



DECHLORANES AND BFR NATIVE STANDARD MIXTURE 10 UG/ML IN NONANE/TOLUENE

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: 14/12/2017

Revision date:

Version: 1.0

ES-5606

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

1.1. Product identifier

Product form : Mixtures
Product name : DECHLORANES AND BFR NATIVE STANDARD MIXTURE 10 UG/ML IN NONANE/TOLUENE
Product code : ES-5606

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

1.2.1. Relevant identified uses

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

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

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

USA: 1-800-322-1174 Int: 1-978-749-8000
cilsales@isotope.com 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. 2	H225
Acute Tox. 4 (Inhalation)	H332
Skin Irrit. 2	H315
Eye Irrit. 2	H319
Repr. 2	H361
STOT SE 3	H336
STOT RE 2	H373
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]

Repr.Cat.3; R62
Repr.Cat.3; R63
F; R11
Xn; R20
Xn; R48/20
Xi; R36/37/38
R67

Full text of R-phrases: see section 16

GHS-US classification

Flam. Liq. 2	H225
Acute Tox. 4 (Inhalation)	H332
Skin Irrit. 2	H315
Eye Irrit. 2	H319
Repr. 2	H361
STOT SE 3	H336

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STOT RE 2 H373
Asp. Tox. 1 H304
Aquatic Acute 2 H401

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Central Nervous System. Flammable liquid and vapor. May cause drowsiness or dizziness. Harmful if inhaled. Causes skin irritation. Causes serious eye irritation. May be fatal if swallowed and enters airways.

2.2. Label elements

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

Hazard pictograms (CLP)



Signal word (CLP)

: Danger

Hazardous ingredients

: TOLUENE UNLABELED; N-NONANE UNLABELED

Hazard statements (CLP)

: H225 - Highly 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
H361 - Suspected of damaging fertility. Suspected of damaging the unborn child (if inhaled, if swallowed, in contact with skin)
H373 - May cause damage to organs (brain, kidneys, liver, urinary bladder) through prolonged or repeated exposure (if inhaled, if swallowed, in contact with skin)

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
P260 - Do not breathe 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)



Signal word (GHS-US)

: Danger

Hazard statements (GHS-US)

: H225 - Highly 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
H361 - Suspected of damaging fertility, Suspected of damaging the unborn child (Dermal, Inhalation, oral)
H373 - May cause damage to organs (brain, kidneys, liver, urinary bladder) through prolonged or repeated exposure (Dermal, Inhalation, oral)
H401 - Toxic to aquatic life

Precautionary statements (GHS-US)

: P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
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

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P242 - Use only non-sparking tools
P243 - Take precautionary measures against static discharge
P260 - Do not breathe dust, fume, gas, mist, spray, vapors
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
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
P308+P313 - If exposed or concerned: Get medical advice/attention
P312 - Call a doctor, a POISON CENTER if you feel unwell
P314 - Get medical advice/attention 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+P364 - 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
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	59.990997	R10 Xn; R20 Xn; R65 Xi; R36/38 R67
TOLUENE UNLABELED	(CAS No) 108-88-3 (EC No) 203-625-9 (EC Index No) 601-021-00-3 (REACH-no) 01-2119471310-51	40	F; R11 Xi; R38 Xn; R65 Repr.Cat.3; R62 Repr.Cat.3; R63 R67 N; R51/53 Xn; R48/20
MIREX UNLABELED	(CAS No) 2385-85-5 (EC No) 219-196-6 (EC Index No) 602-077-00-1	0.001286	Xn; R21/22 N; R50/53
DECHLORANE PLUS ANTI UNLABELED	(CAS No) 135821-74-8	0.001286	Xn; R20 N; R51/53
DECHLORANE PLUS SYN UNLABELED	(CAS No) 135821-03-3	0.001286	Muta.Cat.3; R68 T; R23 Xi; R37 N; R51/53
HEXABROMOBENZENE UNLABELED	(CAS No) 87-82-1 (EC No) 201-773-9 (EC Index No)	0.001286	Xn; R20/21/22 Xi; R36/37/38 N; R50/53
DECHLORANE 602 UNLABELED	(CAS No) 31107-44-5	0.001286	Not classified

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Name	Product identifier	%	Classification according to Directive 67/548/EEC
TBPH (BIS(2-ETHYLHEXYL)TETRABROMOPHTHALATE) UNLABELED	(CAS No) 26040-51-7	0.001286	Xi; R36/37/38 N; R51/53
1,4-DIBROMOBENZENE UNLABELED	(CAS No) 106-37-6 (EC No) 203-390-2	0.001286	Xi; R36/37/38 N; R50/53

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	59.990997	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
TOLUENE UNLABELED	(CAS No) 108-88-3 (EC No) 203-625-9 (EC Index No) 601-021-00-3 (REACH-no) 01-2119471310-51	40	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304
MIREX UNLABELED	(CAS No) 2385-85-5 (EC No) 219-196-6 (EC Index No) 602-077-00-1	0.001286	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Carc. 2, H351 Repr. 2, H361 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410
DECHLORANE PLUS ANTI UNLABELED	(CAS No) 135821-74-8	0.001286	Acute Tox. 3 (Inhalation), H331
DECHLORANE PLUS SYN UNLABELED	(CAS No) 135821-03-3	0.001286	Acute Tox. 3 (Inhalation), H331 Skin Irrit. 2, H315 STOT SE 2, H371 Aquatic Chronic 4, H413
HEXABROMOBENZENE UNLABELED	(CAS No) 87-82-1 (EC No) 201-773-9 (EC Index No)	0.001286	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 4, H413
DECHLORANE 602 UNLABELED	(CAS No) 31107-44-5	0.001286	Not classified
TBPH (BIS(2-ETHYLHEXYL)TETRABROMOPHTHALATE) UNLABELED	(CAS No) 26040-51-7	0.001286	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 2, H411
1,4-DIBROMOBENZENE UNLABELED	(CAS No) 106-37-6 (EC No) 203-390-2	0.001286	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Name	Product identifier	%	GHS-US classification
N-NONANE UNLABELED	(CAS No) 111-84-2	59.990997	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
TOLUENE UNLABELED	(CAS No) 108-88-3	40	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 2, H401
MIREX UNLABELED	(CAS No) 2385-85-5	0.001286	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Carc. 2, H351 Repr. 2, H361 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
DECHLORANE PLUS ANTI UNLABELED	(CAS No) 135821-74-8	0.001286	Acute Tox. 3 (Inhalation), H331

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Name	Product identifier	%	GHS-US classification
DECHLORANE PLUS SYN UNLABELED	(CAS No) 135821-03-3	0.001286	Acute Tox. 3 (Inhalation), H331 Skin Irrit. 2, H315 STOT SE 2, H371 Aquatic Acute 2, H401 Aquatic Chronic 4, H413
HEXABROMOBENZENE UNLABELED	(CAS No) 87-82-1	0.001286	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 4, H413
DECHLORANE 602 UNLABELED	(CAS No) 31107-44-5	0.001286	Not classified
TBPH (BIS(2-ETHYLHEXYL)TETRABROMOPHTHALATE) UNLABELED	(CAS No) 26040-51-7	0.001286	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335 Aquatic Chronic 2, H411
1,4-DIBROMOBENZENE UNLABELED	(CAS No) 106-37-6	0.001286	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335 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	: IF exposed or concerned: Get medical advice/attention.
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	: Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: 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	: Suspected of damaging fertility. Suspected of damaging the unborn child (in contact with skin, if inhaled, if swallowed). May cause damage to organs (brain, kidneys, liver, urinary bladder) (in contact with skin, if inhaled, if swallowed).
Symptoms/injuries after inhalation	: Harmful if inhaled. May cause respiratory irritation.
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. Risk of lung edema.

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	: Highly flammable liquid and vapor.
Explosion hazard	: May form flammable/explosive vapor-air mixture.
Reactivity	: Highly flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

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 : Dike and contain spill. Dispose as hazardous waste. Comply with local regulations for disposal.

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

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

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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

Precautions for safe handling : No open flames. No smoking. Use only non-sparking tools. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust, fume, gas, mist, spray, vapors. Use only outdoors or in a well-ventilated area.

Hygiene measures : Wash hands, forearms and face thoroughly after handling.

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.

Storage conditions : 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

8.1. Control parameters

DECHLORANES AND BFR NATIVE STANDARD MIXTURE 10 UG/ML IN NONANE/TOLUENE		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	200.0000000 ppm 20 ppm
Italy - Portugal - USA ACGIH	Remark (ACGIH)	USA. ACGIH Threshold Limit Values (TLV). CNS impair. Visual impairment. Female reproductive. Pregnancy loss. 2015 Adoption. Substances for which there is a Biological Exposure Index or Indices (see BEI® section). Not classifiable as a human carcinogen.; Component: Toluene CAS-No.: 108-88-3 Parameters: Toluene Value: 0.0300 mg/l Biological specimen: Urine Remarks: End of shift (As soon as possible after exposure ceases) Basis: ACGIH - Biological Exposure Indices (BEI); Component: Toluene CAS-No.: 108-88-3 Parameters: Toluene Value: 0.0200 mg/l Biological specimen: In blood Remarks: Prior to last shift of workweek Basis: ACGIH - Biological Exposure Indices (BEI); Component: Toluene CAS-No.: 108-88-3 Parameters: o-Cresol Value: 0.3000 mg/g Biological specimen: Urine Remarks: End of shift (As soon as possible after exposure ceases) Basis: ACGIH - Biological Exposure Indices (BEI)

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DECHLORANES AND BFR NATIVE STANDARD MIXTURE 10 UG/ML IN NONANE/TOLUENE		
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	1050 mg/m ³ 375 mg/m ³
USA NIOSH	NIOSH REL (TWA) (ppm)	200 ppm 100 ppm
USA NIOSH	NIOSH REL (STEL) (mg/m ³)	560 mg/m ³
USA NIOSH	NIOSH REL (STEL) (ppm)	150 ppm
USA NIOSH	Remark (NIOSH)	Central Nervous System impairment. USA. NIOSH Recommended Exposure Limits.
USA OSHA	OSHA PEL (TWA) (mg/m ³)	1050 mg/m ³ 375 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	200 ppm 100 ppm
USA OSHA	OSHA PEL (STEL) (mg/m ³)	560 mg/m ³
USA OSHA	OSHA PEL (STEL) (ppm)	150 ppm
USA OSHA	OSHA PEL (Ceiling) (mg/m ³)	1050 mg/m ³ California permissible exposure limits for chemical contaminants.
USA OSHA	OSHA PEL (Ceiling) (ppm)	200 ppm California permissible exposure limits for chemical contaminants.
USA OSHA	Remark (OSHA)	USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000. OSHA PEL (Ceiling) (ppm): 300 ppm USA. Occupational Exposure Limits (OSHA) - Table Z-2. OSHA PEL (TWA) - 200 ppm - USA. Occupational Exposure Limits (OSHA) - Table Z-2. Remarks: Z37.12-1967.
TOLUENE UNLABELED (108-88-3)		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	20.00000000 ppm USA. ACGIH Threshold Limit Values (TLV)
Italy - Portugal - USA ACGIH	Remark (ACGIH)	Visual impairment. Female reproductive. Pregnancy loss. 2015 Adoption. Substances for which there is a Biological Exposure Index or Indices (see BEI® section). Not classifiable as a human carcinogen.; Component: Toluene CAS-No.: 108-88-3 Parameters: Toluene Value: 0.0300 mg/l Biological specimen: Urine Remarks: End of shift (As soon as possible after exposure ceases) Basis: ACGIH - Biological Exposure Indices (BEI); Component: Toluene CAS-No.: 108-88-3 Parameters: Toluene Value: 0.0200 mg/l Biological specimen: In blood Remarks: Prior to last shift of workweek Basis: ACGIH - Biological Exposure Indices (BEI); Component: Toluene CAS-No.: 108-88-3 Parameters: o-Cresol Value: 0.3000 mg/g Biological specimen: Urine Remarks: End of shift (As soon as possible after exposure ceases) Basis: ACGIH - Biological Exposure Indices (BEI)
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	375 mg/m ³ USA. NIOSH Recommended Exposure Limits
USA NIOSH	NIOSH REL (TWA) (ppm)	100 ppm USA. NIOSH Recommended Exposure Limits
USA NIOSH	NIOSH REL (STEL) (mg/m ³)	560 mg/m ³ USA. NIOSH Recommended Exposure Limits
USA NIOSH	NIOSH REL (STEL) (ppm)	150 ppm USA. NIOSH Recommended Exposure Limits
USA OSHA	OSHA PEL (TWA) (mg/m ³)	375 mg/m ³ USA. OSHA - TABLE Z-1 Limits for Air Contaminants 1910.1000
USA OSHA	OSHA PEL (TWA) (ppm)	100 ppm USA. OSHA - TABLE Z-1 Limits for Air Contaminants 1910.1000
USA OSHA	OSHA PEL (STEL) (mg/m ³)	560 mg/m ³ USA. OSHA - TABLE Z-1 Limits for Air Contaminants 1910.1000
USA OSHA	OSHA PEL (STEL) (ppm)	150 ppm USA. OSHA - TABLE Z-1 Limits for Air Contaminants 1910.1000
USA OSHA	OSHA PEL (Ceiling) (ppm)	300 ppm USA. Occupational Exposure Limits (OSHA) - Table Z-2

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TOLUENE UNLABELED (108-88-3)		
USA OSHA	Remark (OSHA)	OSHA PEL (TWA) - 200 ppm - USA. Occupational Exposure Limits (OSHA) - Table Z-2. Remarks: Z37.12-1967
N-NONANE UNLABELED (111-84-2)		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	200.00000000 ppm USA. ACGIH Threshold Limit Values (TLV)
Italy - Portugal - USA ACGIH	Remark (ACGIH)	CNS impair
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	1050 mg/m ³ USA. NIOSH Recommended Exposure Limits
USA NIOSH	NIOSH REL (TWA) (ppm)	200 ppm USA. NIOSH Recommended Exposure Limits
USA NIOSH	Remark (NIOSH)	Central Nervous System impairment
USA OSHA	OSHA PEL (TWA) (mg/m ³)	1050 mg/m ³ USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000
USA OSHA	OSHA PEL (TWA) (ppm)	200 ppm USA. OSHA - Table Z-1 Limits for Air Contaminants - 1910.1000
USA OSHA	OSHA PEL (Ceiling) (mg/m ³)	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. Handle in accordance with good industrial hygiene and safety procedures.
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

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

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Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosion limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

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

Heat. Open flame. Sparks. Direct sunlight. Extremely high or low temperatures.

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: Harmful if inhaled.

DECHLORANES AND BFR NATIVE STANDARD MIXTURE 10 UG/ML IN NONANE/TOLUENE	
LD50 oral rat	> 5580 mg/kg
LD50 dermal rabbit	12196 mg/kg
LC50 inhalation rat (mg/l)	23760 mg/m ³ 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)
LC50, Inhalation, rat	12,500 - 28,800 mg/m ³ - 4 h
Additional information	: S. Typhimurium Result: negative
MIREX UNLABELED (2385-85-5)	
LD50 oral rat	235 mg/kg
ATE CLP (oral)	235.000 mg/kg body weight
ATE CLP (dermal)	300.000 mg/kg body weight
DECHLORANE PLUS ANTI UNLABELED (135821-74-8)	
ATE CLP (gases)	700.000 ppmV/4h
ATE CLP (vapors)	3.000 mg/l/4h
ATE CLP (dust, mist)	0.500 mg/l/4h
DECHLORANE PLUS SYN UNLABELED (135821-03-3)	
ATE CLP (gases)	700.000 ppmV/4h
ATE CLP (vapors)	3.000 mg/l/4h
ATE CLP (dust, mist)	0.500 mg/l/4h
HEXABROMOBENZENE UNLABELED (87-82-1)	
LD50 oral rat	225 mg/kg
ATE CLP (oral)	500.000 mg/kg body weight
ATE CLP (dermal)	1100.000 mg/kg body weight
ATE CLP (gases)	4500.000 ppmV/4h

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HEXABROMOBENZENE UNLABELED (87-82-1)	
ATE CLP (vapors)	11.000 mg/l/4h
ATE CLP (dust, mist)	1.500 mg/l/4h

DECHLORANE 602 UNLABELED (31107-44-5)	
LD50 oral rat	>
LD50 dermal rabbit	>
LC50 inhalation rat (mg/l)	> 2250 mg/m ³

TOLUENE UNLABELED (108-88-3)	
LD50 oral rat	> 5580 mg/kg
LD50 dermal rabbit	12196 mg/kg
LC50 inhalation rat (mg/l)	12,500 - 28,800 mg/m ³ - 4 h
ATE CLP (dermal)	12196.000 mg/kg body weight
ATE CLP (vapors)	12.500 mg/l/4h
ATE CLP (dust, mist)	12.500 mg/l/4h

N-NONANE UNLABELED (111-84-2)	
LC50 inhalation rat (mg/l)	23760 mg/m ³ 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

1,4-DIBROMOBENZENE UNLABELED (106-37-6)	
LD50 oral	3120 mg/kg mouse

Skin corrosion/irritation	: Causes skin irritation. Skin rabbit Causes skin irritation 24 Hours
Serious eye damage/irritation	: Causes serious eye irritation. Eyes rabbit No eye irritation (OECD 405 method)
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Rat. liver. DNA Damage
Carcinogenicity	: Not classified
Reproductive toxicity	: Damage to fetus possible. Suspected human reproductive toxicant. Reproductive toxicity - Rat - Inhalation. Paternal Effects: Spermatogenesis (including genetic material, sperm morphology, motility, and count). Experiments have shown reproductive toxicity effects in male and female laboratory animals. Developmental Toxicity - Rat - Oral. Effects on Embryo or Fetus: Fetotoxicity (except death, e.g. stunted fetus).
Specific target organ toxicity – single exposure	: May cause drowsiness or dizziness. May cause drowsiness or dizziness
Specific target organ toxicity – repeated exposure	: May cause damage to organs (brain, kidneys, liver, urinary bladder) through prolonged or repeated exposure (if inhaled, if swallowed, in contact with skin). No data available

N-NONANE UNLABELED (111-84-2)	
NOAEL (oral,rat,90 days)	100 mg/kg bodyweight/day female (OECD Test Guideline 408)

Aspiration hazard	: May be fatal if swallowed and enters airways.
Potential Adverse human health effects and symptoms	: Symptoms/injuries. IF INHALED: lungs. Pulmonary irritation. Pulmonary edema. Chest pain. Central Nervous System. 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. Stomach - Irregularities - Based on Human Evidence. Lung irritation, chest pain, pulmonary edema, Inhalation studies have shown the development of inflammatory and ulcerous lesions of the penis, prepuce, and scrotum in animals.
IARC group	: 3
Symptoms/injuries after inhalation	: Harmful if inhaled. May cause respiratory irritation.

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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. Risk of lung edema.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: Toxic to bees.
Ecology - water	: Toxic to aquatic life.

DECHLORANES AND BFR NATIVE STANDARD MIXTURE 10 UG/ML IN NONANE/TOLUENE	
EC50 Daphnia 1	0.2 mg/l static test - Daphnia magna (Water flea) - 48 h
EC50 other aquatic organisms 1	6 mg/l Daphnia magna (Water flea) - Immobilization - 48 h
LC50 fish 2	7.63 mg/l Oncorhynchus mykiss (Rainbow trout) - 96 h
EC50 Daphnia 2	8 mg/l Daphnia magna (Water flea) - 24 h
ErC50 (algae)	245 mg/l Chlorella vulgaris (Fresh water algae) - 24 h
ErC50 (other aquatic plants)	10 mg/l Pseudokirchneriella subcapitata (Green algae) - 24 h
NOEC (chronic)	5.44 mg/l Pimephales promelas (fathead minnow) - 7 d

MIREX UNLABELED (2385-85-5)	
LC50 fish 1	0.023 mg/l Oncorhynchus mykiss (rainbow trout) -96h
EC50 Daphnia 1	2.6 mg/l Daphnia magna (Water flea) -2.6mg/L-48h

TOLUENE UNLABELED (108-88-3)	
EC50 Daphnia 1	8 mg/l Daphnia magna (Water flea) - 24h
LC50 fish 2	7.63 mg/l Oncorhynchus mykiss (Rainbow trout) - 96 h
EC50 Daphnia 2	6 mg/l Daphnia magna (Water flea) - Immobilization - 48 h
ErC50 (algae)	245 mg/l Chlorella vulgaris (Fresh water algae) - 24 h
ErC50 (other aquatic plants)	10 mg/l Pseudokirchneriella subcapitata (Green algae) - 24 h
NOEC (chronic)	5.44 mg/l Pimephales promelas (fathead minnow) - 7 d

N-NONANE UNLABELED (111-84-2)	
EC50 Daphnia 1	0.2 mg/l static test EC50 - Daphnia magna (Water flea) - 48 h

1,4-DIBROMOBENZENE UNLABELED (106-37-6)	
LC50 fish 1	0.68 mg/l Poecilia reticulata (guppy) - 96 h

12.2. Persistence and degradability

DECHLORANES AND BFR NATIVE STANDARD MIXTURE 10 UG/ML IN NONANE/TOLUENE	
Persistence and degradability	May cause long-term adverse effects in the environment.
Biodegradation	Readily biodegradable.

DECHLORANE PLUS ANTI UNLABELED (135821-74-8)	
Persistence and degradability	Not available.

DECHLORANE PLUS SYN UNLABELED (135821-03-3)	
Persistence and degradability	Not available. May cause long-term adverse effects in the environment.

HEXABROMOBENZENE UNLABELED (87-82-1)	
Persistence and degradability	May cause long-term adverse effects in the environment.

DECHLORANE 602 UNLABELED (31107-44-5)	
Persistence and degradability	Persistent in the environment.

TBPH (BIS(2-ETHYLHEXYL)TETRABROMOPHTHALATE) UNLABELED (26040-51-7)	
Persistence and degradability	May cause long-term adverse effects in the environment.

TOLUENE UNLABELED (108-88-3)	
Persistence and degradability	Readily biodegradable.

1,4-DIBROMOBENZENE UNLABELED (106-37-6)	
Persistence and degradability	Not available.

12.3. Bioaccumulative potential

DECHLORANES AND BFR NATIVE STANDARD MIXTURE 10 UG/ML IN NONANE/TOLUENE	
BCF fish 1	0.05 mg/l Leuciscus idus (Golden orfe) - 3 d
Bioconcentration factor (BCF REACH)	90
Bioaccumulative potential	Indication of bioaccumulation.

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MIREX UNLABELED (2385-85-5)	
Bioconcentration factor (BCF REACH)	18100
Log Pow	5.28
Bioaccumulative potential	Bioaccumulative potential: Pimephales promelas (fathead minnow)- 32d.

DECHLORANE PLUS ANTI UNLABELED (135821-74-8)	
Bioaccumulative potential	Not available.

DECHLORANE PLUS SYN UNLABELED (135821-03-3)	
Bioaccumulative potential	Not available.

HEXABROMOBENZENE UNLABELED (87-82-1)	
Log Pow	6.278

DECHLORANE 602 UNLABELED (31107-44-5)	
Bioaccumulative potential	If released in water, this material is expected to preferentially absorb to sediment. The photodegradation half-life is over 24 years. The material is resistant to biodegradation by aerobic and anaerobic bacteria.

TOLUENE UNLABELED (108-88-3)	
BCF fish 1	0.05 mg/l Leuciscus idus (Golden orfe) - 3 d
Bioconcentration factor (BCF REACH)	90

N-NONANE UNLABELED (111-84-2)	
Log Pow	5.65
Bioaccumulative potential	Indication of bioaccumulation.

1,4-DIBROMOBENZENE UNLABELED (106-37-6)	
Bioconcentration factor (BCF REACH)	30.8 ug/l - 220 Gambusia affinis (Mosquito fish) - 96 h
Bioaccumulative potential	30.8 ug/l.- Gambusia affinis (Mosquito fish) - 96 h

12.4. Mobility in soil

DECHLORANE PLUS ANTI UNLABELED (135821-74-8)	
Ecology - soil	Not available.

DECHLORANE PLUS SYN UNLABELED (135821-03-3)	
Ecology - soil	Not available.

DECHLORANE 602 UNLABELED (31107-44-5)	
Ecology - soil	Not available.

1,4-DIBROMOBENZENE UNLABELED (106-37-6)	
Ecology - soil	Not available.

12.5. Results of PBT and vPvB assessment

TOLUENE UNLABELED (108-88-3)	
PBT: not relevant – no registration required	

12.6. Other adverse effects

Other adverse effects : Disposal must be done according to official regulations. Avoid release to the environment.

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.
- Additional information : Handle empty containers with care because residual vapors are flammable.
- 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) : 1294
DOT NA no. UN1294

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Toluene
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) : II - Medium Danger

DOT Special Provisions (49 CFR 172.102) : IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). 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.
T4 - 2.65 178.274(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) : 202

DOT Packaging Bulk (49 CFR 173.xxx) : 242

14.3. Additional information

Emergency Response Guide (ERG) Number : 130

Other information : No supplementary information available.

Overland transport

Packing group (ADR) : II

Class (ADR) : 3 - Flammable liquid

Hazard identification number (Kemler No.) : 33

Classification code (ADR) : F1

Hazard labels (ADR) : 3 - Flammable liquids



Orange plates : 

Tunnel restriction code (ADR) : D/E

Limited quantities (ADR) : 11

EAC : 3YE

Excepted quantities (ADR) : E2

Transport by sea

DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.

MFAG-No : 130

Air transport

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 5 L

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 60 L

Civil Aeronautics Law : Flammable liquids

14.4. Environmental hazards

Other information : No supplementary information available.

14.5. Special precautions for user

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

Not applicable

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SECTION 15: Regulatory information

15.1. US Federal regulations

DECHLORANES AND BFR NATIVE STANDARD MIXTURE 10 UG/ML IN NONANE/TOLUENE

Listed on the United States TSCA (Toxic Substances Control Act) inventory

SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
--	--

SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard
-------------------------------------	---

SARA Section 313 - Emission Reporting	Subject to reporting requirements of the United States SARA Section 313.
---------------------------------------	--

MIREX UNLABELED (2385-85-5)

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	Immediate (acute) health hazard Delayed (chronic) health hazard
-------------------------------------	--

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

DECHLORANE PLUS ANTI UNLABELED (135821-74-8)

SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
--	--

SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
-------------------------------------	--

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

DECHLORANE PLUS SYN UNLABELED (135821-03-3)

SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
--	---

SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
-------------------------------------	--

SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313
---------------------------------------	---

HEXABROMOBENZENE UNLABELED (87-82-1)

SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302.
--	--

SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
-------------------------------------	---------------------------------

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

DECHLORANE 602 UNLABELED (31107-44-5)

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.
---------------------------------------	--

TBPH (BIS(2-ETHYLHEXYL)TETRABROMOPHTHALATE) UNLABELED (26040-51-7)

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
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TOLUENE UNLABELED (108-88-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

CERCLA RQ	1000 lb
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SARA Section 302 Threshold Planning Quantity (TPQ)	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302
--	--

SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard
-------------------------------------	---

SARA Section 313 - Emission Reporting	Subject to reporting requirements of United States SARA Section 313
---------------------------------------	---

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.
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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.
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1,4-DIBROMOBENZENE UNLABELED (106-37-6)	
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313

15.2. International regulations

CANADA

DECHLORANES AND BFR NATIVE STANDARD MIXTURE 10 UG/ML IN NONANE/TOLUENE	
Listed on the Canadian DSL (Domestic Substances List)	
TOLUENE UNLABELED (108-88-3)	
Listed on the Canadian DSL (Domestic Substances List)	
N-NONANE UNLABELED (111-84-2)	
Listed on the Canadian DSL (Domestic Substances List)	

15.2.1. National regulations

N-NONANE UNLABELED (111-84-2)	

15.3. US State regulations

DECHLORANES AND BFR NATIVE STANDARD MIXTURE 10 UG/ML IN NONANE/TOLUENE				
U.S. - California - Proposition 65 - Carcinogens List	No			
U.S. - California - Proposition 65 - Developmental Toxicity	Yes			
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-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities 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			
MIREX UNLABELED (2385-85-5)				
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)
No	No	No	No	
DECHLORANE PLUS ANTI UNLABELED (135821-74-8)				
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	
DECHLORANE PLUS SYN UNLABELED (135821-03-3)				
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	
HEXABROMOBENZENE UNLABELED (87-82-1)				
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)
No	No	No	No	

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DECHLORANE 602 UNLABELED (31107-44-5)				
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)
No	No	No	No	
TBPH (BIS(2-ETHYLHEXYL)TETRABROMOPHTHALATE) UNLABELED (26040-51-7)				
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)
No	No	No	No	
TOLUENE UNLABELED (108-88-3)				
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)
No	Yes	No	No	
N-NONANE UNLABELED (111-84-2)				
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)
No	No	No	No	
1,4-DIBROMOBENZENE UNLABELED (106-37-6)				
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)
No	No	No	No	
MIREX UNLABELED (2385-85-5)				
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				
DECHLORANE PLUS ANTI UNLABELED (135821-74-8)				
State or local regulations				
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List				
DECHLORANE PLUS SYN UNLABELED (135821-03-3)				
State or local regulations				
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List				
HEXABROMOBENZENE UNLABELED (87-82-1)				
State or local regulations				
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List				
TBPH (BIS(2-ETHYLHEXYL)TETRABROMOPHTHALATE) UNLABELED (26040-51-7)				
State or local regulations				
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List				
TOLUENE UNLABELED (108-88-3)				
State or local regulations				
U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities U.S. - New Jersey - Right to Know Hazardous Substance List				

DECHLORANES AND BFR NATIVE STANDARD MIXTURE 10 UG/ML IN NONANE/TOLUENE

ES-5606

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

TOLUENE UNLABELED (108-88-3)

U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances
U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - Massachusetts - Right To Know List

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

1,4-DIBROMOBENZENE UNLABELED (106-37-6)

State or local regulations

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. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhalation) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhalation) Category 4
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Aquatic Chronic 4	Hazardous to the aquatic environment - Chronic Hazard Category 4
Asp. Tox. 1	Aspiration hazard Category 1
Carc. 2	Carcinogenicity Category 2
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Flam. Liq. 2	Flammable liquids Category 2
Flam. Liq. 3	Flammable liquids Category 3
Repr. 2	Reproductive toxicity Category 2
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
STOT SE 2	Specific target organ toxicity (single exposure) Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapor
H226	Flammable liquid and vapor
H301	Toxic if swallowed
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H311	Toxic in contact with skin
H312	Harmful in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H331	Toxic if inhaled
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H351	Suspected of causing cancer
H361	Suspected of damaging fertility or the unborn child
H371	May cause damage to organs
H373	May cause damage to organs through prolonged or repeated exposure

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H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
H413	May cause long lasting harmful effects to aquatic life
R10	Flammable
R11	Highly flammable
R20	Harmful by inhalation
R20/21/22	Harmful by inhalation, in contact with skin and if swallowed
R21/22	Harmful in contact with skin and if swallowed
R23	Toxic by inhalation
R36/37/38	Irritating to eyes, respiratory system and skin
R36/38	Irritating to eyes and skin
R37	Irritating to respiratory system
R38	Irritating to skin
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation
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
R62	Possible risk of impaired fertility
R63	Possible risk of harm to the unborn child
R65	Harmful: may cause lung damage if swallowed
R67	Vapors may cause drowsiness and dizziness
R68	Possible risk of irreversible effects
F	Highly flammable
N	Dangerous for the environment
T	Toxic
Xi	Irritant
Xn	Harmful

NFPA health hazard

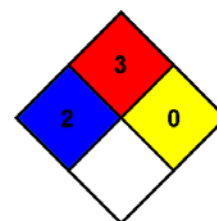
: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard

: 3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature conditions.

NFPA reactivity

: 0 - Material that in themselves are normally stable, even under fire conditions.



HMIS III Rating

Health

: 2 Moderate Hazard - Temporary or minor injury may occur

Flammability

: 3 Serious Hazard

Physical

: 0 Minimal Hazard

CIL Multi-Solvent Mixture SDS

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