

# **p-Terphenyl-d14 Solution** Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 10/08/2019 Revision date: 10/08/2019 Version: 1.0

SECTION 1: Identification			
1.1. Identification			
Product form	: Mixture		
Product name	: p-Terphenyl-d14 Solution		
Product code	: AL0-101404		
1.2. Recommended use and restrictions			
No additional information available	s on use		
1.3. Supplier			
Phenova 6390 Joyce Dr. Suite 100 Golden, CO 80403 - United States T 1-866-942-2978 - F 1-866-283-0269 info@phenova.com			
1.4. Emergency telephone number			
Emergency number	: ChemTel Assistance (US/Canada) 1-800-255-39 ChemTel Assistance (International) +1 813-248-		
SECTION 2: Hazard(s) identification			
2.1. Classification of the substance or r	nixture		
GHS US classification			
Carcinogenicity Category H350 1B	May cause cancer		
Full text of H statements : see section 16			
2.2. GHS Label elements, including pre	cautionary statements		
GHS US labeling			
Hazard pictograms (GHS US)			
Signal word (GHS US)	: Danger		
Hazard statements (GHS US)	: H350 - May cause cancer		
Precautionary statements (GHS US)	<ul> <li>P201 - Obtain special instructions before use.</li> <li>P202 - Do not handle until all safety precautions</li> <li>P280 - Wear protective gloves/protective clothin</li> <li>P308+P313 - If exposed or concerned: Get med</li> <li>P405 - Store locked up.</li> <li>P501 - Dispose of contents/container to hazardo accordance with local, regional, national and/or</li> </ul>	g/eye protection/face protection. ical advice/attention. ous or special waste collection po	
2.3. Other hazards which do not result i	n classification		
No additional information available			
2.4. Unknown acute toxicity (GHS US)			
Not applicable			
SECTION 3: Composition/Informatio	on on ingredients		
3.1. Substances Not applicable			
3.2. Mixtures			
		Dreduct ider tifter	0.000
		Product identifier	Conc.
Name Methylene Chloride		(CAS-No.) 75-09-2	99.9

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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

SECTION 4: First-aid measures	
4.1. Description of first aid measures	
First-aid measures general	Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation :	Allow affected person to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact :	Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact :	Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion :	Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.
4.2. Most important symptoms and effects	(acute and delayed)
Potential Adverse human health effects and symptoms	Based on available data, the classification criteria are not met.
4.3. Immediate medical attention and spec	ial treatment, if necessary
No additional information available	
SECTION 5: Fire-fighting measures	
5.1. Suitable (and unsuitable) extinguishin	g media
Suitable extinguishing media :	Use extinguishing media appropriate for surrounding fire.
Insuitable extinguishing media :	Do not use a heavy water stream.
5.2. Specific hazards arising from the cher	nical
No additional information available	
5.3. Special protective equipment and pred	cautions for fire-fighters
	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting :	Do not enter fire area without proper protective equipment, including respiratory protection.
SECTION 6: Accidental release measu	Ires
6.1. Personal precautions, protective equi	
6.1.1. For non-emergency personnel	
	Evacuate unnecessary personnel.
6.1.2. For emergency responders	
Protective equipment :	Equip cleanup crew with proper protection.
	Ventilate area.
5.2. Environmental precautions	
Prevent entry to sewers and public waters. Notify a	uthorities if liquid enters sewers or public waters.
	Take up in absorbent material. Collect spillage.
<b>3</b> .	
3.4. Reference to other sections	
See Heading 8. Exposure controls and personal pro	
SECTION 7: Handling and storage	
.1. Precautions for safe handling	
	Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
Hygiene measures :	Gently wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.
7.2. Conditions for safe storage, including	any incompatibilities
Storage conditions :	Keep container closed when not in use. Keep container tightly closed and in a well-ventilated place. Keep away from any flames or sparking source.
	EN (English US) 2/7

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Incompatible materials

: Direct sunlight.

#### SECTION 8: Exposure controls/personal protection

8.1. Control paramete	rs		
p-Terphenyl-d14 Solution			
ACGIH	Local name	Dichloromethane	
ACGIH	ACGIH TWA (ppm)	50 ppm	
ACGIH	Remark (ACGIH)	COHb-emia; CNS impair	
ACGIH	Regulatory reference	ACGIH 2018	
OSHA	Remark (OSHA)	(2) See Table Z-2.	
OSHA	Regulatory reference (US-OSHA)	OSHA	
Methylene Chloride (75-09	9-2)		
ACGIH	Local name	Dichloromethane	
ACGIH	ACGIH TWA (ppm)	50 ppm	
ACGIH	Remark (ACGIH)	COHb-emia; CNS impair	
ACGIH	Regulatory reference	ACGIH 2018	
OSHA	Remark (OSHA)	(2) See Table Z-2.	
OSHA	Regulatory reference (US-OSHA)	OSHA	

#### 8.2. Appropriate engineering controls

Appropriate engineering controls : Either local exhaust or general room ventilation is usually required.

8.3. Individual protection measures/Personal protective equipment

#### Personal protective equipment:

Avoid all unnecessary exposure. Gloves. Protective clothing. Protective goggles. Safety glasses.

#### Hand protection:

Wear chemically resistant protective gloves. Wear suitable gloves resistant to chemical penetration

#### Eye protection:

Chemical goggles or safety glasses. Safety glasses

#### Skin and body protection:

Wear chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin contact

#### **Respiratory protection:**

Wear appropriate mask

Personal protective equipment symbol(s):



#### Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties			
9.1. Information on basic physical and chemical properties			
Physical state	: Liquid		
	: Colorless		
	: characteristic		

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Odor threshold	: No data available
рН	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Non flammable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
9.2. Other information	

#### No additional information available

SECTION 10: Stability and reactivity	
10.1. Reactivity	
No additional information available	
10.2. Chemical stability	
Not established.	
10.3. Possibility of hazardous reactions	
Not established.	
10.4. Conditions to avoid	
Direct sunlight. Extremely high or low temperatures	S.
10.5. Incompatible materials	
No additional information available	
10.6. Hazardous decomposition products	
No additional information available	
<b>SECTION 11: Toxicological informatic</b>	n
11.1. Information on toxicological effects	
Acute toxicity	Not classified
Methylene Chloride (75-09-2)	
LD50 oral rat	> 2000 mg/kg body weight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral)
LD50 dermal rat	> 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal)
Skin corrosion/irritation	Not classified
Serious eye damage/irritation	Not classified
Respiratory or skin sensitization	Not classified
Germ cell mutagenicity	Not classified
	Based on available data, the classification criteria are not met
Carcinogenicity	: May cause cancer.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Methylene Chloride (75-09-2)		
IARC group	2A - Probably carcinogenic to humans	
National Toxicology Program (NTP) Status	Reasonably anticipated to be Human Carcinogen	
Reproductive toxicity	: Not classified	
	Based on available data, the classification criteria are not met	
STOT-single exposure	: Not classified	
STOT-repeated exposure	: Not classified	
Aspiration hazard	: Not classified	
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.	

SECTION 12: Ecological information	
12.1. Toxicity	
Methylene Chloride (75-09-2)	
LC50 fish 1	193 mg/l (96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value)
EC50 Daphnia 1	168.2 mg/l (48 h, Daphnia magna)
12.2. Persistence and degradability	
p-Terphenyl-d14 Solution	
Persistence and degradability	Not established.
Methylene Chloride (75-09-2)	
Persistence and degradability	Biodegradable in the soil. Not readily biodegradable in water.
12.3. Bioaccumulative potential	
p-Terphenyl-d14 Solution	
Bioaccumulative potential	Not established.
Methylene Chloride (75-09-2)	
BCF fish 1	2 - 40 (OECD 305: Bioconcentration: Flow-Through Fish Test, 6 week(s), Cyprinus carpio, Semi-static system, Fresh water, Experimental value, GLP)
Log Pow	1.25 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
12.4. Mobility in soil	
Methylene Chloride (75-09-2)	
Surface tension	0.028 N/m (20 °C)
Ecology - soil	Low potential for adsorption in soil. May be harmful to plant growth, blooming and fruit formation.
12.5. Other adverse effects	

p-Terphenyl-d14 Solution	
Methylene Chloride (75-09-2)	

Other information

: Avoid release to the environment.

SECTION 13: Disposal consideration	IS
13.1. Disposal methods	
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials	: Avoid release to the environment.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

**SECTION 14: Transport information** 

#### Department of Transportation (DOT)

In accordance with DOT

Transport document description UN-No.(DOT) Proper Shipping Name (DOT)

Class (DOT) Packing group (DOT) Hazard labels (DOT)

: UN2810 : Toxic, liquids, organic, n.o.s.

: UN2810 Toxic, liquids, organic, n.o.s. (dichloromethane), 6.1, III

IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite

dichloromethane

: 6.1 - Class 6.1 - Poisonous materials 49 CFR 173.132

- : III Minor Danger
- : 6.1 Poison



DOT Packaging Non Bulk (49 CFR 173.xxx)

: 203 : 241

153

- DOT Packaging Bulk (49 CFR 173.xxx)
- DOT Symbols
- DOT Special Provisions (49 CFR 172.102)

(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). 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. TP28 - A portable tank having a minimum test pressure of 2.65 bar (265 kPa) may be used provided the calculated test pressure is 2.65 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP. DOT Packaging Exceptions (49 CFR 173.xxx) : 153 DOT Quantity Limitations Passenger aircraft/rail : 60 L (49 CFR 173.27) DOT Quantity Limitations Cargo aircraft only (49 : 220 L CFR 175.75) **DOT Vessel Stowage Location** : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel. DOT Vessel Stowage Other : 40 - Stow "clear of living quarters" Emergency Response Guide (ERG) Number

: No supplementary information available.

: G - Identifies PSN requiring a technical name

Other information

#### **Transportation of Dangerous Goods**

Not applicable

Transport by sea

Air transport	
Packing group (IMDG)	: III - substances presenting low danger
Class (IMDG)	: 6.1 - Toxic substances
Proper Shipping Name (IMDG)	: TOXIC LIQUID, ORGANIC, N.O.S.
Transport document description (IMDG) UN-No. (IMDG)	: UN 2810 TOXIC LIQUID, ORGANIC, N.O.S. (dichloromethane), 6.1, III : 2810

Transport document description (IATA)	: UN 2810 Toxic liquid, organic, n.o.s. (dichloromethane), 6.1, III	
UN-No. (IATA)	: 2810	
Proper Shipping Name (IATA)	: Toxic liquid, organic, n.o.s.	

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Class (IATA)	:	6.1 - Toxic Substances
Packing group (IATA)	:	III - Minor Danger

### SECTION 15: Regulatory information

15.1. US Federal regulations

Methylene Chloride (75-09-2)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313		
Listed on EPA Hazardous Air Pollutant (HAPS)		
EPA TSCA Regulatory Flag	R - R - indicates a substance that is the subject of a TSCA section 6 risk management rule.	
CERCLA RQ	1000 lb	

15.2. International regulations

#### CANADA

Methylene Chloride (75-09-2)

Listed on the Canadian DSL (Domestic Substances List)

#### **EU-Regulations**

No additional information available

#### National regulations

#### Methylene Chloride (75-09-2)

Listed on IARC (International Agency for Research on Cancer) Listed as carcinogen on NTP (National Toxicology Program) Listed on EPA Hazardous Air Pollutant (HAPS)

15.3. US State regulations

Methylene Chloride (75-09-2)					
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)	Maximum allowable dose level (MADL)
Yes	No	No	No	50 μg/day	

SE	CTION 16: Other informatio	n			
Rev	ision date	: 10/08/2019			
Data	a sources	REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.			
Othe	er information	: None.			
Full text of H-phrases:					
	H350	May cause cancer			

#### Phenova US SDS REV

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