

#### 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: 28/07/2017 Revision date: : Version: 1.0

EDF-5327-CS4H

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

#### 1.1. Product identifier

Product form : Mixtures

Product name : MODIFIED JIS DIOXIN & FURAN CALIBRATION SOLUTION CS4H (UNLABELED/13C12,

99%)

Product code : EDF-5327-CS4H

#### 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 <a href="mailto:cilsales@isotope.com">cilsales@isotope.com</a> 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:dust,mist)
 H332

 Skin Irrit. 2
 H315

 Eye Irrit. 2
 H319

 STOT SE 3
 H336

 Asp. Tox. 1
 H304

 Aquatic Acute 1
 H400

 Aquatic Chronic 1
 H410

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

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

Xn; R20 Xn; R65 Xi; R36/38 R10 N; R50/53

Full text of R-phrases: see section 16

#### **GHS-US** classification

Flam. Liq. 3 Acute Tox. 4 (Inhalation:vapour) Skin Irrit. 2 Eye Irrit. 2A STOT SE 3 Asp. Tox. 1	H226 H332 H315 H319 H336 H304
Asp. Tox. 1	H304
Aquatic Acute 1	H400

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Aquatic Chronic 1 H410 Full text of H statements : see section 16

#### Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

#### 2.2. Label elements

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

Hazard pictograms (CLP)









Signal word (CLP) : Danger

Hazardous ingredients : N-NONANE UNLABELED

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

H410 - Very toxic to aquatic life with long lasting effects

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, lighting, ventilating equipment P261 - Avoid breathing dust, fume, gas, mist, spray, vapors P264 - Wash hands, forearms and face thoroughly after handling

P271 - Use only outdoors or in a well-ventilated area

P273 - Avoid release to the environment

#### **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

H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (GHS-US) : P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking

P233 - Keep container tightly closed

P240 - Ground/Bond container and receiving equipment

P241 - Use explosion-proof electrical, lighting, ventilating equipment

P242 - Use only non-sparking tools

P243 - Take precautionary measures against static discharge

P261 - Avoid breathing fume, mist, spray, vapors P264 - Wash Both hands thoroughly after handling P271 - Use only outdoors or in a well-ventilated area

P273 - Avoid release to the environment

P280 - Wear eye protection, face protection, protective clothing, protective gloves P301+P310 - If swallowed: Immediately call a doctor, a POISON CENTER

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

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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 doctor, a POISON CENTER if you feel unwell

P321 - Specific treatment (see Hazard pictograms (CLP) 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

P362+P364 - Take off contaminated clothing and wash it before reuse

P370+P378 - In case of fire: Use Alcohol resistant foam, Carbon dioxide, Dry chemical, Water

spray to extinguish P391 - Collect spillage

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	99.999905	R10 Xn; R20 Xn; R65 Xi; R36/37/38
OCTACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 3268-87-9	0.000007	T+; R28 Xi; R36 Carc.Cat.3; R40
OCTACHLORODIBENZOFURAN UNLABELED	(CAS No) 39001-02-0	0.000007	Xn; R22 Xi; R36 R53
1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 39227-28-6	0.0000028	Xn; R22 Xn; R65 R53
1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 57652-85-7	0.0000028	Xn; R22 Xn; R65 R53
1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 19408-74-3	0.0000028	Xn; R20/21/22 Carc.Cat.1; R45
1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 35822-46-9	0.0000028	Xn; R22 Xn; R65 R53
OCTACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS No) 3268-87-9 (Unlabeled)	0.0000028	Xn; R22 Xn; R65 R53
1,2,3,4,7,8-HEXACHLORODIBENZOFURAN UNLABELED	(CAS No) 70648-26-9	0.0000028	Xn; R22 Xi; R36 R53
1,2,3,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED	(CAS No) 57117-44-9	0.0000028	Xn; R22 Xi; R36 R53
2,3,4,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED	(CAS No) 60851-34-5	0.0000028	Xn; R22 Xi; R36 R53

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Name	Product identifier	%	Classification according to Directive 67/548/EEC
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN UNLABELED	(CAS No) 72918-21-9	0.0000028	Xn; R22 Xi; R36 R53
1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN UNLABELED	(CAS No) 67562-39-4	0.0000028	Xn; R22 Xi; R36 R53
1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN UNLABELED	(CAS No) 55673-89-7	0.0000028	Xn; R22 Xi; R36 R53
OCTACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 39001-02-0 (Unlabeled)	0.0000028	Xn; R22 Xi; R36 R53
1,3,7,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 62470-53-5	0.0000014	T+; R26/27/28 Carc.Cat.1; R45
1,3,6,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 33423-92-6	0.0000014	T+; R26/27/28 Carc.Cat.1; R45
1,3,6,8-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS No) 33423-92-6 (Unlabeled)	0.0000014	T+; R26/27/28 Carc.Cat.1; R45
2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS No) 1746-01-6 (Unlabeled)	0.0000014	Xn; R22 Xn; R65 R53
2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 1746-01-6	0.0000014	Xn; R22 Xn; R65 R53
1,2,8,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 62470-54-6	0.0000014	T+; R26/27/28 Carc.Cat.1; R45
1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS No) 40321-76-4 (Unlabeled)	0.0000014	Xn; R22 Xn; R65 R53
1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 40321-76-4	0.0000014	Xn; R22 Xn; R65 R53
1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS No) 39227-28-6 (Unlabeled)	0.000014	Xn; R22 Xn; R65 R53
1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS No) 57652-85-7 (Unlabeled)	0.0000014	Xn; R22 Xn; R65 R53
1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS No) 19408-74-3 (Unlabeled)	0.000014	Xn; R22 Xn; R65 R53
1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS No) 35822-46-9 (Unlabeled)	0.0000014	Xn; R22 Xn; R65 R53
2,3,7,8-TETRACHLORODIBENZOFURAN UNLABELED	(CAS No) 51207-31-9	0.000014	Xn; R22 Xi; R36 R53
1,3,6,8-TETRACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 71998-72-6 (Unlabeled)	0.0000014	Xi; R36/37/38 Xn; R22 R53
1,3,6,8-TETRACHLORODIBENZOFURAN UNLABELED	(CAS No) 71998-72-6	0.000014	Xi; R36/37/38 Xn; R22 R53
1,2,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 58802-20-3 (Unlabeled)	0.0000014	Xi; R36/37/38 Xn; R22 R53
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Name	Product identifier	%	Classification according to Directive 67/548/EEC
1,2,7,8-TETRACHLORODIBENZOFURAN UNLABELED	(CAS No) 58802-20-3	0.0000014	Xi; R36/37/38 Xn; R22 R53
1,2,8,9-TETRACHLORODIBENZOFURAN UNLABELED	(CAS No) 70648-22-5 (EC No) (EC Index No)	0.0000014	Xi; R36/37/38 Xn; R22 R53
1,2,3,7,8-PENTACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 57117-46-6 (Unlabeled)	0.000014	Xn; R22 Xi; R36 R53
1,2,3,7,8-PENTACHLORODIBENZOFURAN UNLABELED	(CAS No) 57117-41-6	0.000014	Xn; R22 Xi; R36 R53
2,3,4,7,8-PENTACHLORODIBENZOFURAN UNLABELED	(CAS No) 57117-31-4	0.000014	Xn; R22 Xi; R36 R53
2,3,4,7,8-PENTACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 57117-31-4 (Unlabeled)	0.000014	Xn; R22 Xi; R36 R53
1,2,3,4,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 70648-26-9 (Unlabeled)	0.000014	Xn; R22 Xi; R36 R53
1,2,3,6,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 57117-44-9 (Unlabeled)	0.0000014	Xn; R22 Xi; R36 R53
2,3,4,6,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 60851-34-5 (Unlabeled)	0.000014	Xn; R22 Xi; R36 R53
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 72918-21-9 (Unlabeled)	0.0000014	Xn; R22 Xi; R36 R53
1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 67562-39-4 (Unlabeled)	0.000014	Xn; R22 Xi; R36 R53
1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 55673-89-7 (Unlabeled)	0.000014	Xn; R22 Xi; R36 R53
1,2,3,4,7-PENTACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS No) 39227-61-7 (Unlabeled)	0.000014	Xn; R22 Xn; R65 R53
2,3,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 89059-46-1 (Unlabeled)	0.000014	Xn; R22 Xi; R36 R53
1,2,3,4,6,9-HEXACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 70648-26-9 (Unlabeled)	0.000014	Xn; R22 Xi; R36 R53
1,2,3,4,6,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 69698-58-4 (Unlabeled)	0.0000014	Xn; R22 Xi; R36 R53
1,2,3,4-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS No) 114423-99-3 (Unlabeled)	0.0000014	T+; R26/27/28 Carc.Cat.1; R45
1,2,3,4-TETRACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 24478-72-6 (Unlabeled)	0.0000014	Xi; R36/37/38 Xn; R22 R53

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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	99.999905	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
OCTACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 3268-87-9	0.000007	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
OCTACHLORODIBENZOFURAN UNLABELED	(CAS No) 39001-02-0	0.000007	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 39227-28-6	0.0000028	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	0.0000028	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 19408-74-3	0.0000028	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:dust,mist), H332 Carc. 1A, H350
1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 35822-46-9	0.0000028	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
OCTACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS No) 3268-87-9 (Unlabeled)	0.0000028	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	0.0000028	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	0.0000028	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	0.0000028	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	0.0000028	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN UNLABELED	(CAS No) 67562-39-4	0.0000028	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	0.0000028	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
OCTACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 39001-02-0 (Unlabeled)	0.0000028	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,3,7,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 62470-53-5	0.0000014	Acute Tox. 2 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 2 (Inhalation:dust,mist), H330 Carc. 1A, H350
1,3,6,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 33423-92-6	0.0000014	Acute Tox. 2 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 2 (Inhalation:dust,mist), H330 Carc. 1A, H350
1,3,6,8-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS No) 33423-92-6 (Unlabeled)	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-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS No) 1746-01-6 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 1746-01-6	0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413

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1,2,8,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 62470-54-6	0.0000014	Acute Tox. 2 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 2 (Inhalation:dust,mist), H330 Carc. 1A, H350
1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS No) 40321-76-4 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 40321-76-4	0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS No) 39227-28-6 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS No) 57652-85-7 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS No) 19408-74-3 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS No) 35822-46-9 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
2,3,7,8-TETRACHLORODIBENZOFURAN UNLABELED	(CAS No) 51207-31-9	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,3,6,8-TETRACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 71998-72-6 (Unlabeled)	0.0000014	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	0.0000014	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 (13C12, 99%)	(CAS No) 58802-20-3 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 4, H413
1,2,7,8-TETRACHLORODIBENZOFURAN UNLABELED	(CAS No) 58802-20-3	0.0000014	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 4, H413
1,2,8,9-TETRACHLORODIBENZOFURAN UNLABELED	(CAS No) 70648-22-5 (EC No) (EC Index No)	0.0000014	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 4, H413
1,2,3,7,8-PENTACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 57117-46-6 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,3,7,8-PENTACHLORODIBENZOFURAN UNLABELED	(CAS No) 57117-41-6	0.0000014	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	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
2,3,4,7,8-PENTACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 57117-31-4 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,3,4,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 70648-26-9 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,3,6,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 57117-44-9 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
2,3,4,6,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 60851-34-5 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 72918-21-9 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 67562-39-4 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 55673-89-7 (Unlabeled)	0.000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,3,4,7-PENTACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS No) 39227-61-7 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
2,3,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 89059-46-1 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,3,4,6,9-HEXACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 70648-26-9 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,3,4,6,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 69698-58-4 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Aquatic Chronic 4, H413
1,2,3,4-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS No) 114423-99-3 (Unlabeled)	0.000014	Acute Tox. 2 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 2 (Inhalation:dust,mist), H330 Carc. 1A, H350
1,2,3,4-TETRACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 24478-72-6 (Unlabeled)	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	99.999905	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation:vapour), H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H336 Asp. Tox. 1, H304
OCTACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 3268-87-9	0.000007	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
OCTACHLORODIBENZOFURAN UNLABELED	(CAS No) 39001-02-0	0.000007	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 39227-28-6	0.0000028	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	0.0000028	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN UNLABELED	(2121) 10100 710		
, , , , , , ,	(CAS No) 19408-74-3	0.0000028	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-HEPTACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 19408-74-3 (CAS No) 35822-46-9	0.0000028	Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332
1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN	,		Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Carc. 1A, H350 Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304
1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 35822-46-9	0.0000028	Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Carc. 1A, H350 Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413 Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304
1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN UNLABELED  OCTACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS No) 35822-46-9 (CAS No) 3268-87-9 (Unlabeled)	0.0000028	Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Carc. 1A, H350  Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413  Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413  Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319
1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN UNLABELED  OCTACHLORODIBENZO-P-DIOXIN (13C12, 99%)  1,2,3,4,7,8-HEXACHLORODIBENZOFURAN UNLABELED	(CAS No) 35822-46-9 (CAS No) 3268-87-9 (Unlabeled) (CAS No) 70648-26-9	0.0000028 0.0000028 0.0000028	Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Carc. 1A, H350  Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413  Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413  Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413  Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319  Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319

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Name	Product identifier	%	GHS-US classification
1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN UNLABELED	(CAS No) 67562-39-4	0.0000028	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	0.0000028	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
OCTACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 39001-02-0 (Unlabeled)	0.0000028	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
1,3,7,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 62470-53-5	0.0000014	Acute Tox. 1 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 1 (Inhalation), H330 Carc. 1A, H350
1,3,6,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 33423-92-6	0.0000014	Acute Tox. 1 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 1 (Inhalation), H330 Carc. 1A, H350
1,3,6,8-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS No) 33423-92-6 (Unlabeled)	0.0000014	Acute Tox. 1 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 1 (Inhalation), H330 Carc. 1A, H350
2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS No) 1746-01-6 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 1746-01-6	0.0000014	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	0.0000014	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 (13C12, 99%)	(CAS No) 40321-76-4 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN UNLABELED	(CAS No) 40321-76-4	0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS No) 39227-28-6 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS No) 57652-85-7 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS No) 19408-74-3 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS No) 35822-46-9 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
2,3,7,8-TETRACHLORODIBENZOFURAN UNLABELED	(CAS No) 51207-31-9	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
1,3,6,8-TETRACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 71998-72-6 (Unlabeled)	0.0000014	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	0.0000014	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 (13C12, 99%)	(CAS No) 58802-20-3 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 4, H413
1,2,7,8-TETRACHLORODIBENZOFURAN UNLABELED	(CAS No) 58802-20-3	0.0000014	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
1,2,8,9-TETRACHLORODIBENZOFURAN UNLABELED	(CAS No) 70648-22-5	0.0000014	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 4, H413
1,2,3,7,8-PENTACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 57117-46-6 (Unlabeled)	0.0000014	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	0.0000014	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	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
2,3,4,7,8-PENTACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 57117-31-4 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
1,2,3,4,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 70648-26-9 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
1,2,3,6,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 57117-44-9 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
2,3,4,6,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 60851-34-5 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 72918-21-9 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 67562-39-4 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 55673-89-7 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
1,2,3,4,7-PENTACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS No) 39227-61-7 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Asp. Tox. 1, H304 Aquatic Chronic 4, H413
2,3,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 89059-46-1 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
1,2,3,4,6,9-HEXACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 70648-26-9 (Unlabeled)	0.0000014	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
1,2,3,4,6,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 69698-58-4 (Unlabeled)	0.0000014	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Chronic 4, H413
1,2,3,4-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%)	(CAS No) 114423-99-3 (Unlabeled)	0.0000014	Acute Tox. 1 (Oral), H300 Acute Tox. 1 (Dermal), H310 Acute Tox. 1 (Inhalation), H330 Carc. 1A, H350
1,2,3,4-TETRACHLORODIBENZOFURAN (13C12, 99%)	(CAS No) 24478-72-6 (Unlabeled)	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

#### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice. Evacuate danger area.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water.

First-aid measures after eye contact : Rinse eyes with water as a precaution.

First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

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

Symptoms/injuries : May cause drowsiness or dizziness.

Symptoms/injuries after inhalation : Harmful if inhaled. May cause respiratory irritation. : Causes skin irritation. May be harmful in contact with skin. Symptoms/injuries after skin contact

Symptoms/injuries after eye contact : Causes serious eye irritation.

Symptoms/injuries after ingestion : May be fatal if swallowed and enters airways. Risk of lung edema.

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

Treat symptomatically.

#### **SECTION 5: Firefighting measures**

#### **Extinguishing media**

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

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

: The product is non-reactive under normal conditions of use, storage and transport. Reactivity

#### 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**

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

#### 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

: Do not attempt to take action without suitable protective equipment. For further information Protective equipment

refer to section 8: "Exposure controls/personal protection".

#### **Environmental precautions**

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

### 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. This material and its container must be disposed of in a safe way, and as per local

legislation.

Other information : Dispose of materials or solid residues at an authorized site.

#### Reference to other sections

For further information refer to section 13.

### **SECTION 7: Handling and storage**

#### Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.

: Do not eat, drink or smoke when using this product. Always wash hands after handling the Hygiene measures

product.

#### 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.

#### Specific end use(s)

No additional information available

#### **SECTION 8: Exposure controls/personal protection**

#### **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

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N-NONANE UNLABELED (111-84-2)		
USA NIOSH	NIOSH REL (TWA) (mg/m³)	1050 mg/m³ 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/m³)	1050 mg/m³ 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/m³)	1050 California permissible exposure limits for chemical contaminants.
USA OSHA	OSHA PEL (Ceiling) (ppm)	200 ppm California permissible exposure limits for chemical contaminants.

#### 8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Personal protective equipment : Protective clothing. Protective goggles. Gloves. Self-contained breathing apparatus.









Materials for protective clothing : Wear suitable protective clothing and gloves.

Hand protection : protective gloves.

Eye protection : Chemical goggles or face shield. Chemical goggles or safety glasses.

Skin and body protection : Wear suitable protective clothing, gloves and eye/face protection.

Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is

recommended. Approved respirator.

Environmental exposure controls : Avoid release to the environment.

#### **SECTION 9: Physical and chemical properties**

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

The properties listed below are for the solvent, the main component of this mixture.

Physical state : Liquid

Appearance : Liquid.

Molecular mass : 128.3 g/mol

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 : Not applicable
Freezing point : -53 °C (- 63 °F) - lit
Boiling point : 151 °C (304 °F) - lit
Flash point : 31 °C (87.8 °F) - closed cup

Auto-ignition temperature : 205 °C (401 °F)

Decomposition temperature : No data available

Flammability (solid, gas) : Not applicable

Vapor pressure : 5.69 hPa (4.27 mmHg) at 25 °C (77 °F)

Relative vapor density at 20 °C : No data available Relative density : No data available

Specific gravity / density : 0.718 g/ml at 25  $^{\circ}$ C (77  $^{\circ}$ F)

Solubility : Water: 0.0002 % at 25 °C (77 °F) - slightly soluble

Log Pow : 5.65

Log Kow : No data available

Viscosity, kinematic : 1.008 mm²/s at 20 °C (68 °F)

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Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidizing properties : No data available
Explosion limits : 0.87 - 2.9 % (V)

#### 9.2. Other information

No additional information available

#### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

#### 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

None under recommended storage and handling conditions (see section 7).

#### 10.5. Incompatible materials

Strong oxidizing agents.

#### 10.6. Hazardous decomposition products

Carbon oxides (CO, CO2).

#### **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

Acute toxicity : Inhalation:dust,mist: Harmful if inhaled

Acute toxicity	: Inhalation:dust,mist: Harmful if inhaled.
MODIFIED JIS DIOXIN & FURAN CALIBRATI	ON SOLUTION CS4H (UNLABELED/13C12, 99%)
ATE CLP (dust, mist)	1.500 mg/l/4h
N-NONANE UNLABELED (111-84-2)	
LC50 inhalation rat (mg/l)	23760 mg/m³ male - 4 h
ATE CLP (gases)	3200.000 ppmV/4h
ATE CLP (vapors)	11.000 mg/l/4h
ATE CLP (dust, mist)	23.760 mg/l/4h
Skin corrosion/irritation, Dermal, rat	Result: Skin Irritation (Draize Test)
Additional information	: S. Typhimurium Result: negative
2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN	(13C12, 99%) (1746-01-6 (Unlabeled))
ATE CLP (oral)	500.000 mg/kg body weight
1,3,6,8-TETRACHLORODIBENZO-P-DIOXIN	(13C12, 99%) (33423-92-6 (Unlabeled))
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-DIOXII	N (13C12, 99%) (40321-76-4 (Unlabeled))
ATE CLP (oral)	500.000 mg/kg body weight
1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXI	N (13C12, 99%) (39227-28-6 (Unlabeled))
ATE CLP (oral)	500.000 mg/kg body weight
1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXI	N UNLABELED (39227-28-6)
ATE CLP (oral)	500.000 mg/kg body weight
1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXI	N (13C12, 99%) (57652-85-7 (Unlabeled))
ATE CLP (oral)	500.000 mg/kg body weight
1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXI	N UNLABELED (57652-85-7)
ATE CLP (oral)	500.000 mg/kg body weight
1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXI	N (13C12, 99%) (19408-74-3 (Unlabeled))
ATE CLP (oral)	500.000 mg/kg body weight
1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXI	N UNLABELED (19408-74-3)
ATE CLP (oral)	500.000 mg/kg body weight
ATE CLP (dermal)	1100.000 mg/kg body weight
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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

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1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOX	IN UNLABELED (19408-74-3)
ATE CLP (dust, mist)	1.500 mg/l/4h
1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DI	OXIN (13C12, 99%) (35822-46-9 (Unlabeled))
ATE CLP (oral)	500.000 mg/kg body weight
1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DI	OXIN UNLABELED (35822-46-9)
ATE CLP (oral)	500.000 mg/kg body weight
OCTACHLORODIBENZO-P-DIOXIN (13C12,	99%) (3268-87-9 (Unlabeled))
ATE CLP (oral)	500.000 mg/kg body weight
OCTACHLORODIBENZO-P-DIOXIN UNLABE	ELED (3268-87-9)
ATE CLP (oral)	500.000 mg/kg body weight
1,3,6,8-TETRACHLORODIBENZOFURAN (1)	3C12_99%) (71998-72-6 (Unlaheled))
ATE CLP (oral)	500.000 mg/kg body weight
1,2,7,8-TETRACHLORODIBENZOFURAN (13	
ATE CLP (oral)	500.000 mg/kg body weight
1,2,3,7,8-PENTACHLORODIBENZOFURAN (	
ATE CLP (oral)	500.000 mg/kg body weight
` '	
2,3,4,7,8-PENTACHLORODIBENZOFURAN ( ATE CLP (oral)	13C12, 99%) (57117-31-4 (Unlabeled)) 500.000 mg/kg body weight
, ,	
1,2,3,4,7,8-HEXACHLORODIBENZOFURAN	(13C12, 99%) (70648-26-9 (Unlabeled)) 500.000 mg/kg body weight
ATE CLP (oral)	
1,2,3,4,7,8-HEXACHLORODIBENZOFURAN	
ATE CLP (oral)	500.000 mg/kg body weight
1,2,3,6,7,8-HEXACHLORODIBENZOFURAN	
ATE CLP (oral)	500.000 mg/kg body weight
1,2,3,6,7,8-HEXACHLORODIBENZOFURAN	
ATE CLP (oral)	500.000 mg/kg body weight
2,3,4,6,7,8-HEXACHLORODIBENZOFURAN	
ATE CLP (oral)	500.000 mg/kg body weight
2,3,4,6,7,8-HEXACHLORODIBENZOFURAN	
ATE CLP (oral)	500.000 mg/kg body weight
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN	(13C12, 99%) (72918-21-9 (Unlabeled))
$A \vdash C \vdash $	
ATE CLP (oral)	500.000 mg/kg body weight
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN	UNLABELED (72918-21-9)
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN ATE CLP (oral)	UNLABELED (72918-21-9) 500.000 mg/kg body weight
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN (ATE CLP (oral)  1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURA	UNLABELED (72918-21-9)  500.000 mg/kg body weight  AN (13C12, 99%) (67562-39-4 (Unlabeled))
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN ATE CLP (oral)  1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURA ATE CLP (oral)	UNLABELED (72918-21-9)  500.000 mg/kg body weight  AN (13C12, 99%) (67562-39-4 (Unlabeled))  500.000 mg/kg body weight
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN ATE CLP (oral)  1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURA ATE CLP (oral)  1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURA	UNLABELED (72918-21-9)  500.000 mg/kg body weight  AN (13C12, 99%) (67562-39-4 (Unlabeled))  500.000 mg/kg body weight  AN UNLABELED (67562-39-4)
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN ATE CLP (oral)  1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURA ATE CLP (oral)	UNLABELED (72918-21-9)  500.000 mg/kg body weight  AN (13C12, 99%) (67562-39-4 (Unlabeled))  500.000 mg/kg body weight
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN ATE CLP (oral)  1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURA ATE CLP (oral)  1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURA	UNLABELED (72918-21-9)  500.000 mg/kg body weight  AN (13C12, 99%) (67562-39-4 (Unlabeled))  500.000 mg/kg body weight  AN UNLABELED (67562-39-4)  500.000 mg/kg body weight  AN (13C12, 99%) (55673-89-7 (Unlabeled))
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN (ATE CLP (oral))  1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAL ATE CLP (oral)  1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAL ATE CLP (oral)	UNLABELED (72918-21-9)  500.000 mg/kg body weight  AN (13C12, 99%) (67562-39-4 (Unlabeled))  500.000 mg/kg body weight  AN UNLABELED (67562-39-4)  500.000 mg/kg body weight
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN ATE CLP (oral)  1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURA ATE CLP (oral)  1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURA ATE CLP (oral)  1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURA	UNLABELED (72918-21-9)  500.000 mg/kg body weight  AN (13C12, 99%) (67562-39-4 (Unlabeled))  500.000 mg/kg body weight  AN UNLABELED (67562-39-4)  500.000 mg/kg body weight  AN (13C12, 99%) (55673-89-7 (Unlabeled))  500.000 mg/kg body weight
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN ATE CLP (oral)  1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURA ATE CLP (oral)  1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURA ATE CLP (oral)  1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURA ATE CLP (oral)	UNLABELED (72918-21-9)  500.000 mg/kg body weight  AN (13C12, 99%) (67562-39-4 (Unlabeled))  500.000 mg/kg body weight  AN UNLABELED (67562-39-4)  500.000 mg/kg body weight  AN (13C12, 99%) (55673-89-7 (Unlabeled))  500.000 mg/kg body weight
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN ATE CLP (oral)  1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURA ATE CLP (oral)  1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURA ATE CLP (oral)  1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURA ATE CLP (oral)  1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURA ATE CLP (oral)	UNLABELED (72918-21-9)  500.000 mg/kg body weight  AN (13C12, 99%) (67562-39-4 (Unlabeled))  500.000 mg/kg body weight  AN UNLABELED (67562-39-4)  500.000 mg/kg body weight  AN (13C12, 99%) (55673-89-7 (Unlabeled))  500.000 mg/kg body weight  AN UNLABELED (55673-89-7)  500.000 mg/kg body weight
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN ATE CLP (oral)  1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURA ATE CLP (oral)  1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURA ATE CLP (oral)  1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURA ATE CLP (oral)  1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURA ATE CLP (oral)	UNLABELED (72918-21-9)  500.000 mg/kg body weight  AN (13C12, 99%) (67562-39-4 (Unlabeled))  500.000 mg/kg body weight  AN UNLABELED (67562-39-4)  500.000 mg/kg body weight  AN (13C12, 99%) (55673-89-7 (Unlabeled))  500.000 mg/kg body weight  AN UNLABELED (55673-89-7)  500.000 mg/kg body weight
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN ATE CLP (oral)  1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURA ATE CLP (oral)  1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURA ATE CLP (oral)  1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURA ATE CLP (oral)  1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURA ATE CLP (oral)  OCTACHLORODIBENZOFURAN (13C12, 996)	UNLABELED (72918-21-9)  500.000 mg/kg body weight  AN (13C12, 99%) (67562-39-4 (Unlabeled))  500.000 mg/kg body weight  AN UNLABELED (67562-39-4)  500.000 mg/kg body weight  AN (13C12, 99%) (55673-89-7 (Unlabeled))  500.000 mg/kg body weight  AN UNLABELED (55673-89-7)  500.000 mg/kg body weight  (N) (39001-02-0 (Unlabeled))  500.000 mg/kg body weight
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN ATE CLP (oral)  1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURA ATE CLP (oral)  1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURA ATE CLP (oral)  1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURA ATE CLP (oral)  1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURA ATE CLP (oral)  OCTACHLORODIBENZOFURAN (13C12, 996 ATE CLP (oral)	UNLABELED (72918-21-9)  500.000 mg/kg body weight  AN (13C12, 99%) (67562-39-4 (Unlabeled))  500.000 mg/kg body weight  AN UNLABELED (67562-39-4)  500.000 mg/kg body weight  AN (13C12, 99%) (55673-89-7 (Unlabeled))  500.000 mg/kg body weight  AN UNLABELED (55673-89-7)  500.000 mg/kg body weight  (N) (39001-02-0 (Unlabeled))  500.000 mg/kg body weight
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN ATE CLP (oral)  1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURA ATE CLP (oral)  1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURA ATE CLP (oral)  1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURA ATE CLP (oral)  1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURA ATE CLP (oral)  OCTACHLORODIBENZOFURAN (13C12, 9990 ATE CLP (oral))  OCTACHLORODIBENZOFURAN UNLABELE	UNLABELED (72918-21-9)  500.000 mg/kg body weight  AN (13C12, 99%) (67562-39-4 (Unlabeled))  500.000 mg/kg body weight  AN UNLABELED (67562-39-4)  500.000 mg/kg body weight  AN (13C12, 99%) (55673-89-7 (Unlabeled))  500.000 mg/kg body weight  AN UNLABELED (55673-89-7)  500.000 mg/kg body weight  AN UNLABELED (55673-89-7)  500.000 mg/kg body weight
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN ATE CLP (oral)  1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURA ATE CLP (oral)  1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURA ATE CLP (oral)  1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURA ATE CLP (oral)  1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURA ATE CLP (oral)  OCTACHLORODIBENZOFURAN (13C12, 9990 ATE CLP (oral)  OCTACHLORODIBENZOFURAN UNLABELE ATE CLP (oral)	UNLABELED (72918-21-9)  500.000 mg/kg body weight  AN (13C12, 99%) (67562-39-4 (Unlabeled))  500.000 mg/kg body weight  AN UNLABELED (67562-39-4)  500.000 mg/kg body weight  AN (13C12, 99%) (55673-89-7 (Unlabeled))  500.000 mg/kg body weight  AN UNLABELED (55673-89-7)  500.000 mg/kg body weight  AN UNLABELED (55673-89-7)  500.000 mg/kg body weight
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN ATE CLP (oral)  1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURA ATE CLP (oral)  1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURA ATE CLP (oral)  1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURA ATE CLP (oral)  1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURA ATE CLP (oral)  OCTACHLORODIBENZOFURAN (13C12, 999 ATE CLP (oral)  OCTACHLORODIBENZOFURAN UNLABELE ATE CLP (oral)  1,2,3,4,7-PENTACHLORODIBENZO-P-DIOXI	UNLABELED (72918-21-9)  500.000 mg/kg body weight  AN (13C12, 99%) (67562-39-4 (Unlabeled))  500.000 mg/kg body weight  AN UNLABELED (67562-39-4)  500.000 mg/kg body weight  AN (13C12, 99%) (55673-89-7 (Unlabeled))  500.000 mg/kg body weight  AN UNLABELED (55673-89-7)  500.000 mg/kg body weight  Who (39001-02-0 (Unlabeled))  500.000 mg/kg body weight  ED (39001-02-0)  500.000 mg/kg body weight  N (13C12, 99%) (39227-61-7 (Unlabeled))  500.000 mg/kg body weight
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN ATE CLP (oral)  1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURA ATE CLP (oral)  1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURA ATE CLP (oral)  1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURA ATE CLP (oral)  1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURA ATE CLP (oral)  OCTACHLORODIBENZOFURAN (13C12, 999 ATE CLP (oral)  OCTACHLORODIBENZOFURAN UNLABELE ATE CLP (oral)  1,2,3,4,7-PENTACHLORODIBENZO-P-DIOXII ATE CLP (oral)	UNLABELED (72918-21-9)  500.000 mg/kg body weight  AN (13C12, 99%) (67562-39-4 (Unlabeled))  500.000 mg/kg body weight  AN UNLABELED (67562-39-4)  500.000 mg/kg body weight  AN (13C12, 99%) (55673-89-7 (Unlabeled))  500.000 mg/kg body weight  AN UNLABELED (55673-89-7)  500.000 mg/kg body weight  Who (39001-02-0 (Unlabeled))  500.000 mg/kg body weight  ED (39001-02-0)  500.000 mg/kg body weight  N (13C12, 99%) (39227-61-7 (Unlabeled))  500.000 mg/kg body weight
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN ATE CLP (oral)  1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURA ATE CLP (oral)  1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURA ATE CLP (oral)  1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURA ATE CLP (oral)  1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURA ATE CLP (oral)  OCTACHLORODIBENZOFURAN (13C12, 999 ATE CLP (oral)  OCTACHLORODIBENZOFURAN UNLABELE ATE CLP (oral)  1,2,3,4,7-PENTACHLORODIBENZO-P-DIOXII ATE CLP (oral)  2,3,7,8-TETRACHLORODIBENZOFURAN (13	UNLABELED (72918-21-9)  500.000 mg/kg body weight  AN (13C12, 99%) (67562-39-4 (Unlabeled))  500.000 mg/kg body weight  AN UNLABELED (67562-39-4)  500.000 mg/kg body weight  AN (13C12, 99%) (55673-89-7 (Unlabeled))  500.000 mg/kg body weight  AN UNLABELED (55673-89-7)  500.000 mg/kg body weight  AN UNLABELED (55673-89-7)  500.000 mg/kg body weight  CO (39001-02-0)  500.000 mg/kg body weight  N (13C12, 99%) (39227-61-7 (Unlabeled))  500.000 mg/kg body weight  SC12, 99%) (89059-46-1 (Unlabeled))  500.000 mg/kg body weight
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN ATE CLP (oral)  1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURA ATE CLP (oral)  1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURA ATE CLP (oral)  1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURA ATE CLP (oral)  1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURA ATE CLP (oral)  OCTACHLORODIBENZOFURAN (13C12, 999 ATE CLP (oral)  OCTACHLORODIBENZOFURAN UNLABELE ATE CLP (oral)  1,2,3,4,7-PENTACHLORODIBENZO-P-DIOXI ATE CLP (oral)  2,3,7,8-TETRACHLORODIBENZOFURAN (13C12, 34TE CLP (oral))	UNLABELED (72918-21-9)  500.000 mg/kg body weight  AN (13C12, 99%) (67562-39-4 (Unlabeled))  500.000 mg/kg body weight  AN UNLABELED (67562-39-4)  500.000 mg/kg body weight  AN (13C12, 99%) (55673-89-7 (Unlabeled))  500.000 mg/kg body weight  AN UNLABELED (55673-89-7)  500.000 mg/kg body weight  AN UNLABELED (55673-89-7)  500.000 mg/kg body weight  CO (39001-02-0)  500.000 mg/kg body weight  N (13C12, 99%) (39227-61-7 (Unlabeled))  500.000 mg/kg body weight  SC12, 99%) (89059-46-1 (Unlabeled))  500.000 mg/kg body weight

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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

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1,2,3,4-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) (114423-99-3 (Unlabeled))				
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			
1,2,3,4-TETRACHLORODIBENZOFURAN (13C	:12, 99%) (24478-72-6 (Unlabeled))			
ATE CLP (oral)	500.000 mg/kg body weight			
1,2,3,4,6,8,9-HEPTACHLORODIBENZOFURAN	I (13C12, 99%) (69698-58-4 (Unlabeled))			
ATE CLP (oral)	500.000 mg/kg body weight			
	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 U				
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 U ATE CLP (oral)	5.000 mg/kg body weight			
ATE CLP (drain)  ATE CLP (dermal)	5.000 mg/kg body weight			
ATE CLP (dust, mist)	0.050 mg/l/4h			
1,2,8,9-TETRACHLORODIBENZO-P-DIOXIN U	·			
ATE CLP (oral)  ATE CLP (dermal)	5.000 mg/kg body weight 5.000 mg/kg body weight			
ATE CLP (definal)  ATE CLP (dust, mist)	0.050 mg/l/4h			
,				
1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN				
ATE CLP (oral)	500.000 mg/kg body weight			
	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			
1,2,7,8-TETRACHLORODIBENZOFURAN UNL	,			
ATE CLP (oral)	500.000 mg/kg body weight			
1,2,8,9-TETRACHLORODIBENZOFURAN UNL	ABELED (70648-22-5)			
ATE CLP (oral)	500.000 mg/kg body weight			
1,2,3,7,8-PENTACHLORODIBENZOFURAN UN	NLABELED (57117-41-6)			
ATE CLP (oral)	500.000 mg/kg body weight			
2,3,4,7,8-PENTACHLORODIBENZOFURAN UN	VLABELED (57117-31-4)			
ATE CLP (oral)	500.000 mg/kg body weight			
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			
	: Not classified			
Reproductive toxicity  Specific target organ toxicity – single exposure				
, , , , , , , , , , , , , , , , , , , ,	: May cause drowsiness or dizziness.			
Specific target organ toxicity – repeated exposure	: Not classified			
N-NONANE UNLABELED (111-84-2)				
NOAEL (oral,rat,90 days)	100 mg/kg bodyweight/day female (OECD Test Guildeline 408)			
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/injuries after inhalation	: Harmful if inhaled. May cause respiratory irritation.			
Symptoms/injuries after skin contact	: Causes skin irritation. May be harmful in contact with skin.			

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Symptoms/injuries after eye contact : Causes serious eye irritation.

Symptoms/injuries after ingestion : May be fatal if swallowed and enters airways. Risk of lung edema.

SECTION 12: Ecological information	
12.1. Toxicity	
N-NONANE UNLABELED (111-84-2)	
EC50 Daphnia 1	0.2 mg/l static test EC50 - Daphnia magna (Water flea) - 48 h
	3
12.2. Persistence and degradability	
1,2,3,7,8-PENTACHLORODIBENZOFURAN (13	C12, 99%) (57117-46-6 (Unlabeled))
Persistence and degradability	Not available.
2,3,4,7,8-PENTACHLORODIBENZOFURAN (13	C12, 99%) (57117-31-4 (Unlabeled))
Persistence and degradability	Not available.
1,2,3,4,7,8-HEXACHLORODIBENZOFURAN (1	3C12, 99%) (70648-26-9 (Unlabeled))
Persistence and degradability	Not available.
1,2,3,6,7,8-HEXACHLORODIBENZOFURAN (1	3C12, 99%) (57117-44-9 (Unlabeled))
Persistence and degradability	Not available.
2,3,4,6,7,8-HEXACHLORODIBENZOFURAN (13	3C12, 99%) (60851-34-5 (Unlabeled))
Persistence and degradability	Not available.
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN (13	3C12, 99%) (72918-21-9 (Unlabeled))
Persistence and degradability	Not available.
1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN	(13C12, 99%) (67562-39-4 (Unlabeled))
Persistence and degradability	Not available.
1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN	(13C12, 99%) (55673-89-7 (Unlabeled))
Persistence and degradability	Not available.
OCTACHLORODIBENZOFURAN (13C12, 99%)	(39001-02-0 (Unlabeled))
Persistence and degradability	Not available.
1,2,3,4,6,9-HEXACHLORODIBENZOFURAN (1	3C12, 99%) (70648-26-9 (Unlabeled))
Persistence and degradability	Not available.
1,2,3,4,6,8,9-HEPTACHLORODIBENZOFURAN	(13C12, 99%) (69698-58-4 (Unlabeled))
Persistence and degradability	Not available.
12.3. Bioaccumulative potential	
	N SOLUTION CS4H (UNLABELED/13C12, 99%)
Log Pow	5.65
N-NONANE UNLABELED (111-84-2)	
Log Pow	5.65
Bioaccumulative potential	Indication of bioaccumulation.
1,2,3,7,8-PENTACHLORODIBENZOFURAN (13	C12, 99%) (57117-46-6 (Unlabeled))
Bioaccumulative potential	Not available.
2,3,4,7,8-PENTACHLORODIBENZOFURAN (13	
Bioaccumulative potential	Not available.
1,2,3,4,7,8-HEXACHLORODIBENZOFURAN (1:	
Bioaccumulative potential	Not available.
1,2,3,6,7,8-HEXACHLORODIBENZOFURAN (1:	
Bioaccumulative potential	Not available.
2,3,4,6,7,8-HEXACHLORODIBENZOFURAN (1:	
Bioaccumulative potential	Not available.
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN (1	
Bioaccumulative potential	Not available.
1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN	
Bioaccumulative potential	Not available.
2.2.2.2	

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1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN	(13C12, 99%) (55673-89-7 (Unlabeled))
Bioaccumulative potential	Not available.
OCTACHLORODIBENZOFURAN (13C12, 99%)	(39001-02-0 (Unlabeled))
Bioaccumulative potential	Not available.
1,2,3,4,6,9-HEXACHLORODIBENZOFURAN (13	, , , , , , , , , , , , , , , , , , , ,
Bioaccumulative potential	Not available.
1,2,3,4,6,8,9-HEPTACHLORODIBENZOFURAN	
Bioaccumulative potential	Not available.
12.4. Mobility in soil	
1,2,3,7,8-PENTACHLORODIBENZOFURAN (13	C12, 99%) (57117-46-6 (Unlabeled))
Ecology - soil	Not available.
2,3,4,7,8-PENTACHLORODIBENZOFURAN (13	C12, 99%) (57117-31-4 (Unlabeled))
Ecology - soil	Not available.
1,2,3,4,7,8-HEXACHLORODIBENZOFURAN (13	3C12, 99%) (70648-26-9 (Unlabeled))
Ecology - soil	Not available.
1,2,3,6,7,8-HEXACHLORODIBENZOFURAN (13	3C12, 99%) (57117-44-9 (Unlabeled))
Ecology - soil	Not available.
2,3,4,6,7,8-HEXACHLORODIBENZOFURAN (13	3C12, 99%) (60851-34-5 (Unlabeled))
Ecology - soil	Not available.
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN (13	
Ecology - soil	Not available.
1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN	
Ecology - soil	Not available.
1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN	
Ecology - soil	Not available.
OCTACHLORODIBENZOFURAN (13C12, 99%)	, , , , , , , , , , , , , , , , , , , ,
Ecology - soil	Not available.
1,2,3,4,6,9-HEXACHLORODIBENZOFURAN (13	
Ecology - soil	Not available.
1,2,3,4,6,8,9-HEPTACHLORODIBENZOFURAN	
Ecology - soil	Not available.

#### 12.5. Results of PBT and vPvB assessment

No additional information available

#### 12.6. Other adverse effects

Other adverse effects : Very toxic to aquatic life with long lasting effects. Avoid release to the environment. Disposal must be done according to official regulations.

#### 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

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

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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).

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

#### **Additional information**

Emergency Response Guide (ERG) Number : 128

: No supplementary information available. Other information

#### **Overland transport**

Hazard identification number (Kemler No.) : 30

Orange plates

30

Tunnel restriction code (ADR) : D/F Limited quantities (ADR) 51 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 : 60 L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 220 L

CFR 175.75)

Civil Aeronautics Law : Flammable liquids

#### **Environmental hazards**

Dangerous for the environment



Other information : No supplementary information available.

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14.5. Special	precautions	tor user
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SARA Section 313 - Emission Reporting

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

Not applicable	II of MARPOL 73/78 and the IBC Code			
Not applicable				
SECTION 15: Regulatory information				
I5.1. US Federal regulations				
MODIFIED JIS DIOXIN & FURAN CALIBRATIO	N SOLUTION CS4H (UNLABELED/13C12, 99%)			
Listed on the United States TSCA (Toxic Substa	nces 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.			
N-NONANE UNLABELED				
Listed on the United States TSCA (Toxic Substa				
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.			
2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN (1	3C12, 99%) (1746-01-6 (Unlabeled))			
Not listed on the United States TSCA (Toxic Sub	stances 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	ting Not subject to reporting requirements of the United States SARA Section 313.			
1,3,6,8-TETRACHLORODIBENZO-P-DIOXIN (1	3C12, 99%) (33423-92-6 (Unlabeled))			
Not listed on the United States TSCA (Toxic Sub	stances 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.			
1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	(13C12, 99%) (40321-76-4 (Unlabeled))			
Not listed on the United States TSCA (Toxic Sub	stances 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.			
1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	(13C12, 99%) (39227-28-6 (Unlabeled))			
Not listed on the United States TSCA (Toxic Sub	stances 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.			
1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN	UNLABELED (39227-28-6)			
Not listed on the United States TSCA (Toxic Sub	stances 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.			
1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	(13C12, 99%) (57652-85-7 (Unlabeled))			
Not listed on the United States TSCA (Toxic Sub	stances 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.			
1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN	UNLABELED (57652-85-7)			
Not listed on the United States TSCA (Toxic Sub	stances Control Act) inventory			
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.			
CARA Section 212 Emission Reporting	Not subject to reporting requirements of the United States SADA Section 212			

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

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to, 2012 / Rules and Regulations	
1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	(13C12, 99%) (19408-74-3 (Unlabeled))
Not listed on the United States TSCA (Toxic Subs	stances 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.
1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN	UNLABELED (19408-74-3)
Not listed on the United States TSCA (Toxic Subs	stances 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.
1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOX	(IN (13C12, 99%) (35822-46-9 (Unlabeled))
Not listed on the United States TSCA (Toxic Subs	
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.
1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOX	
Not listed on the United States TSCA (Toxic Subs	, ,
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.
OCTACHLORODIBENZO-P-DIOXIN (13C12, 99	%) (3268-87-9 (Unlabeled))
Not listed on the United States TSCA (Toxic Subs	stances 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.
OCTACHLORODIBENZO-P-DIOXIN UNLABELI	ED (3268-87-9)
Not listed on the United States TSCA (Toxic Subs	stances 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.
1,3,6,8-TETRACHLORODIBENZOFURAN (13C	12. 99%) (71998-72-6 (Unlabeled))
Not listed on the United States TSCA (Toxic Subs	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporing requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporing requirements of the United States SARA Section 313.
1,2,7,8-TETRACHLORODIBENZOFURAN (13C	12 99%) (58802-20-3 (Unlabeled))
Not listed on the United States TSCA (Toxic Subs	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporing requirements of the United States SARA Section 302.
SARA Section 313 - Emission Reporting	Not subject to reporing requirements of the United States SARA Section 313.
1,2,3,7,8-PENTACHLORODIBENZOFURAN (13	C12. 99%) (57117-46-6 (Unlabeled))
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.
2,3,4,7,8-PENTACHLORODIBENZOFURAN (13	, , , , ,
SARA Section 302 Threshold Planning	Not subject to reporting requirements of the United States SARA Section 302.
Quantity (TPQ)	, , , , ,
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.
1,2,3,4,7,8-HEXACHLORODIBENZOFURAN (13	. , , , , , , , , , , , , , , , , , , ,
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.
1,2,3,4,7,8-HEXACHLORODIBENZOFURAN UN	ILABELED (70648-26-9)
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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1,2,3,6,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%) (57117-44-9 (Unlabeled))					
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.				
1,2,3,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED (57117-44-9)					
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.				
2,3,4,6,7,8-HEXACHLORODIBENZOFURAN (13	3C12, 99%) (60851-34-5 (Unlabeled))				
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.				
2,3,4,6,7,8-HEXACHLORODIBENZOFURAN UN	ILABELED (60851-34-5)				
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.				
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN (13	3C12, 99%) (72918-21-9 (Unlabeled))				
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.				
1,2,3,7,8,9-HEXACHLORODIBENZOFURAN UN	ILABELED (72918-21-9)				
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.				
1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN	(13C12, 99%) (67562-39-4 (Unlabeled))				
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.				
1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN	UNLABELED (67562-39-4)				
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.					
1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN					
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.				
1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN	UNLABELED (55673-89-7)				
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.				
OCTACHLORODIBENZOFURAN (13C12, 99%)					
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.				
OCTACHLORODIBENZOFURAN UNLABELED	,				
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.				
1,2,3,4,7-PENTACHLORODIBENZO-P-DIOXIN					
Not listed on the United States TSCA (Toxic Sub- SARA Section 302 Threshold Planning	stances Control Act) inventory  Not subject to reporting requirements of the United States SARA Section 302.				
Quantity (TPQ) SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.				
	,				
2,3,7,8-TETRACHLORODIBENZOFURAN (13C 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.				
	, 11-1-5-11-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1				

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-,					
1,2,3,4,6,9-HEXACHLORODIBENZOFURAN (13	1,2,3,4,6,9-HEXACHLORODIBENZOFURAN (13C12, 99%) (70648-26-9 (Unlabeled))				
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.				
1,2,3,4-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) (114423-99-3 (Unlabeled))					
Not listed on the United States TSCA (Toxic Subs	stances 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.				
1,2,3,4-TETRACHLORODIBENZOFURAN (13C	12, 99%) (24478-72-6 (Unlabeled))				
Not listed on the United States TSCA (Toxic Subs					
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporing requirements of the United States SARA Section 302.				
SARA Section 313 - Emission Reporting	Not subject to reporing requirements of the United States SARA Section 313.				
1,2,3,4,6,8,9-HEPTACHLORODIBENZOFURAN	(13C12, 99%) (69698-58-4 (Unlabeled))				
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.				
2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN UN					
Not listed on the United States TSCA (Toxic Subs	,				
SARA Section 302 Threshold Planning	Not subject to reporting requirements of the United States SARA Section 302.				
Quantity (TPQ)  SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.				
· · ·	, , , , , , , , , , , , , , , , , , , ,				
1,3,6,8-TETRACHLORODIBENZO-P-DIOXIN UN	,				
Not listed on the United States TSCA (Toxic Subs	, ,				
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.				
1,3,7,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (62470-53-5)					
Not listed on the United States TSCA (Toxic Sub-	stances 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.				
1,2,8,9-TETRACHLORODIBENZO-P-DIOXIN UN	NLABELED (62470-54-6)				
Not listed on the United States TSCA (Toxic Subs	stances 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.				
1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN	UNLABELED (40321-76-4)				
Not listed on the United States TSCA (Toxic Subs	,				
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.				
2,3,7,8-TETRACHLORODIBENZOFURAN UNLA	ABELED (51207-31-9)				
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.				
1.3.6.8-TETRACHLORODIBENZOFURAN LINI	ABELED (71998-72-6)				
	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 reporing requirements of the United States SARA Section 302.				
SARA Section 313 - Emission Reporting	Not subject to reporing requirements of the United States SARA Section 313.				
1,2,7,8-TETRACHLORODIBENZOFURAN UNLA					
Not listed on the United States TSCA (Toxic Subs					
SARA Section 302 Threshold Planning	Not subject to reporting requirements of the United States SARA Section 302.				
Quantity (TPQ) SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.				
1 SARA Section 313 - Emission Renomina					

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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.		
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.		
1,2,3,7,8-PENTACHLORODIBENZOFURAN UNLABELED (57117-41-6)			
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.		
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.		
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.		

#### 15.2. International regulations

CANADA
MODIFIED JIS DIOXIN & FURAN CALIBRATION SOLUTION CS4H (UNLABELED/13C12, 99%)
Listed on the Canadian DSL (Domestic Substances List)
N-NONANE UNLABELED
Listed on the Canadian DSL (Domestic Substances List)
1,3,6,8-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) (33423-92-6 (Unlabeled))
1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN (13C12, 99%) (40321-76-4 (Unlabeled))
1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%) (39227-28-6 (Unlabeled))
1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (39227-28-6)
1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%) (57652-85-7 (Unlabeled))
1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (57652-85-7)
1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%) (19408-74-3 (Unlabeled))
1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN UNLABELED (19408-74-3)
1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN (13C12, 99%) (35822-46-9 (Unlabeled))
1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN UNLABELED (35822-46-9)
OCTACHLORODIBENZO-P-DIOXIN (13C12, 99%) (3268-87-9 (Unlabeled))
OCTACHLORODIBENZO-P-DIOXIN UNLABELED (3268-87-9)
1,3,6,8-TETRACHLORODIBENZOFURAN (13C12, 99%) (71998-72-6 (Unlabeled))
1,2,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%) (58802-20-3 (Unlabeled))
1,2,3,4,7-PENTACHLORODIBENZO-P-DIOXIN (13C12, 99%) (39227-61-7 (Unlabeled))
1,2,3,4-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) (114423-99-3 (Unlabeled))
1,2,3,4-TETRACHLORODIBENZOFURAN (13C12, 99%) (24478-72-6 (Unlabeled))
2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (1746-01-6)
1,3,6,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (33423-92-6)
1,3,7,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (62470-53-5)
1,2,8,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (62470-54-6)
1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN UNLABELED (40321-76-4)
1,3,6,8-TETRACHLORODIBENZOFURAN UNLABELED (71998-72-6)
1,2,7,8-TETRACHLORODIBENZOFURAN UNLABELED (58802-20-3)
1,2,8,9-TETRACHLORODIBENZOFURAN UNLABELED (70648-22-5)

### 15.2.1. National regulations

#### N-NONANE UNLABELED

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### 2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN (13C12, 99%) (1746-01-6 (Unlabeled)) 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) 1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%) (39227-28-6 (Unlabeled)) 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) 1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%) (57652-85-7 (Unlabeled)) 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) 1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%) (19408-74-3 (Unlabeled)) 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) 1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN (13C12, 99%) (35822-46-9 (Unlabeled)) 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 (13C12, 99%) (3268-87-9 (Unlabeled)) 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-TETRACHLORODIBENZOFURAN (13C12, 99%) (71998-72-6 (Unlabeled)) Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List) 1,2,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%) (58802-20-3 (Unlabeled)) Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List) 1,2,3,4,7-PENTACHLORODIBENZO-P-DIOXIN (13C12, 99%) (39227-61-7 (Unlabeled)) Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-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)/NDSL (Non-Domestic Substances List) 1,2,3,4-TETRACHLORODIBENZOFURAN (13C12, 99%) (24478-72-6 (Unlabeled)) Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List) 2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (1746-01-6) Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List) 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)

### 1,2,8,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (62470-54-6)

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)

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

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

#### 1,2,7,8-TETRACHLORODIBENZOFURAN UNLABELED (58802-20-3)

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)

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#### 15.3. US State regulations

13.3. 03 State regulation	3				
		UTION CS4H (UNLABELED/13C	12, 99%) <b>()</b>		
U.S California - Proposition 65 - Carcinogens List		No			
U.S California - Propositi Toxicity	on 65 - Developmental	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 Idaho - Non-Carcinogeni U.S New Jersey - Right to Kr U.S Massachusetts - Right T U.S Pennsylvania - RTK (Rig U.S New York - Reporting of	now Hazardous Substance Lis o Know List aht to Know) List	t	
N-NONANE UNLABEL	ED				
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		
2,3,7,8-TETRACHLOROD	IBENZO-P-DIOXIN (13C12. 9	99%) (1746-01-6 (Unlabeled))			
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-TETRACHLOROD	IBENZO-P-DIOXIN (13C12, 9	99%) (33423-92-6 (Unlabeled))			
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-PENTACHI ORC	DIRENZO-P-DIOXIN (13C12	2, 99%) (40321-76-4 (Unlabeled)	)		
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		
123478-HEXACHLOP	DDIRENZO-P-DIOXIN (13C1)	 2, 99%) (39227-28-6 (Unlabeled)	1)		
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		
	DDIBENZO-P-DIOXIN UNLA	BELED (39227-28-6)			
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		
1,2,3,6,7,8-HEXACHLORG	DDIBENZO-P-DIOXIN (13C1)	2, 99%) (57652-85-7 (Unlabeled	))		
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)	
		remale	Iviale		

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123678-HEXACHI O	RODIBENZO-P-DIOXIN UNLAB	FI FD (57652-85-7)		
U.S California -	U.S California -	U.S California -	U.S California -	No significant risk level
Proposition 65 -	Proposition 65 -	Proposition 65 -	Proposition 65 -	(NSRL)
Carcinogens List	Developmental Toxicity	Reproductive Toxicity -	Reproductive Toxicity -	( - )
· ·	,	Female	Male	
Yes	No	No	No	
	RODIBENZO-P-DIOXIN (13C12,			
U.S California -	U.S California -	U.S California -	U.S California -	No significant risk level
Proposition 65 -	Proposition 65 -	Proposition 65 -	Proposition 65 -	(NSRL)
	Developmental Toxicity	Reproductive Toxicity -	Reproductive Toxicity -	(NSKL)
Carcinogens List	Developmental Toxicity	Female	Male	
		remaie	iviale	
Yes	No	No	No	
1,2,3,7,8,9-HEXACHLO	RODIBENZO-P-DIOXIN UNLAB			
U.S California -	U.S California -	U.S California -	U.S California -	No significant risk level
Proposition 65 -	Proposition 65 -	Proposition 65 -	Proposition 65 -	(NSRL)
Carcinogens List	Developmental Toxicity	Reproductive Toxicity -	Reproductive Toxicity -	
		Female	Male	
Yes	No	No	No	
1,2,3,4,6,7,8-HEPTACH	LORODIBENZO-P-DIOXIN (130	12, 99%) (35822-46-9 (Unlab	eled))	
U.S California -	U.S California -	U.S California -	U.S California -	No significant risk level
Proposition 65 -	Proposition 65 -	Proposition 65 -	Proposition 65 -	(NSRL)
Carcinogens List	Developmental Toxicity	Reproductive Toxicity -	Reproductive Toxicity -	` '
J		Female	Male	
Yes	No	No	No	
	LORODIBENZO-P-DIOXIN UNL			
U.S California -	U.S California -	U.S California -	U.S California -	No significant risk level
Proposition 65 -	Proposition 65 -	Proposition 65 -	Proposition 65 -	(NSRL)
Carcinogens List	Developmental Toxicity	Reproductive Toxicity -	Reproductive Toxicity -	(NOINE)
Odromogens List	Developmental Toxicity	Female	Male	
Yes	No	No	No	
	O-P-DIOXIN (13C12, 99%) (326			
U.S California -	U.S California -	U.S California -	U.S California -	No significant risk level
Proposition 65 -	Proposition 65 -	Proposition 65 -	Proposition 65 -	(NSRL)
Carcinogens List	Developmental Toxicity	Reproductive Toxicity -	Reproductive Toxicity -	
		Female	Male	
Yes	No	No	No	
OCTACHI OPODIRENZ	O-P-DIOXIN UNLABELED (326	8-87-0\		
	U.S California -		U.S California -	No significant risk level
Proposition 65 -	Proposition 65 -	Proposition 65 -	Proposition 65 -	(NSRL)
Carcinogens List	Developmental Toxicity	Reproductive Toxicity -	Reproductive Toxicity -	(ITORE)
Carolinogono Liot	Bevelopmental residity	Female	Male	
Yes	No	No	No	
			INO	
	DDIBENZOFURAN (13C12, 99%		1110 0-114	No stante of the
U.S California -	U.S California -	U.S California -	U.S California -	No significant risk level
Proposition 65 -	Proposition 65 -	Proposition 65 -	Proposition 65 -	(NSRL)
Carcinogens List	Developmental Toxicity	Reproductive Toxicity - Female	Reproductive Toxicity -	
			Male	
Yes	No	No	No	
	DDIBENZOFURAN (13C12, 99%	, , , , , , , , , , , , , , , , , , , ,		
U.S California -	U.S California -	U.S California -	U.S California -	No significant risk level
Proposition 65 -	Proposition 65 -	Proposition 65 -	Proposition 65 -	(NSRL)
Carcinogens List	Developmental Toxicity	Reproductive Toxicity -	Reproductive Toxicity -	
		Female	Male	
Yes	No	No	No	
1,2,3,7,8-PENTACHLOF	RODIBENZOFURAN (13C12, 99	%) (57117-46-6 (Unlabeled))		
U.S California -	U.S California -	U.S California -	U.S California -	No significant risk level
Proposition 65 -	Proposition 65 -	Proposition 65 -	Proposition 65 -	(NSRL)
Carcinogens List	Developmental Toxicity	Reproductive Toxicity -	Reproductive Toxicity -	
Caroniogono Liot				

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1,2,3,7,8-PENTACHLOR	RODIBENZOFURAN (13C12, 99		1	
		Female	Male	
⁄es	No	No	No	
			INO	
<b>2,3,4,7,8-PENTACHLOF</b> J.S California -	RODIBENZOFURAN (13C12, 99 U.S California -	(5/11/-31-4 (Unlabeled)) U.S California -	U.S California -	No significant risk level
Proposition 65 - Carcinogens List	Proposition 65 - Developmental Toxicity	Proposition 65 - Reproductive Toxicity - Female	Proposition 65 - Reproductive Toxicity - Male	(NSRL)
Yes	No	No	No	
1,2,3,4,7,8-HEXACHLOI	RODIBENZOFURAN (13C12, 99	%) (70648-26-9 (Unlabeled))		
U.S California -	U.S California -	U.S California -	U.S California -	No significant risk level
Proposition 65 - Carcinogens List	Proposition 65 - Developmental Toxicity	Proposition 65 - Reproductive Toxicity - Female	Proposition 65 - Reproductive Toxicity - Male	(NSRL)
Yes	No	No	No	
1,2,3,4,7,8-HEXACHLOI	RODIBENZOFURAN UNLABEL	ED (70648-26-9)		
U.S California -	U.S California -	U.S California -	U.S California -	No significant risk level
Proposition 65 - Carcinogens List	Proposition 65 - Developmental Toxicity	Proposition 65 - Reproductive Toxicity - Female	Proposition 65 - Reproductive Toxicity - Male	(NSRL)
Yes	No	No	No	
1,2,3,6,7,8-HEXACHLOI	RODIBENZOFURAN (13C12, 99	9%) (57117-44-9 (Unlabeled))		
U.S California -	U.S California -	U.S California -	U.S California -	No significant risk level
Proposition 65 - Carcinogens List	Proposition 65 - Developmental Toxicity	Proposition 65 - Reproductive Toxicity - Female	Proposition 65 - Reproductive Toxicity - Male	(NSRL)
Yes	No	No	No	
1,2,3,6,7,8-HEXACHLOI	RODIBENZOFURAN UNLABEL	ED (57117-44-9)		
U.S California -	U.S California -	U.S California -	U.S California -	No significant risk level
Proposition 65 -	Proposition 65 -	Proposition 65 -	Proposition 65 -	(NSRL)
Carcinogens List	Developmental Toxicity	Reproductive Toxicity - Female	Reproductive Toxicity - Male	
Yes	No	No	No	
2,3,4,6,7,8-HEXACHLOI	RODIBENZOFURAN (13C12, 99	%) (60851-34-5 (Unlabeled))		
U.S California -	U.S California -	U.S California -	U.S California -	No significant risk level
Proposition 65 - Carcinogens List	Proposition 65 - Developmental Toxicity	Proposition 65 - Reproductive Toxicity - Female	Proposition 65 - Reproductive Toxicity - Male	(NSRĽ)
Yes	No	No	No	
<b>2,3,4,6,7,8-HEXACHLO</b> I U.S California -	U.S California -	U.S California -	U.S California -	No significant risk level
Proposition 65 - Carcinogens List	Proposition 65 - Developmental Toxicity	Proposition 65 - Reproductive Toxicity - Female	Proposition 65 - Reproductive Toxicity - Male	(NSRL)
Yes	No	No	No	
1,2,3,7,8,9-HEXACHLOI	RODIBENZOFURAN (13C12, 99	)%) (72918-21-9 (Unlabeled))		
U.S California -	U.S California -	U.S California -	U.S California -	No significant risk level
Proposition 65 - Carcinogens List	Proposition 65 - Developmental Toxicity	Proposition 65 - Reproductive Toxicity - Female	Proposition 65 - Reproductive Toxicity - Male	(NSRL)
Yes	No	No	No	
1,2,3,7,8,9-HEXACHLOI	RODIBENZOFURAN UNLABEL	ED (72918-21-9)		
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity -	U.S California - Proposition 65 - Reproductive Toxicity -	No significant risk level (NSRL)

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	DIBENZOFURAN UNLABELE	D (72918-21-9)		
Yes	No	No	No	
1 2 3 4 6 7 8-HEPTACHI OI	RODIBENZOFURAN (13C12	99%) (67562-39-4 (Unlabeled)		
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	
1,2,3,4,6,7,8-HEPTACHLOF	RODIBENZOFURAN UNLABE	ELED (67562-39-4)		
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	
1,2,3,4,7,8,9-HEPTACHLOF	RODIBENZOFURAN (13C12,	99%) (55673-89-7 (Unlabeled)	))	
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	
	RODIBENZOFURAN UNLABE			
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	
OCTACHLORODIBENZOF	URAN (13C12, 99%) (39001-0	02-0 (Unlabeled))		
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	
OCTACHLORODIBENZOF	URAN UNLABELED (39001-0	02-0)		
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	
1,2,3,4,7-PENTACHLOROE	DIBENZO-P-DIOXIN (13C12, 9	99%) (39227-61-7 (Unlabeled))		
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	
2,3,7,8-TETRACHLORODIF	BENZOFURAN (13C12, 99%)	(89059-46-1 (Unlabeled))		
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	
1,2,3,4,6,9-HEXACHLORO	DIBENZOFURAN (13C12, 99%	%) (70648-26-9 (Unlabeled))		
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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1,2,3,4-TETRACHLORO	DDIBENZO-P-DIOXIN (13C12, 99	9%) (114423-99-3 (Unlabeled	))	
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	
1.2.3.4-TETRACHLORG	DDIBENZOFURAN (13C12, 99%)	(24478-72-6 (Unlabeled))		
U.S California -	U.S California -	U.S California -	U.S California -	No significant risk level
Proposition 65 - Carcinogens List	Proposition 65 - Developmental Toxicity	Proposition 65 - Reproductive Toxicity - Female	Proposition 65 - Reproductive Toxicity - Male	(NSRL)
Yes	No	No	No	
	LORODIBENZOFURAN (13C12		d))	
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	
			INO	
<b>2,3,7,8-TETRACHLORC</b> U.S California -	DIBENZO-P-DIOXIN UNLABEL U.S California -	.ED (1746-01-6) U.S California -	U.S California -	No significant risk level
O.S California - Proposition 65 - Carcinogens List	Proposition 65 - Developmental Toxicity	Proposition 65 - Reproductive Toxicity - Female	Proposition 65 - Reproductive Toxicity - Male	(NSRL)
Yes	Yes	Yes	Yes	
1,3,6,8-TETRACHLORC	DIBENZO-P-DIOXIN UNLABEL	ED (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-TETRACHLORC	DIBENZO-P-DIOXIN UNLABEL	ED (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	
1,2,8,9-TETRACHLORC	DIBENZO-P-DIOXIN UNLABEL	ED (62470-54-6)		
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	
1,2,3,7,8-PENTACHLOF	RODIBENZO-P-DIOXIN UNLABI	ELED (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	
2,3,7,8-TETRACHLORC	DIBENZOFURAN UNLABELED	(51207-31-9)		
U.S California -	U.S California -	U.S California -	U.S California -	No significant risk level
Proposition 65 - Carcinogens List	Proposition 65 - Developmental Toxicity	Proposition 65 - Reproductive Toxicity - Female	Proposition 65 - Reproductive Toxicity - Male	(NSRL)
Yes	No	No	No	
1,3,6,8-TETRACHLORC	DIBENZOFURAN UNLABELED	(71998-72-6)		
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity -	U.S California - Proposition 65 - Reproductive Toxicity -	No significant risk level (NSRL)

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1,3,6,8-TETRACHLORO	DDIBENZOFURAN UNLABELED			
		Female	Male	
Yes	No	No	No	
1,2,7,8-TETRACHLORO	DDIBENZOFURAN UNLABELED	(58802-20-3)		
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	
1,2,8,9-TETRACHLORO	DDIBENZOFURAN UNLABELE	(70648-22-5)		
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-PENTACHLOI	RODIBENZOFURAN UNLABEL	ED (57117-41-6)		
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	
2,3,4,7,8-PENTACHLOI	RODIBENZOFURAN UNLABEL	ED (57117-31-4)		
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	

#### N-NONANE UNLABELED

#### State or local regulations

- 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

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

#### State or local regulations

- U.S. Pennsylvania RTK (Right to Know) List
- U.S. New Jersey Right to Know Hazardous Substance List

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

### State or local regulations

- U.S. Pennsylvania RTK (Right to Know) List
- U.S. New Jersey Right to Know Hazardous Substance List

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

#### State or local regulations

- U.S. Pennsylvania RTK (Right to Know) List
- U.S. New Jersey Right to Know Hazardous Substance List

#### 1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%) (39227-28-6 (Unlabeled))

#### State or local regulations

- U.S. Pennsylvania RTK (Right to Know) List
- U.S. New Jersey Right to Know Hazardous Substance List

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

#### State or local regulations

U.S. - Pennsylvania - RTK (Right to Know) List

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

U.S. - New Jersey - Right to Know Hazardous Substance List

#### 1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%) (57652-85-7 (Unlabeled))

#### State or local regulations

- U.S. Pennsylvania RTK (Right to Know) List
- U.S. New Jersey Right to Know Hazardous Substance List

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

#### State or local regulations

- U.S. Pennsylvania RTK (Right to Know) List
- U.S. New Jersey Right to Know Hazardous Substance List

#### 1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN (13C12, 99%) (19408-74-3 (Unlabeled))

#### State or local regulations

- U.S. Pennsylvania RTK (Right to Know) List
- U.S. New Jersey Right to Know Hazardous Substance List

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

#### State or local regulations

- U.S. Pennsylvania RTK (Right to Know) List
- U.S. New Jersey Right to Know Hazardous Substance List

#### 1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN (13C12, 99%) (35822-46-9 (Unlabeled))

#### State or local regulations

- U.S. Pennsylvania RTK (Right to Know) List
- U.S. New Jersey Right to Know Hazardous Substance List

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

#### State or local regulations

- U.S. Pennsylvania RTK (Right to Know) List
- U.S. New Jersey Right to Know Hazardous Substance List

#### OCTACHLORODIBENZO-P-DIOXIN (13C12, 99%) (3268-87-9 (Unlabeled))

#### State or local regulations

- U.S. Pennsylvania RTK (Right to Know) List
- U.S. New Jersey Right to Know Hazardous Substance List

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

#### State or local regulations

- U.S. Pennsylvania RTK (Right to Know) List
- U.S. New Jersey Right to Know Hazardous Substance List

#### 1,3,6,8-TETRACHLORODIBENZOFURAN (13C12, 99%) (71998-72-6 (Unlabeled))

#### State or local regulations

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

#### 1,2,7,8-TETRACHLORODIBENZOFURAN (13C12, 99%) (58802-20-3 (Unlabeled))

#### State or local regulations

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

#### 1,2,3,7,8-PENTACHLORODIBENZOFURAN (13C12, 99%) (57117-46-6 (Unlabeled))

#### 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

#### 2,3,4,7,8-PENTACHLORODIBENZOFURAN (13C12, 99%) (57117-31-4 (Unlabeled))

#### 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

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#### 1,2,3,4,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%) (70648-26-9 (Unlabeled))

#### 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

#### 1,2,3,4,7,8-HEXACHLORODIBENZOFURAN UNLABELED (70648-26-9)

#### 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

#### 1,2,3,6,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%) (57117-44-9 (Unlabeled))

#### 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

#### 1,2,3,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED (57117-44-9)

#### 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

#### 2,3,4,6,7,8-HEXACHLORODIBENZOFURAN (13C12, 99%) (60851-34-5 (Unlabeled))

#### 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

#### 2,3,4,6,7,8-HEXACHLORODIBENZOFURAN UNLABELED (60851-34-5)

#### 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

#### 1,2,3,7,8,9-HEXACHLORODIBENZOFURAN (13C12, 99%) (72918-21-9 (Unlabeled))

#### 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

#### 1,2,3,7,8,9-HEXACHLORODIBENZOFURAN UNLABELED (72918-21-9)

#### 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

#### 1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN (13C12, 99%) (67562-39-4 (Unlabeled))

#### 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

#### 1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN UNLABELED (67562-39-4)

#### 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

#### 1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%) (55673-89-7 (Unlabeled))

#### State or local regulations

- U.S. Massachusetts Right To Know List
- U.S. Pennsylvania RTK (Right to Know) List

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#### 1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%) (55673-89-7 (Unlabeled))

U.S. - New Jersey - Right to Know Hazardous Substance List

#### 1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN UNLABELED (55673-89-7)

#### 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

#### OCTACHLORODIBENZOFURAN (13C12, 99%) (39001-02-0 (Unlabeled))

#### 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

#### OCTACHLORODIBENZOFURAN UNLABELED (39001-02-0)

#### 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

#### 1,2,3,4,7-PENTACHLORODIBENZO-P-DIOXIN (13C12, 99%) (39227-61-7 (Unlabeled))

#### 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-TETRACHLORODIBENZOFURAN (13C12, 99%) (89059-46-1 (Unlabeled))

#### 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

#### 1,2,3,4,6,9-HEXACHLORODIBENZOFURAN (13C12, 99%) (70648-26-9 (Unlabeled))

#### 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

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

#### State or local regulations

- U.S. Pennsylvania RTK (Right to Know) List
- U.S. New Jersey Right to Know Hazardous Substance List

#### 1,2,3,4-TETRACHLORODIBENZOFURAN (13C12, 99%) (24478-72-6 (Unlabeled))

#### State or local regulations

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

#### 1,2,3,4,6,8,9-HEPTACHLORODIBENZOFURAN (13C12, 99%) (69698-58-4 (Unlabeled))

#### 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

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

#### State or local regulations

- U.S. Pennsylvania RTK (Right to Know) List
- U.S. New Jersey Right to Know Hazardous Substance List

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

#### State or local regulations

- U.S. Pennsylvania RTK (Right to Know) List
- U.S. New Jersey Right to Know Hazardous Substance List

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

#### State or local regulations

- U.S. Pennsylvania RTK (Right to Know) List
- U.S. New Jersey Right to Know Hazardous Substance List

#### 1,2,8,9-TETRACHLORODIBENZO-P-DIOXIN UNLABELED (62470-54-6)

#### State or local regulations

- U.S. Pennsylvania RTK (Right to Know) List
- U.S. New Jersey Right to Know Hazardous Substance List

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

#### State or local regulations

- U.S. Pennsylvania Schedule I Controlled Substances
- U.S. New Jersey Right to Know Hazardous Substance List

#### 2,3,7,8-TETRACHLORODIBENZOFURAN UNLABELED (51207-31-9)

#### 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

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

#### State or local regulations

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

#### 1,2,7,8-TETRACHLORODIBENZOFURAN UNLABELED (58802-20-3)

#### State or local regulations

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

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

#### State or local regulations

- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) List

#### 1,2,3,7,8-PENTACHLORODIBENZOFURAN UNLABELED (57117-41-6)

#### 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

#### 2,3,4,7,8-PENTACHLORODIBENZOFURAN UNLABELED (57117-31-4)

#### 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: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

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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

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 4	Hazardous to the aquatic environment - Chronic Hazard Category 4
Asp. Tox. 1	Aspiration hazard Category 1
Carc. 1A	Carcinogenicity Category 1A
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Flam. Liq. 3	Flammable liquids Category 3
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
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
H319	Causes serious eye irritation
H330	Fatal if inhaled
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H350	May cause cancer
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H413	May cause long lasting harmful effects to aquatic life
R10	Flammable
R20	Harmful by inhalation
R20/21/22	Harmful by inhalation, in contact with skin and if swallowed
R22	Harmful if swallowed
R26/27/28	Very toxic by inhalation, in contact with skin and if swallowed
R28	Very toxic by initiatation, in contact with skin and it swallowed  Very toxic if swallowed
R36	Irritating to eyes
R36/37/38	Irritating to eyes  Irritating to eyes, respiratory system and skin
R36/38	Irritating to eyes and skin
R40	Limited evidence of a carcinogenic effect
R45	May cause cancer
R50/53	Very 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
R65	Harmful: may cause lung damage if swallowed
R67	Vapors may cause dring darrage it swallowed  Vapors may cause drowsiness and dizziness
N	Dangerous for the environment
T+	Very toxic
Xi	Irritant
Xn	Harmful
ΛΠ	Hamiul

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.



#### **HMIS III Rating**

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 3 Serious Hazard Physical : 0 Minimal Hazard

CIL Mixture SDS

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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

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