

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: 28/08/2017 Revision date: 04/05/2018 Supersedes: 28/08/2017 Version: 1.1

EC-5583

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

1.1. Product identifier

Product form : Mixtures

Product name : MO & NDL PCB MIXTURE (13C12, 99%) IN NONANE

Product code : EC-5583

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 <u>cilsales@isotope.com</u> www.isotope.com

Emergency telephone number

Emergency numbers:

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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

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

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

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

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

Full text of R-phrases: see section 16

GHS-US classification

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

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

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2.2. Label elements

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

Hazard pictograms (CLP)



GHS02





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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

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 P280 - Wear protective clothing, protective gloves

GHS-US labeling

Hazard pictograms (GHS-US)







GHS02

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H226 - Flammable liquid and vapor

H304 - May be fatal if swallowed and enters airways

H315 - Causes skin irritation H319 - Causes serious eye irritation

H332 - Harmful if inhaled

H336 - May cause drowsiness or dizziness

Precautionary statements (GHS-US) : P210 - Keep away from heat, 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 hands, forearms and face thoroughly after handling

P271 - Use only outdoors or in a well-ventilated area P280 - Wear 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

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 Hazardous component(s) for labeling 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 - Take off contaminated clothing and wash it before reuse

P370+P378 - In case of fire: Use alcohol resistant foam, carbon dioxide (CO2), dry

extinguishing powder to extinguish

P403+P233 - Store in a well-ventilated place. Keep container tightly closed

P403+P235 - Store in a well-ventilated place. Keep cool

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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

Other hazards

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. **Substances**

Not applicable

Mixtures

Name	Product identifier	%	Classification according to
			Directive 67/548/EEC
N-NONANE UNLABELED	(CAS No) 111-84-2 (EC No) 203-913-4	99.99804	R10 Xn; R20 Xn; R65 Xi; R36/38 R67
2,2',4,5,5'-PENTACB (PCB-101) (13C12, 99%)	(CAS No) 104130-39-4 (EC Index No) 602-039-00-4	0.00014	Xn; R48/20/21/22 N; R50/53 R33
2,2',4,4',5,5'-HEXACB (PCB-153) (13C12, 99%)	(CAS No) 185376-58-3 (EC Index No) 602-039-00-4	0.00014	N; R50/53 R33 R48
2,3,3',4,4'-PENTACB (PCB-105) (13C12, 99%)	(CAS No) 208263-62-1 (EC Index No) 602-039-00-4	0.00014	Xn; R48/20/21/22 Xi; R41 N; R50/53 R33
2,3',4,4',5,5'-HEXACB (PCB-167) (13C12, 99%)	(CAS No) 208263-69-8 (EC Index No) 602-039-00-4	0.00014	Xn; R48/20/21/22 N; R50/53 R33
2,2',3,4,4',5,5'-HEPTACB (PCB-180) (13C12, 99%)	(CAS No) 35065-29-3 (Unlabeled)	0.00014	R33
2,2',5,5'-TETRACB (PCB-52) (13C12, 99%)	(CAS No) 208263-80-3 (EC Index No) 602-039-00-4	0.00014	Carc.Cat.1; R45 N; R51/53 Xn; R48/20/21/22
2,4,4'-TRICB (PCB-28) (13C12, 99%)	(CAS No) 208263-76-7 (EC No) 230-293-2 (Unlabeled) (EC Index No) 602-039-00-4 (Unlabeled)	0.00014	Xn; R20/21/22 N; R50/53 R48
2,3,3',4,4',5-HEXACB (PCB-156) (13C12, 99%)	(CAS No) 208263-68-7 (EC Index No) 602-039-00-4	0.00014	N; R50/53 Xn; R48/21/22 R33
2,2',3,4,4',5'-HEXACB (PCB-138) (13C12, 99%)	(CAS No) 208263-66-5 (EC Index No) 602-039-00-4	0.00014	Xn; R48/20/21/22 N; R50/53 R33
2,3',4,4',5-PENTACB (PCB-118) (13C12, 98%)	(CAS No) 104130-40-7 (EC No) 215-648-1 (EC Index No) 602-039-00-4	0.00014	Xn; R48/20/21/22 N; R50/53 R33
2',3,4,4',5-PENTACB (PCB-123) (13C12, 99%)	(CAS No) 208263-64-3 (EC Index No) 602-039-00-4	0.00014	Xn; R48/20/21/22 N; R50/53 R33
2,3,3',4,4',5,5'-HEPTACB (PCB-189) (13C12, 99%)	(CAS No) 208263-73-4 (EC Index No) 602-039-00-4	0.00014	Xn; R48/20/21/22 N; R50/53 R33
2,3,3',4,4',5'-HEXACB (PCB-157) (13C12, 99%)	(CAS No) 235416-30-5 (EC Index No) 602-039-00-4	0.00014	Xn; R48/20/21/22 N; R50/53 R33
2,3,4,4',5-PENTACB (PCB-114) (13C12, 99%)	(CAS No) 208263-63-2 (EC Index No) 602-039-00-4	0.00014	Xn; R48/20/21/22 N; R50/53 R33

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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	99.99804	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
2,2',4,5,5'-PENTACB (PCB-101) (13C12, 99%)	(CAS No) 104130-39-4 (EC Index No) 602-039-00-4	0.00014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,2',4,4',5,5'-HEXACB (PCB-153) (13C12, 99%)	(CAS No) 185376-58-3 (EC Index No) 602-039-00-4	0.00014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3,3',4,4'-PENTACB (PCB-105) (13C12, 99%)	(CAS No) 208263-62-1 (EC Index No) 602-039-00-4	0.00014	Eye Dam. 1, H318 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3',4,4',5,5'-HEXACB (PCB-167) (13C12, 99%)	(CAS No) 208263-69-8 (EC Index No) 602-039-00-4	0.00014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,2',3,4,4',5,5'-HEPTACB (PCB-180) (13C12, 99%)	(CAS No) 35065-29-3 (Unlabeled)	0.00014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,2',5,5'-TETRACB (PCB-52) (13C12, 99%)	(CAS No) 208263-80-3 (EC Index No) 602-039-00-4	0.00014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,4,4'-TRICB (PCB-28) (13C12, 99%)	(CAS No) 208263-76-7 (EC No) 230-293-2 (Unlabeled) (EC Index No) 602-039-00-4 (Unlabeled)	0.00014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3,3',4,4',5-HEXACB (PCB-156) (13C12, 99%)	(CAS No) 208263-68-7 (EC Index No) 602-039-00-4	0.00014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,2',3,4,4',5'-HEXACB (PCB-138) (13C12, 99%)	(CAS No) 208263-66-5 (EC Index No) 602-039-00-4	0.00014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3',4,4',5-PENTACB (PCB-118) (13C12, 98%)	(CAS No) 104130-40-7 (EC No) 215-648-1 (EC Index No) 602-039-00-4	0.00014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2',3,4,4',5-PENTACB (PCB-123) (13C12, 99%)	(CAS No) 208263-64-3 (EC Index No) 602-039-00-4	0.00014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3,3',4,4',5,5'-HEPTACB (PCB-189) (13C12, 99%)	(CAS No) 208263-73-4 (EC Index No) 602-039-00-4	0.00014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3,3',4,4',5'-HEXACB (PCB-157) (13C12, 99%)	(CAS No) 235416-30-5 (EC Index No) 602-039-00-4	0.00014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3,4,4',5-PENTACB (PCB-114) (13C12, 99%)	(CAS No) 208263-63-2 (EC Index No) 602-039-00-4	0.00014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Name	Product identifier	%	GHS-US classification
N-NONANE UNLABELED	(CAS No) 111-84-2	99.99804	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
2,2',4,5,5'-PENTACB (PCB-101) (13C12, 99%)	(CAS No) 104130-39-4	0.00014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,2',4,4',5,5'-HEXACB (PCB-153) (13C12, 99%)	(CAS No) 185376-58-3	0.00014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
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Name	Product identifier	%	GHS-US classification
2,2',5,5'-TETRACB (PCB-52) (13C12, 99%)	(CAS No) 208263-80-3	0.00014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,4,4'-TRICB (PCB-28) (13C12, 99%)	(CAS No) 208263-76-7	0.00014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3,3',4,4',5-HEXACB (PCB-156) (13C12, 99%)	(CAS No) 208263-68-7	0.00014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,2',3,4,4',5'-HEXACB (PCB-138) (13C12, 99%)	(CAS No) 208263-66-5	0.00014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3',4,4',5-PENTACB (PCB-118) (13C12, 98%)	(CAS No) 104130-40-7	0.00014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2',3,4,4',5-PENTACB (PCB-123) (13C12, 99%)	(CAS No) 208263-64-3	0.00014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
2,3,3',4,4',5,5'-HEPTACB (PCB-189) (13C12, 99%)	(CAS No) 208263-73-4	0.00014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
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2,3,4,4',5-PENTACB (PCB-114) (13C12, 99%)	(CAS No) 208263-63-2	0.00014	STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

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 : Call a physician immediately.

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a

POISON CENTER or doctor/physician if you feel unwell.

First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash

with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Gently wash with plenty of soap and water, Get immediate medical advice/attention. Get medical advice/attention. Specific treatment (see Hazard pictograms (CLP) on this label).

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Immediately call a poison center or doctor/physician.

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

Symptoms/injuries after inhalation : May be harmful if inhaled. May cause drowsiness or dizziness.

Symptoms/injuries after skin contact : Causes skin irritation.

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

Symptoms/injuries after ingestion : May be fatal if swallowed and enters airways.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable liquid and vapor.

Explosion hazard : May form flammable/explosive vapor-air mixture.

Reactivity : Flammable liquid and vapor. vapors may form flammable mixture with air.

5.3. Advice for firefighters

Firefighting instructions : Do not enter fire area without proper protective equipment, including respiratory protection.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing

apparatus. Complete protective clothing.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures

 Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.

6.1.1. For non-emergency personnel

Emergency procedures

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

6.1.2. For emergency responders

Protective equipment

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

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

For containment

Other information

Dike and contain spill. Dispose as hazardous waste. Comply with local regulations for disposal.Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public

Methods for cleaning up

waters.Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed

: Handle empty containers with care because residual vapors are flammable.

Precautions for safe handling

: No open flames. No smoking. Take precautionary measures against static discharge. Use only non-sparking tools. Avoid breathing dust, fume, gas, mist, spray, vapors. Use only outdoors or in a well-ventilated area.

Hygiene measures

Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures

 Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof Lighting equipment, ventilating equipment.

0.5 mg/m³

Storage conditions

USA OSHA

: Store at room temperature away from light and moisture.

Incompatible materials : Heat sources

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

OSHA PEL (TWA) (mg/m3)

8.1. Control parameters

MO & NDL PCB MIXTURE (13C12, 99%) IN NONANE		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	200.00000000 ppm USA. ACGIH Threshold Limit Values (TLV)
Italy - Portugal - USA ACGIH	Remark (ACGIH)	CNS impair
USA NIOSH	NIOSH REL (TWA) (mg/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.
2,2',5,5'-TETRACB (PCB-52) (13C12, 99%) (208263-80-3)		

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N-NONANE UNLABELED (111-84-2)		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	200.00000000 ppm USA. ACGIH Threshold Limit Values (TLV)
Italy - Portugal - USA ACGIH	Remark (ACGIH)	CNS impair
USA NIOSH	NIOSH REL (TWA) (mg/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 : Wear suitable protective clothing and gloves.

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

Skin and body protection : Wear suitable protective clothing.

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

recommended. Wear respiratory protection.

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) : Flammable liquid and vapor

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 $25 \, ^{\circ}\text{C}$ (77 $^{\circ}\text{F}$)

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

Log Pow : 5.65

Log Kow : No data available

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

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

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

10.2. Chemical stability

See storage and expiration date on CoA.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Open flame. Overheating. Direct sunlight. Heat. Sparks.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Carbon oxides (CO, CO2).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Inhalation: Harmful if inhaled.

MO & NDL PCB MIXTURE (13C12, 99%) IN NONANE	
LC50 inhalation rat (mg/l)	23760 mg/m³ male - 4 h
ATE CLP (gases)	4500.000 ppmV/4h
ATE CLP (vapors)	11.000 mg/l/4h
ATE CLP (dust, mist)	1.500 mg/l/4h
Skin corrosion/irritation, Dermal, rat	Result: Skin Irritation (Draize Test)
Additional information	: S. Typhimurium Result: negative

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

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified

Specific target organ toxicity – single exposure : May cause drowsiness or dizziness.

Specific target organ toxicity – repeated : Not classified

exposure

MO & NDL PCB MIXTURE (13C12, 99%) IN NONANE			
NOAEL (oral,rat,90 days)	100 mg/kg bodyweight/day female (OECD Test Guildeline 408)		
N-NONANE UNLABELED (111-84-2)	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.		

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Symptoms/injuries after inhalation : May be harmful if inhaled. May cause drowsiness or dizziness.

Symptoms/injuries after skin contact : Causes skin irritation.

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

Symptoms/injuries after ingestion : May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse

effects in the environment.

MO & NDL PCB MIXTURE (13C12, 99%) IN NONANE		
EC50 Daphnia 1	0.2 mg/l static test EC50 - Daphnia magna (Water flea) - 48 h	
2,2',5,5'-TETRACB (PCB-52) (13C12, 99%) (20	8263-80-3)	
LC50 fish 1	>= 0.002 mg/l Pimephales promelas (fathead minnow) - 96 h	
EC50 Daphnia 1	>= 0.002 mg/l Daphnia magna (Water flea) - 48 h	
NOEC (chronic)	0.1 mg/l Oncorhynchus mykiss (rainbow trout) - 7 d	
2,4,4'-TRICB (PCB-28) (13C12, 99%) (208263-	2,4,4'-TRICB (PCB-28) (13C12, 99%) (208263-76-7)	
LC50 fish 1	> 0.16 mg/l Pimpephale promelas (fathead minnow) -96h	
EC50 Daphnia 1	> 0.16 mg/l Daphnia magna (Water flea) -48h	
N-NONANE UNLABELED (111-84-2)		
EC50 Daphnia 1	0.2 mg/l static test EC50 - Daphnia magna (Water flea) - 48 h	

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

MO & NDL PCB MIXTURE (13C12, 99%) IN NONANE	
Log Pow	5.65
Bioaccumulative potential	Indication of bioaccumulation.
2,2',4,4',5,5'-HEXACB (PCB-153) (13C12, 99%) (185376-58-3)	
Log Pow	7.75
2,3',4,4',5-PENTACB (PCB-118) (13C12, 98%) (104130-40-7)	
Log Pow 7.12	
N-NONANE UNLABELED (111-84-2)	

Bioaccumulative potential

Log Pow

12.4. Mobility in soilNo additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

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

Indication of bioaccumulation.

5.65

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

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14.2. UN proper shipping name

Proper Shipping Name (DOT) : Nonanes

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

Hazard labels (DOT) : 3 - Flammable liquid



Packing group (DOT) : III - Minor Danger

DOT Special Provisions (49 CFR 172.102) : B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a

flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this

subchapter are applicable.

IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table

T2 - 1.5 178.274(d)(2) Normal..... 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.

DOT Packaging Exceptions (49 CFR 173.xxx) : 150
DOT Packaging Non Bulk (49 CFR 173.xxx) : 203
DOT Packaging Bulk (49 CFR 173.xxx) : 242

14.3. Additional information

Emergency Response Guide (ERG) Number : 128

Other information : No supplementary information available.

Overland transport

Packing group (ADR) : III

Class (ADR) : 3 - Flammable liquid

Hazard identification number (Kemler No.) : 30 Classification code (ADR) : F1

Hazard labels (ADR) : 3 - Flammable liquids



Orange plates

30 1920

Tunnel restriction code (ADR) : D/E
Limited quantities (ADR) 5I
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)

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Civil Aeronautics Law : Flammable liquids

Environmental hazards

Marine pollutant



IMDG only

Other information : No supplementary information available.

Special precautions for user

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

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations			
MO & NDL PCB MIXTURE (13C12, 99%) IN NONANE			
Listed on the United States TSCA (Toxic Substances Control Act) inventory			
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.		
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.		
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard		
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.		
2,2',4,5,5'-PENTACB (PCB-101) (13C12, 99%) (104130-39-4)		
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.		
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard		
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.		
2,2',4,4',5,5'-HEXACB (PCB-153) (13C12, 99%)	(185376-58-3)		
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.		
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard		
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.		
2,3,3',4,4'-PENTACB (PCB-105) (13C12, 99%) (2	208263-62-1)		
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporing requirements of the United States SARA Section 302.		
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard		
SARA Section 313 - Emission Reporting	Not subject to reporing requirements of the United States SARA Section 313.		
2,3',4,4',5,5'-HEXACB (PCB-167) (13C12, 99%)	(208263-69-8)		
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporing requirements of the United States SARA Section 302.		
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard		
SARA Section 313 - Emission Reporting	Not subject to reporing requirements of the United States SARA Section 313.		
2,2',3,4,4',5,5'-HEPTACB (PCB-180) (13C12, 99	%) (35065-29-3 (Unlabeled))		
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.		
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard		
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.		
2,2',5,5'-TETRACB (PCB-52) (13C12, 99%) (208263-80-3)			
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.		
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard		
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.		
2,4,4'-TRICB (PCB-28) (13C12, 99%) (208263-7	2,4,4'-TRICB (PCB-28) (13C12, 99%) (208263-76-7)		
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporing requirements of the United States SARA Section 302.		
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard		

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2,4,4'-TRICB (PCB-28) (13C12, 99%) (208263-76-7)		
SARA Section 313 - Emission Reporting	Not subject to reporing requirements of the United States SARA Section 313.	
2,3,3',4,4',5-HEXACB (PCB-156) (13C12, 99%) (208263-68-7)		
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporing requirements of the United States SARA Section 302.	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard	
SARA Section 313 - Emission Reporting	Not subject to reporing requirements of the United States SARA Section 313.	
2,2',3,4,4',5'-HEXACB (PCB-138) (13C12, 99%) (208263-66-5)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard	
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.	
2,3',4,4',5-PENTACB (PCB-118) (13C12, 98%)	(104130-40-7)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporing requirements of the United States SARA Section 302.	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard	
SARA Section 313 - Emission Reporting	Not subject to reporing requirements of the United States SARA Section 313.	
2',3,4,4',5-PENTACB (PCB-123) (13C12, 99%)	(208263-64-3)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporing requirements of the United States SARA Section 302.	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard	
SARA Section 313 - Emission Reporting	Not subject to reporing requirements of the United States SARA Section 313.	
2,3,3',4,4',5,5'-HEPTACB (PCB-189) (13C12, 9	9%) (208263-73-4)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporing requirements of the United States SARA Section 302.	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard	
SARA Section 313 - Emission Reporting	Not subject to reporing requirements of the United States SARA Section 313.	
2,3,3',4,4',5'-HEXACB (PCB-157) (13C12, 99%) (235416-30-5)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporing requirements of the United States SARA Section 302.	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard	
SARA Section 313 - Emission Reporting	Not subject to reporing requirements of the United States SARA Section 313.	
2,3,4,4',5-PENTACB (PCB-114) (13C12, 99%) (208263-63-2)		
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard	
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.	
N-NONANE UNLABELED (111-84-2)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.	
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard	
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313.	
15.2. International regulations		

CANADA

MO & NDL PCB MIXTURE (13C12, 99%) IN NONANE

Listed on the Canadian DSL (Domestic Substances List)

N-NONANE UNLABELED (111-84-2)

Listed on the Canadian DSL (Domestic Substances List)

National regulations

No additional information available

15.3. US State regulations

MO & NDL PCB MIXTURE (13C12, 99%) IN NONANE		
U.S California - Proposition 65 - Carcinogens List	No	
U.S California - Proposition 65 - Developmental	No	

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	(13C12, 99%) IN NONANE	T			
Toxicity					
U.S California - Proposition Toxicity - Female		No			
U.S California - Proposition 65 - Reproductive Toxicity - Male		No			
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			
2.2'.4.5.5'-PENTACB (PCI	B-101) (13C12, 99%) (10413	30-39-4)			
U.S California - Proposition 65 -	U.S California - Proposition 65 -	U.S California - Proposition 65 -	U.S California - Proposition 65 -	No significant risk level (NSRL)	
Carcinogens List	Developmental Toxicity	Reproductive Toxicity - Female	Reproductive Toxicity - Male	, ,	
Yes	Yes	Yes	Yes		
2.2'.4.4'.5.5'-HEXACR (PC	CB-153) (13C12, 99%) (1853	76-58-3)			
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	Yes	Yes	Yes		
2,3,3',4,4'-PENTACB (PCE	3-105) (13C12, 99%) (20826	3-62-1)			
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	Yes	Yes	Yes		
2,3',4,4',5,5'-HEXACB (PC	CB-167) (13C12, 99%) (2082	63-69-8)			
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	Yes	Yes	Yes		
2,2',3,4,4',5,5'-HEPTACB (PCB-180) (13C12, 99%) (35	065-29-3 (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 - Female	Reproductive Toxicity - Male		
Yes	Yes	Yes	Yes		
2,2',5,5'-TETRACB (PCB-	52) (13C12, 99%) (208263-8	30-3)			
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	Yes	Yes	Yes		
2,4,4'-TRICB (PCB-28) (1:	3C12, 99%) (208263-76-7)				
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 - Female	Reproductive Toxicity - Male		
Yes	Yes	Yes	Yes		
2,3,3',4,4',5-HEXACB (PC	B-156) (13C12, 99%) (20820	63-68-7)			
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 - Female	Reproductive Toxicity - Male		
Yes	Yes	Yes	Yes		

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2.2'.3.4.4'.5'-HEXACB ((PCB-138) (13C12, 99%) (20826	3-66-5)		
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	Yes	Yes	Yes	
2,3',4,4',5-PENTACB (F	PCB-118) (13C12, 98%) (104130	-40-7)		
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	
2',3,4,4',5-PENTACB (F	PCB-123) (13C12, 99%) (208263	-64-3)		
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	Yes	Yes	Yes	
2,3,3',4,4',5,5'-HEPTAC	B (PCB-189) (13C12, 99%) (208	3263-73-4)		<u>.</u>
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	
2,3,3',4,4',5'-HEXACB ((PCB-157) (13C12, 99%) (23541	6-30-5)		
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	Yes	Yes	Yes	
2,3,4,4',5-PENTACB (P	PCB-114) (13C12, 99%) (208263	-63-2)		
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	
N-NONANE UNLABELE	ED (111-84-2)	·	<u> </u>	
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 2' 4 5 5'-PENTACE (I	PCB-101) (13C12, 99%) (104130	-39-4)		
2,2,1,0,0 1 2111700 (1	02 107, (10012, 0070, (104100			

State or local regulations

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

2,2',4,4',5,5'-HEXACB (PCB-153) (13C12, 99%) (185376-58-3)

State or local regulations

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

2,3,3',4,4'-PENTACB (PCB-105) (13C12, 99%) (208263-62-1)

State or local regulations

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

2,3',4,4',5,5'-HEXACB (PCB-167) (13C12, 99%) (208263-69-8)

State or local regulations

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

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2,3',4,4',5,5'-HEXACB (PCB-167) (13C12, 99%) (208263-69-8)

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

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

State or local regulations

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

2,2',5,5'-TETRACB (PCB-52) (13C12, 99%) (208263-80-3)

State or local regulations

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

2,4,4'-TRICB (PCB-28) (13C12, 99%) (208263-76-7)

State or local regulations

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

2,3,3',4,4',5-HEXACB (PCB-156) (13C12, 99%) (208263-68-7)

State or local regulations

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

2,2',3,4,4',5'-HEXACB (PCB-138) (13C12, 99%) (208263-66-5)

State or local regulations

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

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

State or local regulations

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

2',3,4,4',5-PENTACB (PCB-123) (13C12, 99%) (208263-64-3)

State or local regulations

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

2,3,3',4,4',5,5'-HEPTACB (PCB-189) (13C12, 99%) (208263-73-4)

State or local regulations

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

2,3,3',4,4',5'-HEXACB (PCB-157) (13C12, 99%) (235416-30-5)

State or local regulations

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

2,3,4,4',5-PENTACB (PCB-114) (13C12, 99%) (208263-63-2)

State or local regulations

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

N-NONANE UNLABELED (111-84-2)

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

SECTION 16: Other information

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Safety Data Sheet

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

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:

text of it, if and Loff philases	~ .
Acute Tox. 4 (Inhalation)	Acute toxicity (inhalation) Category 4
Acute Tox. 4	Acute toxicity (inhalation:vapour) Category 4
(Inhalation:vapour)	
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Asp. Tox. 1	Aspiration hazard Category 1
Eye Dam. 1	Serious eye damage/eye irritation Category 1
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 RE 2	Specific target organ toxicity (repeated exposure) Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H226	Flammable liquid and vapor
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled
H336	May cause drowsiness or dizziness
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
R10	Flammable
R20	Harmful by inhalation
R20/21/22	Harmful by inhalation, in contact with skin and if swallowed
R33	Danger of cumulative effects
R36/38	Irritating to eyes and skin
R41	Risk of serious damage to eyes
R45	May cause cancer
R48	Danger of serious damage to health by prolonged exposure
R48/20/21/22	Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed
R48/21/22	Harmful: danger of serious damage to health by prolonged exposure in contact with skin and if swallowed
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R65	Harmful: may cause lung damage if swallowed
R67	Vapors may cause drowsiness and dizziness
N	Dangerous for the environment
Xi	Irritant
Xn	Harmful
7311	Harring

NFPA health hazard

: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

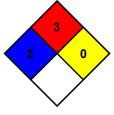
NFPA fire hazard

: 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

: 3 Serious Hazard Flammability Physical : 0 Minimal Hazard

CIL Mixture SDS

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

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