



PAH-SIM RECOVERY STANDARD MIXTURE (D, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2

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

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ES-5386

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

1.1. Product identifier

Product form : Mixtures
Product name : PAH-SIM RECOVERY STANDARD MIXTURE (D, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2
Product code : ES-5386

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]

Acute Tox. 4 (Oral) H302
Acute Tox. 4 (Dermal) H312
Skin Irrit. 2 H315
Eye Irrit. 2 H319
Carc. 2 H351
STOT SE 3 H335
STOT SE 3 H336
STOT RE 2 H373

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

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

Xi; R36/37/38
Carc.Cat.3; R40
R67
Xn; R48/21/22

Full text of R-phrases: see section 16

GHS-US classification

Acute Tox. 4 (Oral) H302
Acute Tox. 4 (Dermal) H312
Skin Irrit. 2 H315
Eye Irrit. 2A H319
Carc. 2 H351
STOT SE 3 H336
STOT SE 3 H335
STOT RE 2 H373

Full text of H statements : see section 16

PAH-SIM RECOVERY STANDARD MIXTURE (D, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2

ES-5386

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

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP)



Signal word (CLP)

: Warning

Hazard statements (CLP)

: H302+H312 - Harmful if swallowed or in contact with skin
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation
H336 - May cause drowsiness or dizziness
H351 - Suspected of causing cancer (in contact with skin, if inhaled, if swallowed)
H373 - May cause damage to organs (blood, central nervous system, heart, kidneys, liver, pancreas) through prolonged or repeated exposure (in contact with skin, if inhaled, if swallowed)

Precautionary statements (CLP)

: P260 - Do not breathe dust, fume, gas, mist, spray, vapors
P264 - Wash hands, forearms and face thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear eye protection, face protection, protective clothing, protective gloves
P301+P312 - IF SWALLOWED: Call a doctor if you feel unwell
P302+P352 - IF ON SKIN: Wash with plenty of soap and water
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

GHS-US labeling

Hazard pictograms (GHS-US)



Signal word (GHS-US)

: Warning

Hazard statements (GHS-US)

: H302+H312 - Harmful if swallowed or in contact with skin
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation
H336 - May cause drowsiness or dizziness
H351 - Suspected of causing cancer (Dermal, Inhalation, oral)
H373 - May cause damage to organs (blood, central nervous system, heart, kidneys, liver, pancreas) through prolonged or repeated exposure (Dermal, Inhalation, oral)

Precautionary statements (GHS-US)

: P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
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
P270 - Do not eat, drink or smoke when using this product
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear eye protection, face protection, protective clothing, protective gloves
P301+P312 - If swallowed: Call a doctor if you feel unwell
P302+P352 - If on skin: Wash with plenty of water
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 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)
P322 - Specific treatment (see Hazard pictograms (CLP) on this label)

PAH-SIM RECOVERY STANDARD MIXTURE (D, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2

ES-5386

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

P330 - Rinse mouth
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
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
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
METHYLENE CHLORIDE-D2 (D, 99.8%)	(CAS No) 1665-00-5 (EC No) 216-776-0 (Unlabeled) (EC Index No) 602-004-00-3 (Unlabeled) (REACH-no) 01-2119480404-41	99.708	Xi; R36/37/38 Carc. Cat. 3; R40 T; R48/25 R67 Xn; R21/22
2-METHYLNAPHTHALENE (D10, 98%) CHEMICAL PURITY 97%	(CAS No) 7297-45-2 (EC No) 202-078-3	0.073	Xn; R22 Xi; R36/37/38 N; R51/53
ANTHRACENE (D10, 98%) substance listed as REACH Candidate (Anthracene)	(CAS No) 1719-06-8 (EC No) 204-371-1	0.073	Xi; R36/37/38 N; R50/53
P-TERPHENYL (D14, 98%)	(CAS No) 1718-51-0 (EC No) 202-205-2 (Unlabeled)	0.073	T+; R28 F; R11 Xi; R38 N; R50/53 R67 Xn; R65
BENZO[E]PYRENE (D12, 98%)	(CAS No) 205440-82-0 (EC No) 205-892-7 (Unlabeled) (EC Index No) 601-049-00-6 (Unlabeled)	0.073	Carc. Cat. 1; R45 N; R50/53

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
METHYLENE CHLORIDE-D2 (D, 99.8%)	(CAS No) 1665-00-5 (EC No) 216-776-0 (Unlabeled) (EC Index No) 602-004-00-3 (Unlabeled) (REACH-no) 01-2119480404-41	99.708	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H336 STOT SE 3, H335 STOT RE 2, H373
2-METHYLNAPHTHALENE (D10, 98%) CHEMICAL PURITY 97%	(CAS No) 7297-45-2 (EC No) 202-078-3	0.073	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 2, H411
ANTHRACENE (D10, 98%) substance listed as REACH Candidate (Anthracene)	(CAS No) 1719-06-8 (EC No) 204-371-1	0.073	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Acute 1, H400 (M=1000) Aquatic Chronic 1, H410
P-TERPHENYL (D14, 98%)	(CAS No) 1718-51-0 (EC No) 202-205-2 (Unlabeled)	0.073	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
BENZO[E]PYRENE (D12, 98%)	(CAS No) 205440-82-0 (EC No) 205-892-7 (Unlabeled) (EC Index No) 601-049-00-6 (Unlabeled)	0.073	Carc. 1B, H350 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

PAH-SIM RECOVERY STANDARD MIXTURE (D, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2

ES-5386

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

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2-METHYLNAPHTHALENE (D10, 98%) CHEMICAL PURITY 97%	(CAS No) 7297-45-2	0.073	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
ANTHRACENE (D10, 98%)	(CAS No) 1719-06-8	0.073	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
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BENZO[E]PYRENE (D12, 98%)	(CAS No) 205440-82-0	0.073	Carc. 1B, H350 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	: Suspected of causing cancer (if inhaled, in contact with skin, if swallowed).
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	: Immediately call a poison center or doctor/physician. Specific measures (see Hazard pictograms (CLP) on this label). 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	: Immediately rinse with water for a prolonged period while holding the eyelids wide open. Get immediate medical advice/attention.
First-aid measures after ingestion	: Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.

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

Symptoms/injuries	: Causes damage to organs (blood, central nervous system, heart, liver, kidneys, pancreas) (in contact with skin, if inhaled, if swallowed).
Symptoms/injuries after inhalation	: May cause respiratory irritation. May cause drowsiness or dizziness.
Symptoms/injuries after skin contact	: Repeated exposure to this material can result in absorption through skin causing significant health hazard. Harmful in contact with skin. Causes skin irritation.
Symptoms/injuries after eye contact	: Causes serious eye irritation.
Symptoms/injuries after ingestion	: Harmful if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

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 chemical powder, alcohol-resistant foam, carbon dioxide (CO₂).

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Firefighting instructions	: Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting	: Wear self-contained breathing apparatus, rubber boots and thick rubber gloves.

PAH-SIM RECOVERY STANDARD MIXTURE (D, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2

ES-5386

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Avoid dust formation. Avoid breathing dust, vapors, mist, gas. Use personal protective equipment as required. Ensure adequate air ventilation.

6.1.2. For emergency responders

Protective equipment : Avoid breathing Dust, vapors.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Do not discharge the product into the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Collect spillage. Soak up with inert absorbent material (for example sand, sawdust, a universal binder, silica gel). This material and its container must be disposed of in a safe way, and as per local legislation.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : 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 : Do not eat, drink or smoke when using this product. Wash hands, forearms and face thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Store tightly closed in a dry and cool place.

Storage conditions : Store at room temperature away from light and moisture.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

PAH-SIM RECOVERY STANDARD MIXTURE (D, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	50.00000000 ppm Central Nervous System impairment, Carboxyhemoglobinemia substances (see BEI)
2-METHYLNAPHTHALENE (D10, 98%) CHEMICAL PURITY 97% (7297-45-2)		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	0.50000000 ppm Skin contact does contribute to exposure. Not classifiable as a human carcinogen
ANTHRACENE (D10, 98%) (1719-06-8)		
USA OSHA	OSHA PEL (TWA) (mg/m ³)	0.2 mg/m ³
METHYLENE CHLORIDE-D2 (D, 99.8%) (1665-00-5)		
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	50.00000000 ppm Basis: USA. ACGIH Threshold Limit Values (TLV)
Italy - Portugal - USA ACGIH	Remark (ACGIH)	Central Nervous system impairment. Carboxyhemoglobinemia. Substances for which there is a Biological Exposure Index or Indices (see BEI section). Confirmed animal carcinogen with unknown relevance to humans. Potential Occupational Carcinogen See Appendix A.
USA OSHA	OSHA PEL (STEL) (mg/m ³)	435 mg/m ³ Basis: California permissible exposure limits for chemical contaminants (Title 8, Article 107) see section 5202
USA OSHA	OSHA PEL (STEL) (ppm)	125 ppm Basis: OSHA Specially Regulated Chemicals/Carcinogens California permissible exposure limits for chemical contaminants (Title 8, Article 107) see section 5202

PAH-SIM RECOVERY STANDARD MIXTURE (D, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2

ES-5386

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

METHYLENE CHLORIDE-D2 (D, 99.8%) (1665-00-5)		
USA OSHA	OSHA PEL (Ceiling) (mg/m ³)	87 mg/m ³ Basis: California permissible exposure limits for chemical contaminants (Title 8, Article 107) see section 5202
USA OSHA	OSHA PEL (Ceiling) (ppm)	25 ppm Basis: OSHA Specifically Regulated Chemicals/Carcinogens California permissible exposure limits for chemical contaminants (Title 8, Article 107) see section 5202
USA OSHA	Remark (OSHA)	Substance listed; for mor information see OSHA document 1910.1052. See Table Z-2. This section applies to all occupational exposures to methylene chloride (MC). Chemical Abstracts Service Registry Number 75-09-2, in general industry, construction and shipyard employment. Methylene chloride (MC) means an organic compound with chemical formula CH ₂ Cl ₂ . Its Chemical Abstracts Service Registry Number is 75-09-2. Its molecular weight is 8.9 g/mole. OSHA Specifically regulated carcinogen.

8.2. Exposure controls

Personal protective equipment : Gloves. Safety glasses. Protective clothing. Respiratory protection of the dependent type.



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

Hand protection : Protective gloves.

Eye protection : 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.

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	: 86.94 g/mol (Labeled)
Color	: Colorless
Odor	: Sweet, penetrating, ether-like odor
Odor threshold	: No data available
pH	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Relative evaporation rate (ether=1)	: 0.71
Melting point	: -97 °C (-143 °F)
Freezing point	: No data available
Boiling point	: 39.8 - 40 °C (103.6 - 104 °F)
Flash point	: No data available
Auto-ignition temperature	: 556.1 °C (1,033.0 °F); 622.0 °C (1,223.6 °F)
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapor pressure	: 470.9 hPa (353.2 mmHg) at 20 °C (68 °F)
Relative vapor density at 20 °C	: 2.93 - (Air = 1.0)
Relative density	: No data available
Specific gravity / density	: 1.325 g/ml at 25 °C (77 °F)
Solubility	: Water: Slightly soluble
Log Pow	: 1.25
Log Kow	: No data available
Viscosity, kinematic	: No data available

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ES-5386

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

Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosion limits	: 12 - 19 % (V)

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

See storage and expiration date on CoA.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Heat. Open flame. Sparks. Protect from sunlight.

10.5. Incompatible materials

Alkali metals, Aluminum, Strong oxidizing agents, Bases, Amines, Magnesium. Strong acids and strong bases, Vinyl compounds.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO₂). Hydrogen chloride.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed. Dermal: Harmful in contact with skin.

PAH-SIM RECOVERY STANDARD MIXTURE (D, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2	
LC50 inhalation rat (mg/l)	52000 mg/m ³
ATE CLP (oral)	501.474 mg/kg body weight
ATE CLP (dermal)	1100.000 mg/kg body weight
ATE CLP (vapors)	52.000 mg/l/4h
2-METHYLNAPHTHALENE (D10, 98%) CHEMICAL PURITY 97% (7297-45-2)	
LD50 oral rat	1630 mg/kg
ATE CLP (oral)	1630.000 mg/kg body weight
P-TERPHENYL (D14, 98%) (1718-51-0)	
LD50 oral rat	> 10000 mg/kg
METHYLENE CHLORIDE-D2 (D, 99.8%) (1665-00-5)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg (OECD Test Guideline 402)
LC50 inhalation rat (mg/l)	52000 mg/m ³
ATE CLP (oral)	500.000 mg/kg body weight
ATE CLP (dermal)	1100.000 mg/kg body weight
ATE CLP (vapors)	52.000 mg/l/4h
ATE CLP (dust, mist)	52.000 mg/l/4h

Skin corrosion/irritation	: Causes skin irritation. Skin - rabbit - Skin irritation - 24 h
Serious eye damage/irritation	: Causes serious eye irritation. Eyes - rabbit - Mild eye irritation - 24 h
Respiratory or skin sensitization	: Not available
Germ cell mutagenicity	: Genotoxicity in vivo - rat - Oral : DNA damage
Carcinogenicity	: Suspected of causing cancer (in contact with skin, if inhaled, if swallowed).
Reproductive toxicity	: Not available
Specific target organ toxicity – single exposure	: May cause respiratory irritation. May cause drowsiness or dizziness.
Specific target organ toxicity – repeated exposure	: May cause damage to organs (blood, central nervous system, heart, kidneys, liver, pancreas) through prolonged or repeated exposure (in contact with skin, if inhaled, if swallowed). No data available

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ES-5386

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

Aspiration hazard	: Not classified
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.
IARC group	: 2B
Symptoms/injuries after inhalation	: May cause respiratory irritation. May cause drowsiness or dizziness.
Symptoms/injuries after skin contact	: Repeated exposure to this material can result in absorption through skin causing significant health hazard. Harmful in contact with skin. Causes skin irritation.
Symptoms/injuries after eye contact	: Causes serious eye irritation.
Symptoms/injuries after ingestion	: Harmful if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

SECTION 12: Ecological information

12.1. Toxicity

PAH-SIM RECOVERY STANDARD MIXTURE (D, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2	
LC50 fish 1	193 mg/l Pimephales promelas (fathead minnow) - 96 h
EC50 Daphnia 1	1682 mg/l Daphnia magna (Water flea) - 48 h
NOEC (chronic)	130 mg/l Cyprinodon variegatus (sheepshead minnow) - 96 h
2-METHYLNAPHTHALENE (D10, 98%) CHEMICAL PURITY 97% (7297-45-2)	
LC50 fish 1	2.5 mg/l Pimephales promelas (fathead minnow)
EC50 Daphnia 1	1.5 mg/l Daphnia magna (Water flea) - 48 h
ANTHRACENE (D10, 98%) (1719-06-8)	
LC50 fish 1	0.001 mg/l Lepomis macrochirus (Bluegill) - 96.0 h
EC50 Daphnia 1	0.1 mg/l Daphnia magna (Water flea) - 48 h
METHYLENE CHLORIDE-D2 (D, 99.8%) (1665-00-5)	
LC50 fish 1	193 mg/l Pimephales promelas (fathead minnow) - 96 h
EC50 Daphnia 1	1682 mg/l Daphnia magna (Water flea) - 48 h
NOEC (chronic)	130 mg/l Cyprinodon variegatus (sheepshead minnow) - 96 h

12.2. Persistence and degradability

PAH-SIM RECOVERY STANDARD MIXTURE (D, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2	
Persistence and degradability	Not available.
2-METHYLNAPHTHALENE (D10, 98%) CHEMICAL PURITY 97% (7297-45-2)	
Persistence and degradability	Not available.
ANTHRACENE (D10, 98%) (1719-06-8)	
Persistence and degradability	Not available.
P-TERPHENYL (D14, 98%) (1718-51-0)	
Persistence and degradability	Not available.
BENZO[E]PYRENE (D12, 98%) (205440-82-0)	
Persistence and degradability	Not available.
METHYLENE CHLORIDE-D2 (D, 99.8%) (1665-00-5)	
Biodegradation	< 26 % - Not readily biodegradable. (OECD Test Guideline 301C)

12.3. Bioaccumulative potential

PAH-SIM RECOVERY STANDARD MIXTURE (D, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2	
Log Pow	1.25
Bioaccumulative potential	Not available.
2-METHYLNAPHTHALENE (D10, 98%) CHEMICAL PURITY 97% (7297-45-2)	
Log Pow	3.8
ANTHRACENE (D10, 98%) (1719-06-8)	
Bioconcentration factor (BCF REACH)	649
Log Pow	4.45
Bioaccumulative potential	Bioaccumulation Pimephales promelas (fathead minnow) - 42 d.
P-TERPHENYL (D14, 98%) (1718-51-0)	
Bioaccumulative potential	Not available.

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ES-5386

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

BENZO[E]PYRENE (D12, 98%) (205440-82-0)	
Log Pow	6.44
Bioaccumulative potential	Not available.

METHYLENE CHLORIDE-D2 (D, 99.8%) (1665-00-5)	
Log Pow	1.25
Bioaccumulative potential	Does not accumulate in organisms.

12.4. Mobility in soil

PAH-SIM RECOVERY STANDARD MIXTURE (D, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2	
Ecology - soil	Not available.

2-METHYLNAPHTHALENE (D10, 98%) CHEMICAL PURITY 97% (7297-45-2)	
Ecology - soil	Not available.

ANTHRACENE (D10, 98%) (1719-06-8)	
Ecology - soil	Not available.

P-TERPHENYL (D14, 98%) (1718-51-0)	
Ecology - soil	Not available.

BENZO[E]PYRENE (D12, 98%) (205440-82-0)	
Ecology - soil	Not available.

METHYLENE CHLORIDE-D2 (D, 99.8%) (1665-00-5)	
Ecology - soil	Not available.

12.5. Results of PBT and vPvB assessment

ANTHRACENE (D10, 98%) (1719-06-8)	
This substance/mixture meets the PBT criteria of REACH, annex XIII	
This substance/mixture does not meet the vPvB criteria of REACH, annex XIII	

METHYLENE CHLORIDE-D2 (D, 99.8%) (1665-00-5)	
PBT: not relevant – no registration required	

12.6. Other adverse effects

Other adverse effects : Disposal must be done according to official regulations. May cause long lasting harmful effects to aquatic life.

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) : 1593
DOT NA no. UN1593

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Dichloromethane
Class (DOT) : 6.1 - Class 6.1 - Poisonous materials 49 CFR 173.132
Hazard labels (DOT) : 6.1 - Poison



Packing group (DOT) : III - Minor Danger

PAH-SIM RECOVERY STANDARD MIXTURE (D, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2

ES-5386

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

- DOT Special Provisions (49 CFR 172.102) : IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).
IP8 - Ammonia solutions may be transported in rigid or composite plastic IBCs (31H1, 31H2 and 31HZ1) that have successfully passed, without leakage or permanent deformation, the hydrostatic test specified in 178.814 of this subchapter at a test pressure that is not less than 1.5 times the vapor pressure of the contents at 55 C (131 F).
N36 - Aluminum or aluminum alloy construction materials are permitted only for halogenated hydrocarbons that will not react with aluminum.
T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3)
TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.
- DOT Packaging Exceptions (49 CFR 173.xxx) : 153
DOT Packaging Non Bulk (49 CFR 173.xxx) : 203
DOT Packaging Bulk (49 CFR 173.xxx) : 241

14.3. Additional information

- Emergency Response Guide (ERG) Number : 160
Other information : No supplementary information available.

Overland transport

- Packing group (ADR) : III
Class (ADR) : 6.1 - Toxic substances
Hazard identification number (Kemler No.) : 60
Classification code (ADR) : T1
Hazard labels (ADR) : 6.1 - Toxic substances



- Orange plates : Two orange rectangular plates with black borders. The top plate contains the number '60' and the bottom plate contains the number '1593' in black text.

- Tunnel restriction code (ADR) : E
Limited quantities (ADR) : 5l
EAC : 2Z
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 : 160

Air transport

- DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 220 L
Civil Aeronautics Law : Toxic and infectious substances/Toxic substances

PAH-SIM RECOVERY STANDARD MIXTURE (D, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2

ES-5386

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

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

SECTION 15: Regulatory information

15.1. US Federal regulations

PAH-SIM RECOVERY STANDARD MIXTURE (D, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2	
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
ANTHRACENE (D10, 98%) (1719-06-8)	
Subject to reporting requirements of United States SARA Section 313	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
P-TERPHENYL (D14, 98%) (1718-51-0)	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
BENZO[E]PYRENE (D12, 98%) (205440-82-0)	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
METHYLENE CHLORIDE-D2 (D, 99.8%) (1665-00-5)	
Subject to reporting requirements of United States SARA Section 313	
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

15.2. International regulations

CANADA

PAH-SIM RECOVERY STANDARD MIXTURE (D, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2	
Listed on the Canadian DSL (Domestic Substances List)	
ANTHRACENE (D10, 98%) (1719-06-8)	
Listed on the Canadian DSL (Domestic Substances List)	
METHYLENE CHLORIDE-D2 (D, 99.8%) (1665-00-5)	
Listed on the Canadian DSL (Domestic Substances List)	

15.2.1. National regulations

METHYLENE CHLORIDE-D2 (D, 99.8%) (1665-00-5)	
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15.3. US State regulations

PAH-SIM RECOVERY STANDARD MIXTURE (D, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2()	
U.S. - California - Proposition 65 - Carcinogens List	Yes
U.S. - California - Proposition 65 - Developmental Toxicity	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No
State or local regulations	U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List

PAH-SIM RECOVERY STANDARD MIXTURE (D, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2

ES-5386

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

2-METHYLNAPHTHALENE (D10, 98%) CHEMICAL PURITY 97% (7297-45-2)				
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	
ANTHRACENE (D10, 98%) (1719-06-8)				
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	
P-TERPHENYL (D14, 98%) (1718-51-0)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
BENZO[E]PYRENE (D12, 98%) (205440-82-0)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	
METHYLENE CHLORIDE-D2 (D, 99.8%) (1665-00-5)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
Yes	No	No	No	
2-METHYLNAPHTHALENE (D10, 98%) CHEMICAL PURITY 97% (7297-45-2)				
State or local regulations				
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.				
ANTHRACENE (D10, 98%) (1719-06-8)				
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 WARNING! This product contains a chemical known by the state of California to cause cancer.				
P-TERPHENYL (D14, 98%) (1718-51-0)				
State or local regulations				
U.S. - Massachusetts - Right To Know List U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.				
BENZO[E]PYRENE (D12, 98%) (205440-82-0)				
State or local regulations				
U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List WARNING! This product contains a chemical known by the state of California to cause cancer.				
METHYLENE CHLORIDE-D2 (D, 99.8%) (1665-00-5)				
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				

PAH-SIM RECOVERY STANDARD MIXTURE (D, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2

ES-5386

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

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.

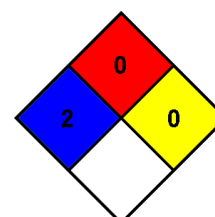
Full text of R-, H- and EUH-phrases:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal) 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
Carc. 1B	Carcinogenicity Category 1B
Carc. 2	Carcinogenicity Category 2
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H302	Harmful if swallowed
H312	Harmful in contact with skin
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H350	May cause cancer
H351	Suspected of causing cancer
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
R11	Highly flammable
R21/22	Harmful in contact with skin and if swallowed
R22	Harmful if swallowed
R28	Very toxic if swallowed
R36/37/38	Irritating to eyes, respiratory system and skin
R38	Irritating to skin
R40	Limited evidence of a carcinogenic effect
R45	May cause cancer
R48/21/22	Harmful: danger of serious damage to health by prolonged exposure in contact with skin and if swallowed
R48/25	Toxic: danger of serious damage to health by prolonged exposure 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
F	Highly flammable
N	Dangerous for the environment
T	Toxic
T+	Very toxic
Xi	Irritant
Xn	Harmful

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

NFPA fire hazard : 0 - Materials that will not burn under typical dire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

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



PAH-SIM RECOVERY STANDARD MIXTURE (D, 98%) 1 MG/ML IN METHYLENE CHLORIDE-D2

ES-5386

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

HMIS III Rating

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