# SAFETY DATA SHEET



#### 1. Identification

Product identifier p-Terphenyl Solution

Other means of identification

Item S-12794X5

Recommended use For Laboratory Use Only

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Chem Service, Inc. Address 660 Tower Lane

West Chester, PA 19380

**United States** 

**Telephone** Toll Free 800-452-9994

Direct 610-692-3026

Website www.chemservice.com
E-mail info@chemservice.com

Emergency phone number Chemtrec US 800-424-9300

Chemtrec outside US +1 703-527-3887

# 2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Acute toxicity, oral Category 4

Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 2A
Carcinogenicity Category 2
Specific target organ toxicity, repeated Category 2

exposure

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements



Signal word Warning

Hazard statement Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. Suspected of causing

cancer. May cause damage to organs through prolonged or repeated exposure.

**Precautionary statement** 

**Prevention** Obtain special instructions before use. Do not handle until all safety precautions have been read

and understood. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear eye protection/face protection. Wear protective

gloves/protective clothing/eye protection/face protection.

Response If swallowed: Call a poison center/doctor if you feel unwell. If on skin: Wash with plenty of water. 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. Rinse mouth.

If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

advice attention. Take on contaminated documing and wash before read

Storage Store locked up.

**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.

Material name: p-Terphenyl Solution

SDS US

Hazard(s) not otherwise classified (HNOC)

None known.

Supplemental information

0.8% of the mixture consists of component(s) of unknown acute oral toxicity.

## 3. Composition/information on ingredients

#### **Mixtures**

Ingestion

Chemical name	Common name and synonyms	CAS number	%
Methylene chloride	Dichloromethane	75-09-2	90 - 100
Other components below reportable levels			1 - < 3

<sup>\*</sup>Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

#### 4. First-aid measures

**Inhalation** Move to fresh air. Call a physician if symptoms develop or persist.

**Skin contact** Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get

medical advice/attention. Wash contaminated clothing before reuse.

**Eye contact** 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.

Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Dizziness. Nausea. Severe eve irritation. Symptoms may include stinging, tearing, redness.

Get medical advice/attention if you feel unwell.

under observation. Symptoms may be delayed.

Most important symptoms/effects, acute and

symptoms/effects, acute and delayed

Indication of immediate medical attention and special treatment needed

swelling, and blurred vision. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.

Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim

General information

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

Suitable extinguishing media

Unsuitable extinguishing

media

Specific hazards arising from the chemical

Special protective equipment

and precautions for firefighters

During fire, gases hazardous to health may be formed.

Move containers from fire area if you can do so without risk.

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Do not use water jet as an extinguisher, as this will spread the fire.

Fire fighting equipment/instructions

equipment/instructions

**Specific methods**Use standard firefighting procedures and consider the hazards of other involved materials.

**General fire hazards** No unusual fire or explosion hazards noted.

#### 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures 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 or vapor. 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.

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

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. Cover with plastic sheet to prevent spreading. 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. For waste disposal, see section 13 of the SDS.

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

Material name: p-Terphenyl Solution

SDS US

S-12794X5 Version #: 02 Revision date: 07-21-2015 Issue date: 07-21-2015

## 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. Provide adequate ventilation. Do not breathe mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. 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 original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

# 8. Exposure controls/personal protection

#### Occupational exposure limits

Components	Туре	Value	
Methylene chloride (CAS 75-09-2)	STEL	125 ppm	
	TWA	25 ppm	
US. ACGIH Threshold Limit Values			
Components	Туре	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	Dichlorometha ne	Urine	*

<sup>\* -</sup> For sampling details, please see the source document.

# Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) 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. Eye wash facilities and emergency shower must be available when handling this product.

## 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. Suitable gloves can be recommended by the glove

supplier.

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

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 103.55 °F (39.75 °C) estimated

range

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

15.5 % estimated

Flammability limit - upper

(%)

66.4 % estimated

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure 579.97 hPa estimated

Vapor densityNot available.Relative densityNot available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient Not available.

(n-octanol/water)

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

**Decomposition temperature** Not available. **Viscosity** Not available.

Other information

**Density** 1.32522 g/cm3 estimated

Explosive properties

Oxidizing properties

Not explosive.

Not oxidizing.

Percent volatile

Specific gravity

VOC (Weight %)

Not explosive.

1.33 estimated

99 % estimated

99 % 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 Hazardous polymerization does not occur.

reactions

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 through prolonged or repeated exposure by inhalation.

**Skin contact** Causes skin irritation.

**Eye contact** Causes serious eye irritation.

**Ingestion** Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Dizziness. Nausea. 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)

Acute Dermal

LD50 Rat > 2000 mg/kg, Days

Inhalation

LC50 Guinea pig 11600 ppm, 6 Hours

40.2 mg/l, 6 Hours

Vapor

LC50 Mouse 49000 mg/m3, 7 Hours

LC50 Mouse 14400 ppm, 7 Hours

56.23 mg/l, 7 Hours 51.5 mg/l, 2 Hours 49.1 mg/l, 6 Hours

Rat 2000 mg/l, 15 Minutes

88 mg/l, 900 Days 79 mg/l, 2 Hours 52 mg/l, 6 Hours

LD50 Mouse 16000 ppm, 7 Hours

Oral

LD50 Rat > 2000 mg/kg

Skin corrosion/irritation

Serious eye damage/eye

irritation

Causes skin 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**No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity Suspected of causing cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

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

US. National Toxicology Program (NTP) Report on Carcinogens

Methylene chloride (CAS 75-09-2)

Reasonably Anticipated to be a Human Carcinogen.

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

Methylene chloride (CAS 75-09-2)

Cancer

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

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard Not an aspiration hazard.

Chronic effects May cause damage to organs through prolonged or repeated exposure. Prolonged inhalation may

be harmful. 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.

<sup>\*</sup> Estimates for product may be based on additional component data not shown.

**Test Results** Components **Species** 

Methylene chloride (CAS 75-09-2)

**Aquatic** 

EC50 Crustacea Water flea (Daphnia magna) 1250 mg/l, 48 hours

Fish LC50 Fathead minnow (Pimephales promelas) 140.8 - 277.8 mg/l, 96 hours

No data is available on the degradability of this product. Persistence and degradability

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Methylene chloride 1.25

No data available. Mobility in soil

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of **Disposal instructions** 

contents/container in accordance with local/regional/national/international regulations.

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

Since emptied containers may retain product residue, follow label warnings even after container is Contaminated packaging

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 = 1010 LBS)

Transport hazard class(es)

6.1(PGIII) Class

Subsidiary risk Label(s) 6 1 Packing group Ш

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

**Special provisions** IB3, IP8, N36, T7, TP2

153 Packaging exceptions 203 Packaging non bulk 241 Packaging bulk

**IATA** 

**UN** number UN1593

**UN** proper shipping name

Transport hazard class(es)

Dichloromethane solution (Methylene chloride)

6.1(PGIII) Class

Subsidiary risk Ш Packing group No. **Environmental hazards ERG Code** 

Other information

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Passenger and cargo

aircraft

Allowed.

Allowed. Cargo aircraft only

**IMDG** 

**UN** number UN1593

**UN proper shipping name** DICHLOROMETHANE SOLUTION (Methylene chloride)

<sup>\*</sup> Estimates for product may be based on additional component data not shown.

Transport hazard class(es)

Class 6.1(PGIII)

Subsidiary risk - Packing group |||

**Environmental hazards** 

Marine pollutant No. nS 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

Not established.

the IBC Code

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.

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

Not regulated.

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

Methylene chloride (CAS 75-09-2) Listed.

SARA 304 Emergency release notification

Not regulated.

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

Methylene chloride (CAS 75-09-2) Cancer

Heart

Central nervous system

Liver

Skin irritation Eye irritation

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

chemical

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Methylene chloride	75-09-2	90 - 100

# 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 Not regulated.

(SDWA)

#### **US state regulations**

## US - New Jersey RTK - Substances: Listed substance

Methylene chloride (CAS 75-09-2)

# US - Pennsylvania RTK - Hazardous Substances: Special hazard

Methylene chloride (CAS 75-09-2)

## US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

# US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd.

(a))

Methylene chloride (CAS 75-09-2)

## US. Massachusetts RTK - Substance List

Methylene chloride (CAS 75-09-2)

## US. New Jersey Worker and Community Right-to-Know Act

Methylene chloride (CAS 75-09-2)

# US. Pennsylvania RTK - Hazardous Substances

Methylene chloride (CAS 75-09-2)

#### US. Pennsylvania Worker and Community Right-to-Know Law

Methylene chloride (CAS 75-09-2)

## **US. Rhode Island RTK**

Methylene chloride (CAS 75-09-2)

## **US. California Proposition 65**

WARNING: This product contains a chemical known to the State of California to cause cancer.

#### US - 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 Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

<sup>\*</sup>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

 Issue date
 07-21-2015

 Revision date
 07-21-2015

Version # 02

NFPA ratings Health: 2

Flammability: 0 Instability: 0

Disclaimer

The above information is believed to be correct on the date it was last revised and must not be considered all inclusive. The information has been obtained only by a search of available literature and is only a guide for handling the chemicals. OSHA regulations require that if other hazards become evident, an upgraded SDS must be made available to the employee within three months. RESPONSIBILITY for updates lies with the employer and not with CHEM SERVICE, Inc.

Persons not specifically and properly trained should not handle this chemical or its container. This product is furnished FOR LABORATORY USE ONLY! Our products may NOT BE USED as drugs, cosmetics, agricultural or pesticide products, food additives or as household chemicals.

This Safety Data Sheet (SDS) is intended only for use with Chem Service, Inc. products and should not be relied on for use with materials from any other supplier even if the chemical name(s) on the product are identical! Whenever using an SDS for a solution or mixture the user should refer to the SDS for every component of the solution or mixture. Chem Service warrants that this SDS is based upon the most current information available to Chem Service at the time it was last revised. THIS WARRANTY IS EXCLUSIVE, AND CHEM SERVICE, INC. MAKES NO OTHER WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. This SDS is provided gratis and CHEM SERVICE, INC. SHALL NOT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR CONTINGENT DAMAGES.

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This product is furnished FOR LABORATORY USE ONLY.

Material name: p-Terphenyl Solution

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