOSH Recommended Exposure Limits
USA NIOSH	NIOSH REL (TWA) (ppm)	200 ppm USA. NIOSH Recommended Exposure Limits
USA NIOSH	Remark (NIOSH)	Central Nervous System impairment
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	1050 mg/m <sup>3</sup> USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000
USA OSHA	OSHA PEL (TWA) (ppm)	200 ppm USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000
USA OSHA	OSHA PEL (Ceiling) (mg/m <sup>3</sup> )	1050 California permissible exposure limits for chemical contaminants.
USA OSHA	OSHA PEL (Ceiling) (ppm)	200 ppm California permissible exposure limits for chemical contaminants.
TOLUENE UNLABELED (108-88-3)		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	20.00000000 ppm USA. ACGIH Threshold Limit Values (TLV)
Italy - Portugal - USA ACGIH	Remark (ACGIH)	Visual impairment. Female reproductive. Pregnancy loss. 2015 Adoption. Substances for which there is a Biological Exposure Index or Indices (see BEI® section). Not classifiable as a human carcinogen.; Component: Toluene CAS-No.: 108-88-3 Parameters: Toluene Value: 0.0300 mg/l Biological specimen: Urine Remarks: End of shift (As soon as possible after exposure ceases) Basis: ACGIH - Biological Exposure Indices (BEI); Component: Toluene CAS-No.: 108-88-3 Parameters: Toluene Value: 0.0200 mg/l Biological specimen: In blood Remarks: Prior to last shift of workweek Basis: ACGIH - Biological Exposure Indices (BEI); Component: Toluene CAS-No.: 108-88-3 Parameters: o-Cresol Value: 0.3000 mg/g Biological specimen: Urine Remarks: End of shift (As soon as possible after exposure ceases) Basis: ACGIH - Biological Exposure Indices (BEI)
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	375 mg/m <sup>3</sup> USA. NIOSH Recommended Exposure Limits
USA NIOSH	NIOSH REL (TWA) (ppm)	100 ppm USA. NIOSH Recommended Exposure Limits
USA NIOSH	NIOSH REL (STEL) (mg/m <sup>3</sup> )	560 mg/m <sup>3</sup> USA. NIOSH Recommended Exposure Limits
USA NIOSH	NIOSH REL (STEL) (ppm)	150 ppm USA. NIOSH Recommended Exposure Limits



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TOLUENE UNLABELED (108-88-3)		
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	375 mg/m <sup>3</sup> USA. OSHA - TABLE Z-1 Limits for Air Contaminants 1910.1000
USA OSHA	OSHA PEL (TWA) (ppm)	100 ppm USA. OSHA - TABLE Z-1 Limits for Air Contaminants 1910.1000
USA OSHA	OSHA PEL (STEL) (mg/m <sup>3</sup> )	560 mg/m <sup>3</sup> USA. OSHA - TABLE Z-1 Limits for Air Contaminants 1910.1000
USA OSHA	OSHA PEL (STEL) (ppm)	150 ppm USA. OSHA - TABLE Z-1 Limits for Air Contaminants 1910.1000
USA OSHA	OSHA PEL (Ceiling) (ppm)	300 ppm USA. Occupational Exposure Limits (OSHA) - Table Z-2
USA OSHA	Remark (OSHA)	OSHA PEL (TWA) - 200 ppm - USA. Occupational Exposure Limits (OSHA) - Table Z-2. Remarks: Z37.12-1967

ISOCTANE UNLABELED (540-84-1)		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	300.00000000 ppm Basis: USA. ACGIH Threshold Limit Values (TLV)
Italy - Portugal - USA ACGIH	Remark (ACGIH)	Upper Respiratory Tract irritation

### 8.2. Exposure controls

- Appropriate engineering controls : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
- Personal protective equipment : Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.



- Materials for protective clothing : Wear suitable protective clothing and gloves.
- Hand protection : Wear suitable protective clothing and gloves.
- Eye protection : Wear eye protection. Chemical goggles or face shield with safety glasses.
- Skin and body protection : Wear suitable protective clothing, gloves and eye/face protection.
- Respiratory protection : In case of inadequate ventilation wear respiratory protection. Approved supplied air respirator.
- Environmental exposure controls : Avoid release to the environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Appearance : Liquid
- Color : Colorless
- Odor : No data available
- Odor threshold : No data available
- pH : No data available
- Relative evaporation rate (butyl acetate=1) : No data available
- Melting point : No data available
- Freezing point : No data available
- Boiling point : No data available
- Flash point : No data available
- Auto-ignition temperature : No data available
- Decomposition temperature : No data available
- Flammability (solid, gas) : No data available
- Vapor pressure : No data available
- Relative vapor density at 20 °C : No data available
- Relative density : No data available
- Solubility : No data available
- Log Pow : No data available
- Log Kow : No data available

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Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosion limits	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Flammable liquid and vapor. Vapors may form flammable mixture with air.

### 10.2. Chemical stability

See storage and expiration date on CoA.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Carbon oxides (CO, CO<sub>2</sub>).

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Inhalation: Harmful if inhaled.

TWO COLUMN DIOXIN, FURAN AND PCB REV-A CALIBRATION SOLUTIONS (CS1H-6H) (UNLABELED/13C12, 99%)	
ATE CLP (gases)	4500.000 ppmV/4h
ATE CLP (vapors)	11.000 mg/l/4h
ATE CLP (dust, mist)	1.500 mg/l/4h
2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (1746-01-6)	
ATE CLP (oral)	500.000 mg/kg body weight
1,3,6,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (33423-92-6)	
ATE CLP (oral)	5.000 mg/kg body weight
ATE CLP (dermal)	5.000 mg/kg body weight
ATE CLP (dust, mist)	0.050 mg/l/4h
1,3,7,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (62470-53-5)	
ATE CLP (oral)	5.000 mg/kg body weight
ATE CLP (dermal)	5.000 mg/kg body weight
ATE CLP (dust, mist)	0.050 mg/l/4h
1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN UNLABELED (40321-76-4)	
ATE CLP (oral)	500.000 mg/kg body weight
1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (39227-28-6)	
ATE CLP (oral)	500.000 mg/kg body weight
1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (19408-74-3)	
ATE CLP (oral)	500.000 mg/kg body weight
ATE CLP (dermal)	1100.000 mg/kg body weight
ATE CLP (dust, mist)	1.500 mg/l/4h
2,3,7,8-TETRACHLORODIBENZOFURAN UNLABELED (51207-31-9)	
ATE CLP (oral)	500.000 mg/kg body weight
1,3,6,8-TETRACHLORODIBENZOFURAN UNLABELED (71998-72-6)	
ATE CLP (oral)	500.000 mg/kg body weight
1,2,8,9-TETRACHLORODIBENZOFURAN UNLABELED (70648-22-5)	
ATE CLP (oral)	500.000 mg/kg body weight

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<b>2,3,4,7,8-PENTACHLORODIBENZOFURAN UNLABELED (57117-31-4)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,4,7,8-HEXACHLORODIBENZOFURAN UNLABELED (70648-26-9)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (57652-85-7)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN UNLABELED (35822-46-9)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED (57117-44-9)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,7,8,9-HEXACHLORODIBENZOFURAN UNLABELED (72918-21-9)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>2,3,4,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED (60851-34-5)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN UNLABELED (67562-39-4)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN UNLABELED (55673-89-7)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>3,4,4',5-TETRACB UNLABELED (70362-50-4)</b>	
Additional information	LD50 - Oral - guinea pig - 1 mg/kg
<b>OCTACHLORODIBENZO-P-DIOXIN UNLABELED (3268-87-9)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>OCTACHLORODIBENZOFURAN UNLABELED (39001-02-0)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,3,6,8-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) (33423-92-6 (Unlabeled))</b>	
ATE CLP (oral)	5.000 mg/kg body weight
ATE CLP (dermal)	5.000 mg/kg body weight
ATE CLP (dust, mist)	0.050 mg/l/4h
<b>2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) (1746-01-6 (Unlabeled))</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN (13C12, 99%) (40321-76-4 (Unlabeled))</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,4,7,8-HexaCDD (13C12, 99%) (109719-80-4)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,7,8,9-HexaCDD (13C12, 99%) (109719-82-6)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
ATE CLP (dermal)	1100.000 mg/kg body weight
ATE CLP (dust, mist)	1.500 mg/l/4h
<b>1,2,3,4,6,7,8-HeptaCDD (13C12, 99%) (109719-83-7)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>OctaCDD (13C12, 99%) (114423-97-1)</b>	
ATE CLP (oral)	5.000 mg/kg body weight
<b>2,3,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%) (89059-46-1 (Unlabeled))</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,7,8-PentaCDF (13C12, 99%) (109719-77-9)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>2,3,4,7,8-PentaCDF (13C12, 99%) (116843-02-8)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,4,7,8-HexaCDF (13C12, 99%) (116843-03-9)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,6,7,8-HexaCDF (13C12, 99%) (116843-03-9)</b>	
ATE CLP (oral)	500.000 mg/kg body weight

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<b>1,2,3,7,8,9-HEXACHLORODIBENZOFURAN (13C12, 99%) (72918-21-9 (Unlabeled))</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>2,3,4,6,7,8-HexaCDF (13C12, 99%) (116843-05-1)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,4,6,7,8-HeptaCDF (13C12, 99%) (109719-84-8)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%) (55673-89-7 (Unlabeled))</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>OCTACHLORODIBENZOFURAN (13C12, 99%) (39001-02-0 (Unlabeled))</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%) (58802-20-3 (Unlabeled))</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,4,6-PENTACHLORODIBENZOFURAN (13C12, 99%) (83704-47-6)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,4,6,7-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%) (NA)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,4,6,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%) (69698-58-4)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,3,4-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) (114423-99-3 (Unlabeled))</b>	
ATE CLP (oral)	5.000 mg/kg body weight
ATE CLP (dermal)	5.000 mg/kg body weight
ATE CLP (dust, mist)	0.050 mg/l/4h
<b>N-NONANE UNLABELED (111-84-2)</b>	
LC50 inhalation rat (mg/l)	23760 mg/m <sup>3</sup> male - 4 h
ATE CLP (vapors)	11.000 mg/l/4h
Skin corrosion/irritation, Dermal, rat	Result: Skin Irritation (Draize Test)
Additional information	: S. Typhimurium Result: negative
<b>1,2,8,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (62470-54-6)</b>	
ATE CLP (oral)	5.000 mg/kg body weight
ATE CLP (dermal)	5.000 mg/kg body weight
ATE CLP (dust, mist)	0.050 mg/l/4h
<b>1,2,3,7,8-PENTACHLORODIBENZOFURAN UNLABELED (57117-41-6)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>1,2,7,8-TETRACHLORODIBENZOFURAN UNLABELED (58802-20-3)</b>	
ATE CLP (oral)	500.000 mg/kg body weight
<b>TOLUENE UNLABELED (108-88-3)</b>	
LD50 oral rat	> 5580 mg/kg
LD50 dermal rabbit	12196 mg/kg
LC50 inhalation rat (mg/l)	12,500 - 28,800 mg/m <sup>3</sup> - 4 h
ATE CLP (dermal)	12196.000 mg/kg body weight
ATE CLP (vapors)	12.500 mg/l/4h
ATE CLP (dust, mist)	12.500 mg/l/4h
<b>ISOCTANE UNLABELED (540-84-1)</b>	
LD50 oral rat	> 5000 mg/kg (OECD Test Guideline 401)
LD50 dermal rabbit	> 2000 mg/kg (OECD Test Guideline 402)
LC50 inhalation rat (mg/l)	> 33.52 mg/l/4h (OECD Test Guideline 403)
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity – single exposure	: May cause drowsiness or dizziness.

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Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: May be fatal if swallowed and enters airways.
Potential Adverse human health effects and symptoms	: This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.
Symptoms/effects after inhalation	: Harmful if inhaled. May cause respiratory irritation.
Symptoms/effects after skin contact	: Causes skin irritation. May be harmful in contact with skin.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: May be fatal if swallowed and enters airways. Risk of lung edema.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

<b>3,4,4',5-TETRACB UNLABELED (70362-50-4)</b>	
LC50 fish 1	Pimephales promelas (fathead minnow) - 96 h
EC50 Daphnia 1	Daphnia magna (Water flea) - 48 h
NOEC (chronic)	0.1 mg/l Oncorhynchus mykiss (rainbow trout) - 7 d
<b>2',3,4,4',5-PENTACB UNLABELED (65510-44-3)</b>	
LC50 fish 1	> 0.16 mg/l Pimephales promelas (fathead minnow) - 96 h
EC50 Daphnia 1	> 0.16 mg/l Daphnia magna (Water flea) - 48 h
<b>2,3,3',4,4',5-HEXACB UNLABELED (38380-08-4)</b>	
LC50 fish 1	> 0.16 mg/l Pimephales promelas (fathead minnow) - 96 h
EC50 Daphnia 1	> 0.16 mg/l Daphnia magna (Water flea) - 48 h
<b>3,3',4,4'-TETRACB UNLABELED (32598-13-3)</b>	
LC50 fish 1	> 0.002 mg/l Pimephales promelas (fathead minnow) - 96 h
EC50 Daphnia 1	> 0.002 mg/l Daphnia magna (Water flea) - 48 h
NOEC (chronic)	0.1 mg/l Oncorhynchus mykiss (rainbow trout) - 7 d
<b>2,3,3',4,4'-PENTACB UNLABELED (32598-14-4)</b>	
LC50 fish 1	> 0.16 mg/l Pimephales promelas (fathead minnow) - 96 h
EC50 Daphnia 1	> 0.16 mg/l Daphnia magna (Water flea) - 48 h
<b>2,3',4,4',5,5'-HEXACB UNLABELED (52663-72-6)</b>	
LC50 fish 1	> 0.16 mg/l Pimephales promelas (fathead minnow) - 96 h
EC50 Daphnia 1	> 0.16 mg/l Daphnia magna (Water flea) - 48 h
<b>2,2',3,3',4,4',5-HEPTACB UNLABELED (35065-30-6)</b>	
LC50 fish 1	0.034 mg/l Pimephales promelas (fathead minnow) - 96 h
<b>2,3,3',4,4',5,5'-HEPTACB UNLABELED (39635-31-9)</b>	
LC50 fish 1	> 0.16 mg/l Pimephales promelas (fathead minnow) - 96 h
EC50 Daphnia 1	> 0.16 mg/l Daphnia magna (Water flea) - 48 h
<b>3,3',4,4'-TETRACB (PCB-77) (13C12, 99%) (105600-23-5)</b>	
LC50 fish 1	> 0.002 mg/l Pimephales promelas (fathead minnow) - 96 h
EC50 Daphnia 1	> 0.002 mg/l Daphnia magna (Water flea) - 48 h
LOEC (chronic)	0.5 mg/l mortality: Pimephales promelas (fathead minnow) - 7 d
NOEC (chronic)	0.1 mg/l mortality: Oncorhynchus mykiss (rainbow trout) - 7 d
<b>2,2',3,3',4,4',5-HEPTACB (PCB-170) (13C12, 99%) (35065-30-6 (Unlabeled))</b>	
LC50 fish 1	0.034 mg/l Pimephales promelas (fathead minnow) - 96 h
<b>TOLUENE UNLABELED (108-88-3)</b>	
EC50 Daphnia 1	8 mg/l Daphnia magna (Water flea) - 24h
LC50 fish 2	7.63 mg/l Oncorhynchus mykiss (Rainbow trout) - 96 h
EC50 Daphnia 2	6 mg/l Daphnia magna (Water flea) - Immobilization - 48 h
ErC50 (algae)	245 mg/l Chlorella vulgaris (Fresh water algae) - 24 h
ErC50 (other aquatic plants)	10 mg/l Pseudokirchneriella subcapitata (Green algae) - 24 h
NOEC (chronic)	5.44 mg/l Pimephales promelas (fathead minnow) - 7 d

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### 12.2. Persistence and degradability

#### 2,2',3,4,4',5,5'-HEPTACB UNLABELED (35065-29-3)

Persistence and degradability: May cause long-term adverse effects in the environment.

#### TOLUENE UNLABELED (108-88-3)

Persistence and degradability: Readily biodegradable.

### 12.3. Bioaccumulative potential

#### 3,3',4,4'-TETRACB UNLABELED (32598-13-3)

Bioconcentration factor (BCF REACH): 81.5

Bioaccumulative potential: Bioaccumulation: *Oryzias latipes* - 20 d Bioconcentration factor (BCF): 81.5.

#### 2,3',4,4',5-PENTACB UNLABELED (31508-00-6)

Log Pow: 7.12

#### 3,3',4,4'-TETRACB (PCB-77) (13C12, 99%) (105600-23-5)

Log Pow: 6.63

Bioaccumulative potential: Bioaccumulation: *Oryzias latipes* - 20 d Bioconcentration factor (BCF): 81.5.

#### 3,3',4,4',5,5'-HEXACB (PCB-169) (13C12, 99%) (32774-16-6 (Unlabeled))

Log Pow: 6.7

#### 2,3',4,4',5-PENTACB (PCB-118) (13C12, 98%) (104130-40-7)

Log Pow: 7.12

#### 2,2',3,3',4,4',5-HEPTACB (PCB-170) (13C12, 99%) (35065-30-6 (Unlabeled))

Log Pow: 8.27

#### N-NONANE UNLABELED (111-84-2)

Log Pow: 5.65

Bioaccumulative potential: Indication of bioaccumulation.

#### 2,2',3,4,4',5,5'-HEPTACB (PCB-180) (13C12, 99%) (35065-29-3 (Unlabeled))

Log Pow: 8.27

#### TOLUENE UNLABELED (108-88-3)

BCF fish 1: 0.05 mg/l *Leuciscus idus* (Golden orfe) - 3 d

Bioconcentration factor (BCF REACH): 90

#### ISOCTANE UNLABELED (540-84-1)

Log Pow: 4.6

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

#### TOLUENE UNLABELED (108-88-3)

PBT: not relevant – no registration required

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional legislation (waste): Waste materials should be disposed of under conditions which meet Federal, State, and local environmental control regulations.

Product/Packaging disposal recommendations: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Ecology - waste materials: Dispose of as unused product.

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

### 14.1. UN number

UN-No.(DOT): 1920

DOT NA no. UN1920

### 14.2. UN proper shipping name

Proper Shipping Name (DOT): Nonanes

# TWO COLUMN DIOXIN, FURAN AND PCB REV-A CALIBRATION SOLUTIONS (CS1H-6H) (UNLABELED/13C12, 99%)

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Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120  
Hazard labels (DOT) : 3 - Flammable liquid



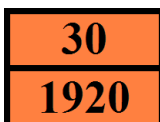
Packing group (DOT) : III - Minor Danger  
DOT Special Provisions (49 CFR 172.102) : B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable.  
IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).  
T2 - 1.5 178.274(d)(2) Normal..... 178.275(d)(3)  
TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling =  $97 / 1 + a (tr - tf)$  Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.  
DOT Packaging Exceptions (49 CFR 173.xxx) : 150  
DOT Packaging Non Bulk (49 CFR 173.xxx) : 203  
DOT Packaging Bulk (49 CFR 173.xxx) : 242

### 14.3. Additional information

Emergency Response Guide (ERG) Number : 128  
Other information : No supplementary information available.

### Overland transport

Hazard identification number (Kemler No.) : 30  
Orange plates :



Tunnel restriction code (ADR) : D/E  
Limited quantities (ADR) : 5l  
EAC : 3Y  
Excepted quantities (ADR) : E1

### Transport by sea

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.  
MFAG-No : 128

### Air transport

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 60 L  
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 220 L  
Civil Aeronautics Law : Flammable liquids

### 14.4. Environmental hazards

Other information : No supplementary information available.

### 14.5. Special precautions for user

### 14.6. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

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### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

##### TWO COLUMN DIOXIN, FURAN AND PCB REV-A CALIBRATION SOLUTIONS (CS1H-6H) (UNLABELED/13C12, 99%)

SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
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SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
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##### 2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (1746-01-6)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
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SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
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##### 1,3,6,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (33423-92-6)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
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SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
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##### 1,3,7,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (62470-53-5)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
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SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
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##### 1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN UNLABELED (40321-76-4)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
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SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
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##### 1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (39227-28-6)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
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SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
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##### 1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (19408-74-3)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
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SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
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##### 2,3,7,8-TETRACHLORODIBENZOFURAN UNLABELED (51207-31-9)

SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
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SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
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##### 1,3,6,8-TETRACHLORODIBENZOFURAN UNLABELED (71998-72-6)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
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SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
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##### 1,2,8,9-TETRACHLORODIBENZOFURAN UNLABELED (70648-22-5)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
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SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
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##### 2,3,4,7,8-PENTACHLORODIBENZOFURAN UNLABELED (57117-31-4)

SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
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SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
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##### 1,2,3,4,7,8-HEXACHLORODIBENZOFURAN UNLABELED (70648-26-9)

SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
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SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
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<b>1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (57652-85-7)</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN UNLABELED (35822-46-9)</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED (57117-44-9)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,7,8,9-HEXACHLORODIBENZOFURAN UNLABELED (72918-21-9)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>2,3,4,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED (60851-34-5)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN UNLABELED (67562-39-4)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN UNLABELED (55673-89-7)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>3,4,4',5-TETRACB UNLABELED (70362-50-4)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>2,3,4,4',5-PENTACB UNLABELED (74472-37-0)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>2',3,4,4',5-PENTACB UNLABELED (65510-44-3)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>3,3',4,4',5-PENTACB UNLABELED (57465-28-8)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>2,3,3',4,4',5-HEXACB UNLABELED (38380-08-4)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>3,3',4,4',5,5'-HEXACB UNLABELED (32774-16-6)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.

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<b>2,2',3,4,4',5,5'-HEPTACB UNLABELED (35065-29-3)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>3,3',4,4'-TETRACB UNLABELED (32598-13-3)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>2,3,3',4,4'-PENTACB UNLABELED (32598-14-4)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>2,3',4,4',5-PENTACB UNLABELED (31508-00-6)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>2,3,3',4,4',5'-HEXACB UNLABELED (69782-90-7)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>2,3',4,4',5,5'-HEXACB UNLABELED (52663-72-6)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>2,2',3,3',4,4',5-HEPTACB UNLABELED (35065-30-6)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>2,3,3',4,4',5,5'-HEPTACB UNLABELED (39635-31-9)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>OCTACHLORODIBENZO-P-DIOXIN UNLABELED (3268-87-9)</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>OCTACHLORODIBENZOFURAN UNLABELED (39001-02-0)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,3,6,8-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) (33423-92-6 (Unlabeled))</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) (1746-01-6 (Unlabeled))</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.

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<b>1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN (13C12, 99%) (40321-76-4 (Unlabeled))</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,4,7,8-HexaCDD (13C12, 99%) (109719-80-4)</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,6,7,8-HexaCDD (13C12, 99%) (109719-81-5)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
<b>1,2,3,7,8,9-HexaCDD (13C12, 99%) (109719-82-6)</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,4,6,7,8-HeptaCDD (13C12, 99%) (109719-83-7)</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	;SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
<b>OctaCDD (13C12, 99%) (114423-97-1)</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
<b>2,3,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%) (89059-46-1 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,7,8-PentaCDF (13C12, 99%) (109719-77-9)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
<b>2,3,4,7,8-PentaCDF (13C12, 99%) (116843-02-8)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
<b>1,2,3,4,7,8-HexaCDF (13C12, 99%) (116843-03-9)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
<b>1,2,3,6,7,8-HexaCDF (13C12, 99%) (116843-03-9)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
<b>1,2,3,7,8,9-HEXACHLORODIBENZOFURAN (13C12, 99%) (72918-21-9 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>2,3,4,6,7,8-HexaCDF (13C12, 99%) (116843-05-1)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313

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<b>1,2,3,4,6,7,8-HeptaCDF (13C12, 99%) (109719-84-8)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
<b>1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%) (55673-89-7 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>OCTACHLORODIBENZOFURAN (13C12, 99%) (39001-02-0 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>3,4,4',5-TETRACB (PCB-81) (13C12, 99%) (208461-24-9)</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>3,3',4,4'-TETRACB (PCB-77) (13C12, 99%) (105600-23-5)</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>3,3',4,4',5-PENTACB (PCB-126) (13C12, 99%) (208263-65-4)</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>3,3',4,4',5,5'-HEXACB (PCB-169) (13C12, 99%) (32774-16-6 (Unlabeled))</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>2',3,4,4',5-PENTACB (PCB-123) (13C12, 99%) (208263-64-3)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>2,3',4,4',5-PENTACB (PCB-118) (13C12, 98%) (104130-40-7)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>2,3,3',4,4'-PENTACB (PCB-105) (13C12, 99%) (208263-62-1)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>2,3,4,4',5-PENTACB (PCB-114) (13C12, 99%) (208263-63-2)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>2,3',4,4',5,5'-HEXACB (PCB-167) (13C12, 99%) (208263-69-8)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.

# TWO COLUMN DIOXIN, FURAN AND PCB REV-A CALIBRATION SOLUTIONS (CS1H-6H) (UNLABELED/13C12, 99%)

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<b>2,3',4,4',5,5'-HEXACB (PCB-167) (13C12, 99%) (208263-69-8)</b>	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>2,3,3',4,4',5-HEXACB (PCB-156) (13C12, 99%) (208263-68-7)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>2,3,3',4,4',5'-HEXACB (PCB-157) (13C12, 99%) (235416-30-5)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>2,3,3',4,4',5,5'-HEPTACB (PCB-189) (13C12, 99%) (208263-73-4)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%) (58802-20-3 (Unlabeled))</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,4,6-PENTACHLORODIBENZOFURAN (13C12, 99%) (83704-47-6)</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,4,6,7-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%) (NA)</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,4,6,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%) (69698-58-4)</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>2,3',4',5-TETRACB (PCB-70) (13C12, 99%) (208263-81-4)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
<b>2,3,3',5,5'-PENTACB (PCB-111) (13C12, 99%) (235416-29-2)</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>2,2',3,4,4',5'-HEXACB (PCB-138) (13C12, 99%) (208263-66-5)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>2,2',3,3',5,5',6-HEPTACB (PCB-178) (13C12, 99%) (232919-67-4)</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.

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<b>2,2',3,3',5,5',6-HEPTACB (PCB-178) (13C12, 99%) (232919-67-4)</b>	
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>3,3',4,5'-TETRACB (PCB-79) (13C12, 99%) (41464-48-6 (Unlabeled))</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
<b>2,2',3,3',4,4',5-HEPTACB (PCB-170) (13C12, 99%) (35065-30-6 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,4-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) (114423-99-3 (Unlabeled))</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>N-NONANE UNLABELED (111-84-2)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>2,2',3,4,4',5,5'-HEPTACB (PCB-180) (13C12, 99%) (35065-29-3 (Unlabeled))</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,8,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (62470-54-6)</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,3,7,8-PENTACHLORODIBENZOFURAN UNLABELED (57117-41-6)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>1,2,7,8-TETRACHLORODIBENZOFURAN UNLABELED (58802-20-3)</b>	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
<b>TOLUENE UNLABELED (108-88-3)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
CERCLA RQ	1000 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Subject to reporting requirements of United States SARA Section 313
<b>ISOCTANE UNLABELED (540-84-1)</b>	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
SARA Section 311/312 Hazard Classes	Fire hazard Delayed (chronic) health hazard

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### ISOCTANE UNLABELED (540-84-1)

SARA Section 313 - Emission Reporting

Not subject to reporting requirements of the United States SARA Section 313.

## 15.2. International regulations

### CANADA

#### TWO COLUMN DIOXIN, FURAN AND PCB REV-A CALIBRATION SOLUTIONS (CS1H-6H) (UNLABELED/13C12, 99%)

Listed on the Canadian DSL (Domestic Substances List)

#### 2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (1746-01-6)

Not listed on the Canadian DSL (Domestic Substances List)

#### 2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) (1746-01-6 (Unlabeled))

Not listed on the Canadian DSL (Domestic Substances List)

#### 3,3',4,5'-TETRACB (PCB-79) (13C12, 99%) (41464-48-6 (Unlabeled))

Not listed on the Canadian DSL (Domestic Substances List)

#### 1,2,3,4-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) (114423-99-3 (Unlabeled))

Not listed on the Canadian DSL (Domestic Substances List)

#### N-NONANE UNLABELED (111-84-2)

Listed on the Canadian DSL (Domestic Substances List)

#### TOLUENE UNLABELED (108-88-3)

Listed on the Canadian DSL (Domestic Substances List)

### 15.2.1. National regulations

#### 1,3,6,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (33423-92-6)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

#### 1,3,7,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (62470-53-5)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

#### 1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN UNLABELED (40321-76-4)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

#### 1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (39227-28-6)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

#### 1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (19408-74-3)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

#### 1,3,6,8-TETRACHLORODIBENZOFURAN UNLABELED (71998-72-6)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

#### 1,2,8,9-TETRACHLORODIBENZOFURAN UNLABELED (70648-22-5)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

#### 1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (57652-85-7)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

#### 1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN UNLABELED (35822-46-9)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

#### OCTACHLORODIBENZO-P-DIOXIN UNLABELED (3268-87-9)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

#### 1,3,6,8-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) (33423-92-6 (Unlabeled))

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

#### 1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN (13C12, 99%) (40321-76-4 (Unlabeled))

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

#### 3,4,4',5'-TETRACB (PCB-81) (13C12, 99%) (208461-24-9)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

#### 3,3',4,4'-TETRACB (PCB-77) (13C12, 99%) (105600-23-5)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

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<b>3,3',4,4',5-PENTACB (PCB-126) (13C12, 99%) (208263-65-4)</b>
Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)
<b>3,3',4,4',5,5'-HEXACB (PCB-169) (13C12, 99%) (32774-16-6 (Unlabeled))</b>
Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)
<b>1,2,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%) (58802-20-3 (Unlabeled))</b>
Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)
<b>1,2,3,4,6-PENTACHLORODIBENZOFURAN (13C12, 99%) (83704-47-6)</b>
Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)
<b>1,2,3,4,6,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%) (69698-58-4)</b>
Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)
<b>2,3,3',5,5'-PENTACB (PCB-111) (13C12, 99%) (235416-29-2)</b>
Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)
<b>2,2',3,3',5,5',6-HEPTACB (PCB-178) (13C12, 99%) (232919-67-4)</b>
Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)
<b>1,2,8,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (62470-54-6)</b>
Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)
<b>1,2,7,8-TETRACHLORODIBENZOFURAN UNLABELED (58802-20-3)</b>
Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

### 15.3. US State regulations

TWO COLUMN DIOXIN, FURAN AND PCB REV-A CALIBRATION SOLUTIONS (CS1H-6H) (UNLABELED/13C12, 99%)(I)				
U.S. - California - Proposition 65 - Carcinogens List	No			
U.S. - California - Proposition 65 - Developmental Toxicity	No			
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	No			
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No			
State or local regulations	U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List			
2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (1746-01-6)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	
1,3,6,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (33423-92-6)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
1,3,7,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (62470-53-5)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN UNLABELED (40321-76-4)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	



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<b>1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (39227-28-6)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (19408-74-3)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>2,3,7,8-TETRACHLORODIBENZOFURAN UNLABELED (51207-31-9)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,3,6,8-TETRACHLORODIBENZOFURAN UNLABELED (71998-72-6)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,8,9-TETRACHLORODIBENZOFURAN UNLABELED (70648-22-5)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>2,3,4,7,8-PENTACHLORODIBENZOFURAN UNLABELED (57117-31-4)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,4,7,8-HEXACHLORODIBENZOFURAN UNLABELED (70648-26-9)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (57652-85-7)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN UNLABELED (35822-46-9)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED (57117-44-9)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	

# TWO COLUMN DIOXIN, FURAN AND PCB REV-A CALIBRATION SOLUTIONS (CS1H-6H) (UNLABELED/13C12, 99%)

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<b>1,2,3,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED (57117-44-9)</b>				
		Female	Male	
Yes	No	No	No	
<b>1,2,3,7,8,9-HEXACHLORODIBENZOFURAN UNLABELED (72918-21-9)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>2,3,4,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED (60851-34-5)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN UNLABELED (67562-39-4)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN UNLABELED (55673-89-7)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>3,4,4',5-TETRACB UNLABELED (70362-50-4)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	
<b>2,3,4,4',5-PENTACB UNLABELED (74472-37-0)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	
<b>2',3,4,4',5-PENTACB UNLABELED (65510-44-3)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	
<b>3,3',4,4',5-PENTACB UNLABELED (57465-28-8)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	
<b>2,3,3',4,4',5-HEXACB UNLABELED (38380-08-4)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)

# TWO COLUMN DIOXIN, FURAN AND PCB REV-A CALIBRATION SOLUTIONS (CS1H-6H) (UNLABELED/13C12, 99%)

EDF-5443-A

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<b>2,3,3',4,4',5-HEXACB UNLABELED (38380-08-4)</b>				
Yes	Yes	Yes	Yes	
<b>3,3',4,4',5,5'-HEXACB UNLABELED (32774-16-6)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	
<b>2,2',3,4,4',5,5'-HEPTACB UNLABELED (35065-29-3)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	
<b>3,3',4,4'-TETRACB UNLABELED (32598-13-3)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	
<b>2,3,3',4,4'-PENTACB UNLABELED (32598-14-4)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	
<b>2,3',4,4',5-PENTACB UNLABELED (31508-00-6)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	
<b>2,3,3',4,4',5'-HEXACB UNLABELED (69782-90-7)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	
<b>2,3',4,4',5,5'-HEXACB UNLABELED (52663-72-6)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	
<b>2,2',3,3',4,4',5-HEPTACB UNLABELED (35065-30-6)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	
<b>2,3,3',4,4',5,5'-HEPTACB UNLABELED (39635-31-9)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	No	No	

# TWO COLUMN DIOXIN, FURAN AND PCB REV-A CALIBRATION SOLUTIONS (CS1H-6H) (UNLABELED/13C12, 99%)

EDF-5443-A

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<b>OCTACHLORODIBENZO-P-DIOXIN UNLABELED (3268-87-9)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>OCTACHLORODIBENZOFURAN UNLABELED (39001-02-0)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,3,6,8-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) (33423-92-6 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) (1746-01-6 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	
<b>1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN (13C12, 99%) (40321-76-4 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,4,7,8-HexaCDD (13C12, 99%) (109719-80-4)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,6,7,8-HexaCDD (13C12, 99%) (109719-81-5)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,7,8,9-HexaCDD (13C12, 99%) (109719-82-6)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,4,6,7,8-HeptaCDD (13C12, 99%) (109719-83-7)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	Yes	Yes	
<b>OctaCDD (13C12, 99%) (114423-97-1)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	Yes	Yes	

# TWO COLUMN DIOXIN, FURAN AND PCB REV-A CALIBRATION SOLUTIONS (CS1H-6H) (UNLABELED/13C12, 99%)

EDF-5443-A

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<b>OctaCDD (13C12, 99%) (114423-97-1)</b>				
		Female	Male	
Yes	No	Yes	Yes	
<b>2,3,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%) (89059-46-1 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,7,8-PentaCDF (13C12, 99%) (109719-77-9)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>2,3,4,7,8-PentaCDF (13C12, 99%) (116843-02-8)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,4,7,8-HexaCDF (13C12, 99%) (116843-03-9)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,6,7,8-HexaCDF (13C12, 99%) (116843-03-9)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,7,8,9-HEXACHLORODIBENZOFURAN (13C12, 99%) (72918-21-9 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>2,3,4,6,7,8-HexaCDF (13C12, 99%) (116843-05-1)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,4,6,7,8-HeptaCDF (13C12, 99%) (109719-84-8)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%) (55673-89-7 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	

# TWO COLUMN DIOXIN, FURAN AND PCB REV-A CALIBRATION SOLUTIONS (CS1H-6H) (UNLABELED/13C12, 99%)

EDF-5443-A

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<b>1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%) (55673-89-7 (Unlabeled))</b>				
Yes	No	No	No	
<b>OCTACHLORODIBENZOFURAN (13C12, 99%) (39001-02-0 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>3,4,4',5-TETRACB (PCB-81) (13C12, 99%) (208461-24-9)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	
<b>3,3',4,4'-TETRACB (PCB-77) (13C12, 99%) (105600-23-5)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	
<b>3,3',4,4',5-PENTACB (PCB-126) (13C12, 99%) (208263-65-4)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	
<b>3,3',4,4',5,5'-HEXACB (PCB-169) (13C12, 99%) (32774-16-6 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	
<b>2',3,4,4',5-PENTACB (PCB-123) (13C12, 99%) (208263-64-3)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	
<b>2,3',4,4',5-PENTACB (PCB-118) (13C12, 98%) (104130-40-7)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	
<b>2,3,3',4,4'-PENTACB (PCB-105) (13C12, 99%) (208263-62-1)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	
<b>2,3,4,4',5-PENTACB (PCB-114) (13C12, 99%) (208263-63-2)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	

# TWO COLUMN DIOXIN, FURAN AND PCB REV-A CALIBRATION SOLUTIONS (CS1H-6H) (UNLABELED/13C12, 99%)

EDF-5443-A

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<b>2,3',4,4',5,5'-HEXACB (PCB-167) (13C12, 99%) (208263-69-8)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	
<b>2,3,3',4,4',5-HEXACB (PCB-156) (13C12, 99%) (208263-68-7)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	
<b>2,3,3',4,4',5'-HEXACB (PCB-157) (13C12, 99%) (235416-30-5)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	
<b>2,3,3',4,4',5,5'-HEPTACB (PCB-189) (13C12, 99%) (208263-73-4)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	
<b>1,2,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%) (58802-20-3 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,4,6-PENTACHLORODIBENZOFURAN (13C12, 99%) (83704-47-6)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>1,2,3,4,6,7-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%) (NA)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,4,6,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%) (69698-58-4)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>2,3',4',5-TETRACB (PCB-70) (13C12, 99%) (208263-81-4)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	No	
<b>2,3,3',5,5'-PENTACB (PCB-111) (13C12, 99%) (235416-29-2)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)

# TWO COLUMN DIOXIN, FURAN AND PCB REV-A CALIBRATION SOLUTIONS (CS1H-6H) (UNLABELED/13C12, 99%)

EDF-5443-A

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<b>2,3,3',5,5'-PENTACB (PCB-111) (13C12, 99%) (235416-29-2)</b>				
		Female	Male	
Yes	Yes	Yes	Yes	
<b>2,2',3,4,4',5'-HEXACB (PCB-138) (13C12, 99%) (208263-66-5)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	
<b>2,2',3,3',5,5',6-HEPTACB (PCB-178) (13C12, 99%) (232919-67-4)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	
<b>3,3',4,5'-TETRACB (PCB-79) (13C12, 99%) (41464-48-6 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	Yes	
<b>2,2',3,3',4,4',5-HEPTACB (PCB-170) (13C12, 99%) (35065-30-6 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	No	
<b>1,2,3,4-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) (114423-99-3 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>N-NONANE UNLABELED (111-84-2)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>2,2',3,4,4',5,5'-HEPTACB (PCB-180) (13C12, 99%) (35065-29-3 (Unlabeled))</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	Yes	Yes	No	
<b>1,2,8,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (62470-54-6)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>1,2,3,7,8-PENTACHLORODIBENZOFURAN UNLABELED (57117-41-6)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)



# TWO COLUMN DIOXIN, FURAN AND PCB REV-A CALIBRATION SOLUTIONS (CS1H-6H) (UNLABELED/13C12, 99%)

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<b>1,2,3,7,8-PENTACHLORODIBENZOFURAN UNLABELED (57117-41-6)</b>				
Yes	No	No	No	
<b>1,2,7,8-TETRACHLORODIBENZOFURAN UNLABELED (58802-20-3)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
<b>TOLUENE UNLABELED (108-88-3)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	Yes	No	No	
<b>ISOCTANE UNLABELED (540-84-1)</b>				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
<b>2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (1746-01-6)</b>				
<b>State or local regulations</b>				
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List				
<b>1,3,6,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (33423-92-6)</b>				
<b>State or local regulations</b>				
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List				
<b>1,3,7,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (62470-53-5)</b>				
<b>State or local regulations</b>				
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List				
<b>1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN UNLABELED (40321-76-4)</b>				
<b>State or local regulations</b>				
U.S. - Pennsylvania - Schedule I Controlled Substances U.S. - New Jersey - Right to Know Hazardous Substance List				
<b>1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (39227-28-6)</b>				
<b>State or local regulations</b>				
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List				
<b>1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (19408-74-3)</b>				
<b>State or local regulations</b>				
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List				
<b>2,3,7,8-TETRACHLORODIBENZOFURAN UNLABELED (51207-31-9)</b>				
<b>State or local regulations</b>				
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List				
<b>1,3,6,8-TETRACHLORODIBENZOFURAN UNLABELED (71998-72-6)</b>				
<b>State or local regulations</b>				
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List				

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<b>1,2,8,9-TETRACHLORODIBENZOFURAN UNLABELED (70648-22-5)</b>
<b>State or local regulations</b>
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
<b>2,3,4,7,8-PENTACHLORODIBENZOFURAN UNLABELED (57117-31-4)</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,4,7,8-HEXACHLORODIBENZOFURAN UNLABELED (70648-26-9)</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (57652-85-7)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN UNLABELED (35822-46-9)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED (57117-44-9)</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,7,8,9-HEXACHLORODIBENZOFURAN UNLABELED (72918-21-9)</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>2,3,4,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED (60851-34-5)</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN UNLABELED (67562-39-4)</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN UNLABELED (55673-89-7)</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>3,4,4',5-TETRACB UNLABELED (70362-50-4)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List

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<b>2,3,4,4',5-PENTACB UNLABELED (74472-37-0)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>2',3,4,4',5-PENTACB UNLABELED (65510-44-3)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>3,3',4,4',5-PENTACB UNLABELED (57465-28-8)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>2,3,3',4,4',5-HEXACB UNLABELED (38380-08-4)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>3,3',4,4',5,5'-HEXACB UNLABELED (32774-16-6)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>2,2',3,4,4',5,5'-HEPTACB UNLABELED (35065-29-3)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>3,3',4,4'-TETRACB UNLABELED (32598-13-3)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>2,3,3',4,4'-PENTACB UNLABELED (32598-14-4)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>2,3',4,4',5-PENTACB UNLABELED (31508-00-6)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>2,3,3',4,4',5'-HEXACB UNLABELED (69782-90-7)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>2,3',4,4',5,5'-HEXACB UNLABELED (52663-72-6)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>2,2',3,3',4,4',5-HEPTACB UNLABELED (35065-30-6)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>2,3,3',4,4',5,5'-HEPTACB UNLABELED (39635-31-9)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List

# TWO COLUMN DIOXIN, FURAN AND PCB REV-A CALIBRATION SOLUTIONS (CS1H-6H) (UNLABELED/13C12, 99%)

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<b>2,3,3',4,4',5,5'-HEPTACB UNLABELED (39635-31-9)</b>
U.S. - New Jersey - Right to Know Hazardous Substance List
<b>OCTACHLORODIBENZO-P-DIOXIN UNLABELED (3268-87-9)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>OCTACHLORODIBENZOFURAN UNLABELED (39001-02-0)</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,3,6,8-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) (33423-92-6 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) (1746-01-6 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN (13C12, 99%) (40321-76-4 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,4,7,8-HexaCDD (13C12, 99%) (109719-80-4)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,6,7,8-HexaCDD (13C12, 99%) (109719-81-5)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,7,8,9-HexaCDD (13C12, 99%) (109719-82-6)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>OctaCDD (13C12, 99%) (114423-97-1)</b>
<b>State or local regulations</b>
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
<b>2,3,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%) (89059-46-1 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,7,8-PentaCDF (13C12, 99%) (109719-77-9)</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>2,3,4,7,8-PentaCDF (13C12, 99%) (116843-02-8)</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List

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<b>2,3,4,7,8-PentaCDF (13C12, 99%) (116843-02-8)</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,4,7,8-HexaCDF (13C12, 99%) (116843-03-9)</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,6,7,8-HexaCDF (13C12, 99%) (116843-03-9)</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,7,8,9-HEXACHLORODIBENZOFURAN (13C12, 99%) (72918-21-9 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>2,3,4,6,7,8-HexaCDF (13C12, 99%) (116843-05-1)</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,4,6,7,8-HeptaCDF (13C12, 99%) (109719-84-8)</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%) (55673-89-7 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>OCTACHLORODIBENZOFURAN (13C12, 99%) (39001-02-0 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>3,4,4',5-TETRACB (PCB-81) (13C12, 99%) (208461-24-9)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>3,3',4,4'-TETRACB (PCB-77) (13C12, 99%) (105600-23-5)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>3,3',4,4',5-PENTACB (PCB-126) (13C12, 99%) (208263-65-4)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>3,3',4,4',5,5'-HEXACB (PCB-169) (13C12, 99%) (32774-16-6 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List

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<b>3,3',4,4',5,5'-HEXACB (PCB-169) (13C12, 99%) (32774-16-6 (Unlabeled))</b>
U.S. - New Jersey - Right to Know Hazardous Substance List
<b>2',3,4,4',5-PENTACB (PCB-123) (13C12, 99%) (208263-64-3)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>2,3',4,4',5-PENTACB (PCB-118) (13C12, 98%) (104130-40-7)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>2,3,3',4,4'-PENTACB (PCB-105) (13C12, 99%) (208263-62-1)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>2,3,4,4',5-PENTACB (PCB-114) (13C12, 99%) (208263-63-2)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>2,3',4,4',5,5'-HEXACB (PCB-167) (13C12, 99%) (208263-69-8)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>2,3,3',4,4',5-HEXACB (PCB-156) (13C12, 99%) (208263-68-7)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>2,3,3',4,4',5-HEXACB (PCB-157) (13C12, 99%) (235416-30-5)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>2,3,3',4,4',5,5'-HEPTACB (PCB-189) (13C12, 99%) (208263-73-4)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%) (58802-20-3 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
<b>1,2,3,4,6-PENTACHLORODIBENZOFURAN (13C12, 99%) (83704-47-6)</b>
<b>State or local regulations</b>
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
<b>1,2,3,4,6,7-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%) (NA)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,4,6,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%) (69698-58-4)</b>
<b>State or local regulations</b>
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List

# TWO COLUMN DIOXIN, FURAN AND PCB REV-A CALIBRATION SOLUTIONS (CS1H-6H) (UNLABELED/13C12, 99%)

EDF-5443-A

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<b>2,3',4',5'-TETRACB (PCB-70) (13C12, 99%) (208263-81-4)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>2,3,3',5,5'-PENTACB (PCB-111) (13C12, 99%) (235416-29-2)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>2,2',3,4,4',5'-HEXACB (PCB-138) (13C12, 99%) (208263-66-5)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>2,2',3,3',5,5',6'-HEPTACB (PCB-178) (13C12, 99%) (232919-67-4)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>3,3',4,5'-TETRACB (PCB-79) (13C12, 99%) (41464-48-6 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>2,2',3,3',4,4',5'-HEPTACB (PCB-170) (13C12, 99%) (35065-30-6 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,4-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) (114423-99-3 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>N-NONANE UNLABELED (111-84-2)</b>
<b>State or local regulations</b>
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances
<b>2,2',3,4,4',5,5'-HEPTACB (PCB-180) (13C12, 99%) (35065-29-3 (Unlabeled))</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,8,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (62470-54-6)</b>
<b>State or local regulations</b>
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,3,7,8-PENTACHLORODIBENZOFURAN UNLABELED (57117-41-6)</b>
<b>State or local regulations</b>
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List
<b>1,2,7,8-TETRACHLORODIBENZOFURAN UNLABELED (58802-20-3)</b>
<b>State or local regulations</b>
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List

# TWO COLUMN DIOXIN, FURAN AND PCB REV-A CALIBRATION SOLUTIONS (CS1H-6H) (UNLABELED/13C12, 99%)

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TOLUENE UNLABELED (108-88-3)	
State or local regulations	
U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities	
U.S. - New Jersey - Right to Know Hazardous Substance List	
U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances	
U.S. - Pennsylvania - RTK (Right to Know) List	
U.S. - Massachusetts - Right To Know List	
ISOCTANE UNLABELED (540-84-1)	
State or local regulations	
U.S. - Massachusetts - Right To Know List	
U.S. - Pennsylvania - RTK (Right to Know) List	
U.S. - New Jersey - Right to Know Hazardous Substance List	

## SECTION 16: Other information

Other information : This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

Full text of R-, H- and EUH-phrases:

Acute Tox. 1 (Dermal)	Acute toxicity (dermal) Category 1
Acute Tox. 2 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 2
Acute Tox. 2 (Oral)	Acute toxicity (oral) Category 2
Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhalation) Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Aquatic Chronic 4	Hazardous to the aquatic environment - Chronic Hazard Category 4
Asp. Tox. 1	Aspiration hazard Category 1
Carc. 1A	Carcinogenicity Category 1A
Carc. 2	Carcinogenicity Category 2
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Flam. Liq. 2	Flammable liquids Category 2
Flam. Liq. 3	Flammable liquids Category 3
Repr. 2	Reproductive toxicity Category 2
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapor
H226	Flammable liquid and vapor
H300	Fatal if swallowed
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H310	Fatal in contact with skin
H312	Harmful in contact with skin
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H330	Fatal if inhaled
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness



# TWO COLUMN DIOXIN, FURAN AND PCB REV-A CALIBRATION SOLUTIONS (CS1H-6H) (UNLABELED/13C12, 99%)

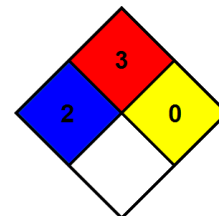
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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

H350	May cause cancer
H351	Suspected of causing cancer
H361	Suspected of damaging fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
H413	May cause long lasting harmful effects to aquatic life
R10	Flammable
R11	Highly flammable
R20	Harmful by inhalation
R20/21/22	Harmful by inhalation, in contact with skin and if swallowed
R20/22	Harmful by inhalation and if swallowed
R22	Harmful if swallowed
R26/27/28	Very toxic by inhalation, in contact with skin and if swallowed
R28	Very toxic if swallowed
R33	Danger of cumulative effects
R36	Irritating to eyes
R36/37/38	Irritating to eyes, respiratory system and skin
R36/38	Irritating to eyes and skin
R38	Irritating to skin
R39/23/24/25	Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed
R40	Limited evidence of a carcinogenic effect
R41	Risk of serious damage to eyes
R45	May cause cancer
R48	Danger of serious damage to health by prolonged exposure
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation
R48/20/21/22	Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed
R48/21/22	Harmful: danger of serious damage to health by prolonged exposure in contact with skin and if swallowed
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R53	May cause long-term adverse effects in the aquatic environment
R62	Possible risk of impaired fertility
R63	Possible risk of harm to the unborn child
R65	Harmful: may cause lung damage if swallowed
R67	Vapors may cause drowsiness and dizziness
F	Highly flammable
N	Dangerous for the environment
T	Toxic
T+	Very toxic
Xi	Irritant
Xn	Harmful

- NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
- NFPA fire hazard : 3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature conditions.
- NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



### Hazard Rating

- Health : 2 Moderate Hazard - Temporary or minor injury may occur
- Flammability : 3 Serious Hazard
- Physical : 0 Minimal Hazard

### CIL Multi-Solvent Mixture SDS

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*