

PHILLYCLAD SOLVENT PRT 59

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Chemical family Non-halogenated organic solvent

General information: PRT-59 is a non-halogenated organic solvent.

MANUFACTURER

ITW Philadelphia Resins
130 Commerce Dr.
Montgomeryville, PA 18936

EMERGENCY INFORMATION

Emergency telephone number
(CHEMTREC) (800) 424-9300
Other calls: (215) 855-8450

2. COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS CONSTITUENTS			Exposure limits			
Constituent	Abbr.	CAS No.	Weight percent	ACGIH TLV	OSHA PEL	Other Limits
Propylene Glycol Monomethyl Ether		107982	> 80	100 ppm	100 ppm	100 (Canada)

"TLV" means the Threshold Limit Value exposure (eight-hour, time-weighted average, unless otherwise noted) as established by the American Conference of Governmental Industrial Hygienists. "STEL" indicates a short-term exposure limit. "PEL" indicates the OSHA Permissible Exposure Limit. "n/e" indicates that no exposure limit has been established. An asterisk (*) indicates a substance whose identity is a trade secret of our supplier and unknown to us.

3. HAZARDS IDENTIFICATION**Emergency Overview**

Appearance, physical form, odor: Clear liquid with ethereal odor.

WARNING! Flammable. Eye, skin and respiratory irritant. May cause central nervous system effects.

Potential health effects:**Primary routes of exposure:**

Skin contact Skin absorption Eye contact Inhalation Ingestion

Symptoms of acute overexposure:**Skin:**

Like most solvents, this product can extract the natural fats and oils of skin tissue; prolonged contact can lead to skin irritation.

Eyes:

May cause moderate irritation (burning sensation, tearing, redness, swelling).

Inhalation:

Irritation of respiratory tract, headaches, dizziness and nausea.

Ingestion:

Gastrointestinal disturbance and effects similar to those of inhalation; liquid drawn into lungs during vomiting can cause severe damage.

Effects of chronic overexposure:

Skin contact may cause dermatitis. Chronic exposure to solvents above their TLV's may cause liver/kidney disorders. May cause nasal irritation, affect mucous tissue/ membrane dysfunction.

Medical conditions which may be aggravated by exposure:

May aggravate skin, eye and respiratory disorders.

Carcinogenicity -- OSHA regulated: No **ACGIH:** No **National Toxicology Program:** No

International Agency for Research on Cancer: No

Cancer-suspect constituent(s): None

Other effects:

Reports have associated repeated and prolonged occupational exposure to solvents with permanent brain and Central Nervous System damage.

4. FIRST AID MEASURES**First aid for eyes:**

Immediately flush with large amounts of water for at least 15 minutes while holding eyelids open. Consult a physician.

First aid for skin:

Remove contaminated clothing and wash with mild soap and plenty of water. Consult a physician if irritation persists.

First aid for inhalation:

Remove to fresh air. Restore respiration if necessary.

First aid for ingestion:

Do NOT induce vomiting. Drink plenty of milk or water to dilute. Keep head below hips to prevent aspiration into lungs. Call a doctor.

5. FIRE FIGHTING MEASURES**Extinguishing media:**

Water



Carbon dioxide



Dry chemical



Foam



Alcohol foam

Flash Point (°F): 88.0

Method: Setaflash

Explosive limits in air -- Lower: 1.6

Upper: 13.8

Special firefighting procedures:

Firefighters should wear self-contained breathing apparatus to avoid inhalation of smoke or vapors. Water may be used to cool exposed containers.

Unusual fire and explosion hazards:

Contains combustible solvent. Do not use in area where sparks or open flames are present.

Hazardous products of combustion:

May form carbon and nitrogen oxides. Other unknown toxic smoke and vapors may form.

6. ACCIDENTAL RELEASE MEASURES**Spill control:**

Avoid personal contact. Eliminate ignition sources. Ventilate area.

Containment:

Dike, contain and absorb with clay, sand or other suitable non-combustible material.

Cleanup:

For large spills, pump to storage/salvage vessels. Soak up residue with an absorbent such as clay, sand, or other suitable material and dispose of properly (RCRA hazardous waste).

Special procedures:

Prevent spill from entering drainage/sewer systems, waterways, and surface waters. Use non-sparking tools

7. HANDLING AND STORAGE**Handling precautions:**

Do not breathe vapor or mist. Do not get in eyes, on skin or clothing. Wash thoroughly after handling. Close container after each use. Ground container when pouring. Keep away from heat, flame or sparks. Use non-sparking tools.

Storage precautions:

Keep in a cool place, without direct exposure to sunlight. Keep container tightly closed and otherwise in accordance with NFPA regulations. Maintain air space in storage containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Engineering controls****Ventilation:**

Good general ventilation is usually adequate for most industrial applications. Local exhaust should be used in confined areas.

Other engineering controls:

Keep container tightly closed. Observe label precautions. Have emergency eye wash and safety shower present.

Personal protective equipment**Eye and face protection:**

Safety glasses or goggles.

Skin Protection:

Chemical resistant rubber gloves and long sleeve clothing.

Respiratory protection:

In confined areas, use NIOSH approved respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

Specific gravity:	0.919	Boiling point (°F):	248.3
Melting point (°F):	n/d	Vapor density (air = 1):	3.12
Vapor pressure (mmHg):	12	Evaporation rate (butyl acetate = 1):	<1
	at 68 °F	Solubility in water:	Appreciable
VOC (grams/liter):	919	pH (5% solution or slurry in water):	n/d
Percent volatile by volume:	100		
Percent solids by weight:	0		0

10. STABILITY AND REACTIVITY

This product is chemically stable.

Hazardous polymerization will not occur.

Conditions to avoid:

Extreme heat, sparks and open flames.

Incompatible materials:

Oxidizing agents, strong acids and bases.

Hazardous decomposition products:

May form carbon and nitrogen oxides. Other unknown toxic smoke and vapors may form.

Conditions of hazardous polymerization:

None reported

11. TOXICOLOGICAL INFORMATION**Acute oral effects:**

LD50 (rat): No data available.

No data.

Acute inhalation effects:

LC50 (rat): No data available. in 4 hours

No data.

Subchronic effects

No data.

Acute dermal effects

LD50 (rabbit): No data available.

No data.

Eye irritation:

No data.

Chronic effects

No data.

Carcinogenicity, teratogenicity, and mutagenicity:

CANCER: Did not cause cancer in laboratory animals. TERATOLOGY: Birth defects are unlikely. Exposures having no adverse effects on the mother should have no effect on the fetus. REPRODUCTIVE: In laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to parent animals. IN VITRO MUTAGENICITY: negative.

Toxicological information on hazardous chemical constituents of this product:

Constituent	Oral LD50 (rat)	Dermal LD50 (rabbit)	Inhalation LC50 (rat, 4 hours)
Propylene Glycol Monomethyl Ether	5660 mg/kg	13000 mg/kg	n/d

12. ECOLOGICAL INFORMATION**Ecotoxicity:**

Material is practically non-toxic to aquatic organisms on an acute basis (LC50 greater than 100 mg/L in most sensitive species). Acute LC50 for fathead minnow is 20,800 mg/L. Acute LC50 for water flea *Daphia magna* is 23,000 mg/L. Growth inhibition EC50 for green alga *Selenastrum capricornutum* is > 1000 mg/L. Acute LC50 for golden orfe is 4600 - 10,000 mg/L.

Mobility and persistence:

Biodegradation reached in Modified OECD Screening Test (OECD Test No. 301E) after 28 days: 96%. 20-day biochemical oxygen demand (BOD20) is 1.14 p/p. 5-day biochemical oxygen demand (BOD5) is below detection limits. Tropospheric half-life is estimated to be 3.1 - 7.8 hr. Inhibitory concentration (IC50) in OECD Activated sludge respiration inhibition test (OECD Test no. 209) is > 1000 mg/L. Theoretical oxygen demand (ThOD) is calculated to be 1.95 p/p. Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

Environmental fate:

Bioconcentration potential is low (BCF less than 100 or log Pow less than 3). Log octanol/water partition coefficient (log Pow) is estimated using structural fragment method to be -0.49. Soil organic carbon partition coefficient (log Koc) is estimated to be 0.2 - 1.0. Potential for mobility in soil is very high (Koc between 0 and 50). Henry's Law Constant (H) is estimated to be 1.40E-06 atm-m³/mole.

13. DISPOSAL CONSIDERATIONS**Waste management recommendations:**

Do not dispose of in a landfill. Incineration is the preferred method of disposal.

14. TRANSPORT INFORMATION**Proper shipping name:** Flammable liquids, n.o.s.**Technical name:** PROPYLENE GLYCOL MONOMETHYL ETHER**Hazard class:** 3**UN number:** 1993**Packing group:** III**IMDG Page no.:** N/A**Emergency Response Guide no.:** 128**Other:****15. REGULATORY INFORMATION****U.S. Federal Regulations****TSCA:**

All ingredients of this product are listed, or are exempt from listing, on the TSCA Inventory.

The following RCRA code(s) applies to this material if it becomes waste: D001**Regulatory status of hazardous chemical constituents of this product:**

Constituent	Extremely Hazardous*	Toxic Chemical**	CERCLA RQ (lbs)	TSCA 12B Export Notification
Propylene Glycol Monomethyl Ether	No	No	No	Not required

*Consult the appropriate regulations for emergency planning and release reporting requirements for substances on the SARA Section 301 Extremely Hazardous Substances list.

**Substances for which the "Toxic Chemical" column is marked "Yes" are on the SARA Section 313 list of Toxic Chemicals, for which release reporting may be required. Consult the appropriate regulations for specific requirements.

Classification of this material for SARA Section 312 hazardous materials inventory reporting:

Immediate health hazard Delayed health hazard Fire hazard

Canadian regulations**WHMIS hazard class(es):** B2; D2B

All components of this product are on the Domestic Substances List.

16. OTHER INFORMATION

Hazardous Materials Information System (HMIS) ratings:		
Health	Flammability	Reactivity
2*	3	1

Revisions for this issue:

MSDS Section	Revisions
5	Updated fire safety data
9	Updated physical properties
12	Updated ecological data
14	Updated transport data

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