

# SAFETY DATA SHEET

## 1. Identification

<b>Product identifier</b>	<b>Phenanthrene-d10 Solution</b>	
<b>Other means of identification</b>	S-12856X5	
<b>Item</b>	S-12856X5	
<b>Recommended use</b>	This chemical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal. For Laboratory Use Only	
<b>Recommended restrictions</b>	None known.	
<b>Manufacturer/Importer/Supplier/Distributor information</b>		
<b>Manufacturer</b>		
<b>Company name</b>	Chem Service, Inc.	
<b>Address</b>	660 Tower Lane West Chester, PA 19380 United States	
<b>Telephone</b>	Toll Free	800-452-9994
	Direct	610-692-3026
<b>Website</b>	www.chemservice.com	
<b>E-mail</b>	info@chemservice.com	
<b>Emergency phone number</b>	Chemtrec US	800-424-9300
	Chemtrec outside US	+1 703-527-3887

## 2. Hazard(s) identification

<b>Physical hazards</b>	Not classified.	
<b>Health hazards</b>	Acute toxicity, oral	Category 4
	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Germ cell mutagenicity	Category 2
	Carcinogenicity	Category 1B
	Specific target organ toxicity, single exposure	Category 1
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Specific target organ toxicity, repeated exposure	Category 1
<b>Environmental hazards</b>	Not classified.	
<b>OSHA defined hazards</b>	Not classified.	
<b>Label elements</b>		



<b>Signal word</b>	Danger
<b>Hazard statement</b>	Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. Suspected of causing genetic defects. May cause cancer. Causes damage to organs. Causes damage to organs through prolonged or repeated exposure.
<b>Precautionary statement</b>	
<b>Prevention</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist/vapors. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

<b>Response</b>	If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
<b>Storage</b>	Store in a well-ventilated place. Keep container tightly closed. Store locked up.
<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	99.8% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 99.8% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	Common name and synonyms	CAS number	%
Methylene chloride	Dichloromethane	75-09-2	99.8
Phenanthrene-d10		1517-22-2	0.2

### 4. First-aid measures

<b>Inhalation</b>	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.
<b>Skin contact</b>	Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.
<b>Most important symptoms/effects, acute and delayed</b>	May cause drowsiness or dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist/vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
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**Methods and materials for containment and cleaning up**

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS.

**Environmental precautions**

Avoid discharge into drains, water courses or onto the ground.

**7. Handling and storage****Precautions for safe handling**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist/vapors. Do not taste or swallow. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities**

Store locked up. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

**8. Exposure controls/personal protection****Occupational exposure limits**

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Components	Type	Value
Methylene chloride (CAS 75-09-2)	STEL	125 ppm
	TWA	25 ppm

**US. ACGIH Threshold Limit Values**

Components	Type	Value
Methylene chloride (CAS 75-09-2)	TWA	50 ppm

**Biological limit values****ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
Methylene chloride (CAS 75-09-2)	0.3 mg/l	Dichloromethane	Urine	*

\* - For sampling details, please see the source document.

**Appropriate engineering controls**

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and safety shower.

**Individual protection measures, such as personal protective equipment****Eye/face protection**

Chemical respirator with organic vapor cartridge and full facepiece.

**Skin protection****Hand protection**

Wear appropriate chemical resistant gloves.

**Other**

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

**Respiratory protection**

Chemical respirator with organic vapor cartridge and full facepiece.

**Thermal hazards**

Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**

Observe any medical surveillance requirements. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

### Appearance

**Physical state** Liquid.

**Form** Liquid.

**Color** Not available.

**Odor** Not available.

**Odor threshold** Not available.

**pH** Not available.

**Melting point/freezing point** -139 °F (-95 °C) estimated

**Initial boiling point and boiling range** 103.55 °F (39.75 °C) estimated

**Flash point** Not available.

**Evaporation rate** Not available.

**Flammability (solid, gas)** Not applicable.

### Upper/lower flammability or explosive limits

**Explosive limit - lower (%)** 15.5 % estimated

**Explosive limit - upper (%)** 66.4 % estimated

**Vapor pressure** 580 hPa estimated

**Vapor density** Not available.

**Relative density** Not available.

### Solubility(ies)

**Solubility (water)** Not available.

**Partition coefficient (n-octanol/water)** Not available.

**Auto-ignition temperature** 1033 °F (556.11 °C) estimated

**Decomposition temperature** Not available.

**Viscosity** Not available.

### Other information

**Density** 1.3254 g/cm<sup>3</sup> estimated

**Explosive properties** Not explosive.

**Oxidizing properties** Not oxidizing.

**Percent volatile** 99.85 % estimated

**Specific gravity** 1.33 estimated

**VOC** 99.85 % estimated

99.8 % estimated

## 10. Stability and reactivity

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

**Chemical stability** Material is stable under normal conditions.

**Possibility of hazardous reactions** Hazardous polymerization does not occur.

**Conditions to avoid** Contact with incompatible materials.

**Incompatible materials** Strong oxidizing agents.

**Hazardous decomposition products** No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

**Inhalation** May cause damage to organs by inhalation. May cause drowsiness or dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful.

**Skin contact** Causes skin irritation.

**Eye contact** Causes serious eye irritation.

**Ingestion** Harmful if swallowed.  
**Symptoms related to the physical, chemical and toxicological characteristics** May cause drowsiness or dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

**Information on toxicological effects**

**Acute toxicity** Harmful if swallowed.

Components	Species	Test Results
Methylene chloride (CAS 75-09-2)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rat	> 2000 mg/kg, Days
<b>Inhalation</b>		
LC50	Rat	52000 mg/m3, 6 Hours
<b>Oral</b>		
LD50	Rat	1600 mg/kg

**Skin corrosion/irritation** Causes skin irritation.

**Serious eye damage/eye irritation** Causes serious eye irritation.

**Respiratory or skin sensitization**

**Respiratory sensitization** Not a respiratory sensitizer.

**Skin sensitization** This product is not expected to cause skin sensitization.

**Germ cell mutagenicity** Suspected of causing genetic defects.

**Carcinogenicity** May cause cancer.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

Methylene chloride (CAS 75-09-2) 2A Probably carcinogenic to humans.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Methylene chloride (CAS 75-09-2) Cancer

**US. National Toxicology Program (NTP) Report on Carcinogens**

Methylene chloride (CAS 75-09-2) Reasonably Anticipated to be a Human Carcinogen.

**Reproductive toxicity** This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure** Causes damage to organs. May cause drowsiness or dizziness.

**Specific target organ toxicity - repeated exposure** Causes damage to organs through prolonged or repeated exposure.

**Aspiration hazard** Not an aspiration hazard.

**Chronic effects** Prolonged inhalation may be harmful. Causes damage to organs through prolonged or repeated exposure. Prolonged exposure may cause chronic effects.

**12. Ecological information**

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Methylene chloride (CAS 75-09-2)		
<b>Aquatic</b>		
<i>Acute</i>		
Crustacea	EC50	Water flea (Daphnia magna) 1250 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas) >= 140.8 - <= 277.8 mg/l, 96 hours

**Persistence and degradability** No data is available on the degradability of any ingredients in the mixture.

**Bioaccumulative potential**

**Partition coefficient n-octanol / water (log Kow)**

Methylene chloride 1.25

**Mobility in soil** No data available.

**Other adverse effects** The product contains volatile organic compounds which have a photochemical ozone creation potential.

### 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

### 14. Transport information

#### DOT

**UN number** UN1593  
**UN proper shipping name** Dichloromethane, solution (Methylene chloride RQ = 1002 LBS)  
**Transport hazard class(es)**  
**Class** 6.1  
**Subsidiary risk** -  
**Label(s)** 6.1  
**Packing group** III  
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.  
**Special provisions** IB3, IP8, N36, T7, TP2  
**Packaging exceptions** 153  
**Packaging non bulk** 203  
**Packaging bulk** 241

#### IATA

**UN number** UN1593  
**UN proper shipping name** Dichloromethane solution (Methylene chloride)  
**Transport hazard class(es)**  
**Class** 6.1  
**Subsidiary risk** -  
**Packing group** III  
**Environmental hazards** No.  
**ERG Code** 6L  
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.  
**Other information**  
**Passenger and cargo aircraft** Allowed with restrictions.  
**Cargo aircraft only** Allowed with restrictions.

#### IMDG

**UN number** UN1593  
**UN proper shipping name** DICHLOROMETHANE SOLUTION (Methylene chloride)  
**Transport hazard class(es)**  
**Class** 6.1  
**Subsidiary risk** -  
**Packing group** III  
**Environmental hazards**  
**Marine pollutant** No.  
**EmS** F-A, S-A  
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.  
**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not established.

DOT



IATA; IMDG



## 15. Regulatory information

### US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### Toxic Substances Control Act (TSCA)

One or more components of the mixture are not on the TSCA 8(b) inventory or are designated "inactive". This chemical/product is not and cannot be distributed in commerce (as defined in TSCA section 3(5)) or processed (as defined in TSCA section 3(13)) for consumer paint or coating removal.

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Methylene chloride (CAS 75-09-2)

0.1 % Annual Export Notification required.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

Methylene chloride (CAS 75-09-2)

Listed.

#### SARA 304 Emergency release notification

Not regulated.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Methylene chloride (CAS 75-09-2)

Cancer  
Heart  
Central nervous system  
Liver  
Skin irritation  
Eye irritation

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### SARA 302 Extremely hazardous substance

Not listed.

#### SARA 311/312 Hazardous chemical

Yes

#### Classified hazard categories

Acute toxicity (any route of exposure)  
Skin corrosion or irritation  
Serious eye damage or eye irritation  
Germ cell mutagenicity  
Carcinogenicity  
Specific target organ toxicity (single or repeated exposure)

#### SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Methylene chloride	75-09-2	99.8

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Methylene chloride (CAS 75-09-2)

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Contains component(s) regulated under the Safe Drinking Water Act.**US state regulations****US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

Methylene chloride (CAS 75-09-2)

**California Proposition 65****WARNING:** This product can expose you to Methylene chloride, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).**California Proposition 65 - CRT: Listed date/Carcinogenic substance**

Methylene chloride (CAS 75-09-2)

Listed: April 1, 1988

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

<b>Issue date</b>	08-07-2014
<b>Revision date</b>	02-22-2023
<b>Version #</b>	05
<b>NFPA ratings</b>	Health: 4 Flammability: 0 Instability: 0



## Disclaimer

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