

## SECTION 1: IDENTIFICATION

**Product Name:** Permacrete 10-66, Asphalt Rapid Patch 10-66RP Liquid  
**Product Number:** 10-66, 10-66RP  
**Recommended Use:** Polyester Mortar Mix. Industrial  
**CAS Number:** 100-42-5  
**Manufacturer:** Topaz Industries  
 130 Corporate Drive, Holtsville, NY 11742  
 Phone: 631-207-0700  
**Emergency number:** Chemtrec  
 800.424.9300

## SECTION 2: HAZARDS IDENTIFICATION

**Classification:** Flammable Liquids, DOT Class 3 Flammable Liquids  
**OSHA Regulatory Status:** This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute Toxicity - Oral..... Category 4  
 Acute Toxicity - Inhalation (gases) ..... Category 4  
 Acute Toxicity - Inhalation (vapors)..... Category 4  
 Acute Toxicity - Inhalation (dusts/mists) ..... Category 4  
 Skin corrosion/irritation..... Category 2  
 Serious Eye Damage/Eye Irritation ..... Category 2  
 Germ Cell Mutagenicity ..... Category 1B  
 Carcinogenicity ..... Category 1B  
 Reproductive Toxicity..... Category 2  
 Specific Target Organ Toxicity (Repeated Exposure)..... Category 1  
 Flammable Liquids..... Category 3

**Label Elements:** Combustible

**Pictograms:**



**Signal Word:** Warning

**Hazard Statements:** Harmful if swallowed. Harmful if inhaled. Vapors may be irritating to nose, throat and respiratory tract. High vapor concentrations may cause CNS depression. High vapor concentrations may cause irritation. Causes skin irritation. Liquid is slightly irritating to the skin. Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis. Liquid is minimally irritating to the eyes. Causes serious eye irritation. May cause genetic defects. May cause cancer. Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure. Flammable liquid and vapor.

**Precautionary Statements:** Unusual Fire and Explosion Hazards: Container exposed to intense heat from fires should be cooled with water to prevent vapor pressure buildup which could result in container rupture. Container areas exposed to direct flame contact should be cooled with large quantities of water as needed to prevent weakening of container structure.

**Other Hazards:** Avoid heat, flame and contact with strong oxidizing agents. Carbon monoxide and unidentified organic compounds may be formed during combustion.

**Unknown Acute Toxicity:** No additional information

**Classification System:**

**NFPA Ratings (scale 0-4)**



Health = 2  
Fire = 2  
Reactivity = 0

**HMIS Ratings (scale 0-4)**



HEALTH **2** Health = 2  
FIRE **2** Fire = 2  
REACTIVITY **0** Reactivity = 0

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

**SUBSTANCE**

NAME	PRODUCT IDENTIFIER	%	GHS-US CLASSIFICATION
Styrene Monomer	(CAS No.) 100-42-5	30.20-37.97	Combustible, Flammable Liquid

## SECTION 4: FIRST AID MEASURES

**DESCRIPTION OF FIRST AID MEASURES**

- General Advice:** Do not breathe dust/fume/gas/mist/vapor/spray. Show this SDS to the doctor in attendance.
- Eye Contact:** Flush eyes immediately with plenty of water for at least 15 minutes, while holding eyelids open. Get medical attention.
- Skin Contact:** Remove contaminated clothing and shoes. Flush skin immediately with water, follow by washing with soap and water. If irritation occurs, get medical attention. Do not reuse clothing until cleaned.
- Inhalation:** Remove victim to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing. Get medical attention.
- Ingestion:** DO NOT induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Get medical attention.
- Protection of First-aiders** Use personal protective equipment.
- Important Effects:** Burning. Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness, cessation of breathing.
- Note to Physician:** If more than 2.0 ml per kg has been ingested and vomiting has not occurred, emesis should be induced with supervision. Keep victim's head below hips to prevent aspiration. If symptoms such as loss of gag reflex, convulsions or unconsciousness occur before emesis, gastric lavage using a cuffed/endotracheal tube should be considered.

## SECTION 5: FIRE FIGHTING MEASURES

**EXTINGUISHING MEDIA**

- Suitable Extinguishing Media:** Cool containers/tanks with water spray. Small Fires: Water spray, Carbon Dioxide. Dry Powder. Large Fires: Water spray or fog.
- Unsuitable Extinguishing Media:** Do not use a solid water stream as it may scatter and spread fire.

**Special Hazards arising from the Substance or Mixture:**

COMBUSTIBLE. (DOT Class 3 (Flammable Liquids)) May be ignited by heat, sparks or flames. Self-accelerating decomposition may occur if the specific control temperature is not maintained. Vapors may accumulate in confined areas (basement, tanks, hopper tank cars, etc.) Containers exposed to intense heat from fires should be cooled with water to prevent vapor pressure buildup, which could result in container rupture. Container areas exposed to direct flame contact should be cooled with large quantities of water as needed to prevent weakening of container structure.

<b>Explosion Data:</b>	No known sensitivity to mechanical impact. Avoid static charge.
<b>Advice for Firefighters:</b>	Caution: Combustible. Do not enter confined fire space without full bunker gear: Helmet with face shield, bunker coats, gloves and rubber boots. Include a positive pressure NIOSH approved self-contained breathing apparatus. Cool fire exposed containers with water to prevent vapor pressure buildup which could result in container pressure.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

- Personal Precautions:**
- Avoid prolonged or repeated breathing of vapors. If exposure may or does exceed occupation exposure limits, use a NIOSH approved respirator to prevent overexposure. In accordance with 29CFR 1910.134 use either an atmosphere-supplying respirator or an air-purifying respirator for organic vapors.
  - Provide sufficient mechanical ventilation to maintain exposure below TLV(s)
  - Wear chemical resistant gloves. Avoid contact with skin.
  - Wear safety glasses or goggles. Avoid contact with eyes.
  - Wear chemical resistant clothing.
  - All equipment used when handling the product must be grounded.

- Emergency Procedures:**
- Eliminate potential sources of ignition. Wear appropriate respirator and other protective clothing. Shut off source of leak only if safe to do so.

### ENVIRONMENTAL PRECAUTIONS

Avoid release to the environment. Prevent entry into sewers, public waters, basements or confined areas. Do not flush into surface water or sanitary sewer system.

### METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

#### Containment Methods

- Large Spills**
- Eliminate potential sources of ignition. Wear appropriate respirator and other protective clothing. Shut off source of leak only if safe to do so. Dike and contain. Remove with vacuum trucks or pump to storage / salvage vessels. Soak up spillage with non-combustible absorbent material, such as clay, sand, earth, diatomaceous earth, vermiculite, or other suitable material. Place in non-leaking container for disposal according to local / national regulations Flush area with water to remove trace residue. Dispose of flush solution as above.
- Small Spills**
- Take up with an absorbent material and place in non-leaking containers for proper disposal.
- Clean Up Methods**
- Use non-sparking tools and equipment.

## SECTION 7: HANDLING AND STORAGE

### PRECAUTIONS FOR SAFE HANDLING

- Handling:** Store in a cool, dry area away from heat, sparks and flame. Keep container closed when not in use. Containers, even those that have been emptied, can contain explosive vapors. Do not cut, drill, grind, weld or perform similar operations on or near containers to empty them. Static electricity may accumulate and create a fire hazard ground fixed equipment. Bond and ground transfer containers and equipment.
- Other Precautions:** Wear protective equipment avoid contact with skin, eyes and clothing. Wash with soap and water before eating, drinking, smoking, applying cosmetics, or using toilet facilities. Launder contaminated clothing before reuse. Air-dry contaminated clothing in a well ventilated area before laundering.

## CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

**Storage:** Store in a cool, dry area away from heat, sparks and flame. Store contents under 100° F. Keep container closed when not in use. Store drums with bung in the upright position.

**Incompatible**

**Materials:** Strong oxidizing and reducing agents. Strong acids. Bases. Free radical initiators. Copper Incompatible products. Keep away from heat, sparks and flame.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### CONTROL PARAMETERS - Exposure Guidelines

Chemical Name	ACGIH TLVs	OSHA PELs	NOISH RELs
Styrene Monomer 100-42-5	TWA: 20 ppm STEL: 40 ppm	TWA: 100 ppm Ceiling: 200 ppm	TWA: 50 ppm TWA: 215 mg/m <sup>3</sup> STEL: 100 ppm STEL: 425 mg/m <sup>3</sup> IDLH: 700 ppm

NIOSH IDLH: Immediately dangerous to life or health

### EXPOSURE CONTROLS

**Engineering Measures:** Provide sufficient mechanical ventilation to maintain exposure below TLV(s). Apply technical measures to comply with the occupational exposure limits. Check the air in the buildings to ensure that it is not explosive. Ensure that eyewash stations and safety showers are close to the workstation location.

### Personal Protective Equipment

**Pictograms:** Safety Glasses. Protective Gloves. Protective Clothing.



**Respiratory:** Avoid prolonged or repeated breathing of vapors. If exposure may or does exceed occupation exposure limits, use a NIOSH approved respirator to prevent overexposure. In accordance with 29CFR 1910.134 use either an atmosphere-supplying respirator or an air-purifying respirator for organic vapors.

**Eye/Face:** Wear safety glasses or goggles with side shields. Eye protection such as chemical splash goggles and or face shield must be worn when possibility exists for eye contact due to splashing/spraying liquid, airborne particles or vapors.

**Skin/Body:** Wear suitable protective clothing. When skin contact is possible, chemical resistant clothing including gloves, apron, sleeves, boots, head and face protection should be worn.

### General Industrial Hygiene Considerations:

Wash with soap and water before eating, drinking, smoking, applying cosmetics, or using toilet facilities. Launder contaminated clothing before reuse. Air-dry contaminated clothing in a well ventilated area before laundering. Provide regular cleaning of equipment and work area.

### Environmental Exposure Controls:

Under EPA-RCRA (40 CFR 261.21) if this product becomes a waste material it would be an ignitable hazardous waste (D001) Refer to latest EPA or state regulations regarding proper disposal.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State</b>	Liquid
<b>Color/Appearance</b>	Clear or Colored
<b>Odor</b>	Styrene
<b>Odor Threshold</b>	N/A
<b>pH</b>	N/A
<b>Melting Point</b>	N/A
<b>Freezing Point</b>	N/A
<b>Boiling Point</b>	N/A
<b>Flash Point</b>	31° C / 88° F
<b>Evaporation Rate</b>	N/A
<b>Flammability</b>	Combustible
<b>Vapor Pressure</b>	N/A
<b>Specific Gravity</b>	N/A
<b>Water Solubility</b>	Insoluble
<b>Solubility in other solvents</b>	N/A
<b>Partition coefficient</b>	N/A
<b>Auto-Ignition Temperature</b>	N/A
<b>Decomposition Temperature</b>	N/A
<b>Viscosity, Kinematic</b>	N/A
<b>Viscosity, Dynamic</b>	N/A
<b>Explosive Properties</b>	N/A
<b>Oxidizing Properties</b>	N/A
<b>VOC Content</b>	N/A
<b>Density Value</b>	N/A
<b>Bulk Density Value</b>	N/A
<b>HAPS Data</b>	N/A
<b>Monomer</b>	42.8227

## SECTION 10: STABILITY AND REACTIVITY

<b>Reactivity:</b>	No data available Stable under normal conditions
<b>Chemical Stability:</b>	This product is normally supplied in a stabilized form. If the permissible storage period and/or storage temperature is noticeably exceeded, the product may polymerize with heat evolution.
<b>Possibility of Hazardous Reactions:</b>	
<b>Hazardous Polymerization</b>	Hazardous polymerization may occur.
<b>Conditions to Avoid:</b>	Heat (temperatures above flash point) sparks, ignition points, flames, static electricity. Avoid improper addition or promoter and/or catalyst. Avoid direct contact to MEKP catalyst with accelerator. If adding accelerator like cobalt drier, mix accelerator with base material before adding catalyst.
<b>Incompatible Materials:</b>	Strong oxidizing agent.
<b>Hazardous Decomposition Products:</b>	Carbon Monoxide and unidentified organic compounds may be formed during combustion. None under normal use, may emit toxic fumes under fire conditions.

## SECTION 11: TOXICOLOGICAL INFORMATION

### INFORMATION ON LIKELY ROUTES OF EXPOSURE

**Product Information:** The product itself as not been tested.

**Inhalation:** May cause irritation of respiratory tract. Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effect, such as mucous membrane and respirator system irritation and adverse effect on kidney, liver and central nervous system.

**Eye Contact:** May cause redness, itching and pain.

**Skin Contact:** Prolonged skin contact may defat the skin and produce dermatitis.

**Ingestion:** May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Styrene Monomer 100-42-5	= 1000 mg/kg (Rat)	-	= 11.8 mg/L (Rat) 4 h

### INFORMATION ON TOXICOLOGICAL EFFECTS

**Symptoms:** Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness, cessation of breathing. Irritating to skin.

### DELAYED AND IMMEDIATE EFFECTS AS WELL AS CHRONIC EFFECTS FROM SHORT AND LONG TERM EXPOSURE.

**Serious eye damage/irritation:** Irritating to eyes.

**Sensitization:** My cause sensitization by inhalation and skin contact.

**Mutagenic Effects:** None known.

**Carcinogenicity:** The table below indicates whether each agency has listed any ingredient as a carcinogen

Chemical Name	ACGIH	IARC	NTP	OSHA
Styrene Monomer 100-42-5	A3	Group 2B	Reasonably Anticipated	X

**ACGIH** - A3 (Animal Carcinogen)

**IARC** - Group 2B (Possibly Carcinogenic to Humans, not classified as a human carcinogen)

**NTP** - Reasonable Anticipated (Reasonable anticipated to be a human carcinogen)

**OSHA** - X (Present)

**Reproductive Toxicity:** This product does not contain any known or suspected reproductive hazards.

**Developmental Toxicity:** None known.

**Teratogenicity:** None known.

**Specific target organ systemic toxicity (single exposure)** No known effects under normal use conditions.

**Specific target organ systemic toxicity (repeated exposure)** May cause disorder and damage to the skin, eyes, ears, respiratory system, central nervous system, liver, lungs.

**Chronic toxicity** Possible cancer hazard. May cause cancer based on animal data.

**Target Organ Effects** Central nervous system, reproductive system, respiratory system, eyes, liver, skin.

**Aspiration Hazard** Aspiration hazard

### NUMERICAL MEASURES OF TOXICITY - PRODUCT INFORMATION

The following values are calculated based on Chapter 3.1 or the GHS Document

<b>ATEmix (oral)</b>	1015 mg/kg
<b>ATEmix (inhalation-gas)</b>	4569 mg/L
<b>ATEmix (inhalation-dust/mist)</b>	1.5 mg/L
<b>ATEmix (inhalation-vapor)</b>	12 mg/L

## SECTION 12: ECOLOGICAL INFORMATION

### ECO-TOXICITY

0% of the mixture consists of component(s) or unknown hazards to the aquatic environment.

Chemical Name	Toxicity to algae	Toxicity fo Fish	Toxicity to microorganisms	Toxicity fo daphnia & other aquatic invertebrates
Styrene Monomer 100-42-5	0.15-3.2: 96h Pseudokirchneriella subcapitata mg/L EC50 static 0.46-4.3: 72h Pseudokirchneriella subcapitata mg/L EC50 static 0.72: 96h Pseudokirchneriella subcapitata mg/L EC50 1.4: 72h Pseudokirchneriella subcapitata mg/L EC50	58.75-95.32: 96h poecilia reticulata mg/L LC50 static 6.75-14.5: 96h Pimephales promelas mg/L LC50 static 19.03-33.53: 96h Lepomis macrochirus mg/L LC50 static 3.24-4.99: 96h Pimephales promelas mg/L LC50 flow-through		3.3-7.4: 48h daphnia magna mg/L EC50

### PERSISTENCE AND DEGRADABILITY

No information available

### BIOACCUMULATION

No information available

Chemical Name	Log Pow
Styrene Monomer 100-42-5	2.95

## SECTION 13: DISPOSAL CONSIDERATIONS

### WASTE TREATMENT METHODS:

<b>Waste Disposal Methods</b>	It must undergo special treatment, eg: at suitable disposal site, to comply with local regulations.
<b>Contaminated Packaging</b>	Do not re-use empty containers.
<b>US EPA Waste Number</b>	D001

## SECTION 14: TRANSPORTATION INFORMATION

### DOT

<b>UN-No</b>	UN1866
<b>Proper shipping name</b>	Resin Solution
<b>Hazard Class</b>	3
<b>Packing Group</b>	III
<b>Special Provisions</b>	B1, B52, IB3, T2, TP1
<b>Description</b>	UN1866, Resin Solution, 3, III
<b>ERG Number</b>	127

### TDG

<b>UN-No</b>	UN1866
<b>Proper shipping name</b>	Resin Solution
<b>Hazard Class</b>	3
<b>Packing Group</b>	III
<b>Description</b>	UN1866, Resin Solution, 3, III

**MEX**

UN-No UN1866  
Proper shipping name Resin Solution  
Hazard Class 3  
Special Provisions 223  
Packing Group III  
Description UN1866, Resin Solution, 3, III

**ICSO**

UN-No UN1866  
Proper shipping name Resin Solution  
Hazard Class 3  
Packing Group III  
Special Provisions A3  
Description UN1866, Resin Solution, 3, III

**ICSO/IATA**

UN-No UN1866  
Proper shipping name Resin Solution  
Hazard Class 3  
Packing Group III  
Special Provisions A3  
Description UN1866, Resin Solution, 3, III

**IMDG/IMO**

UN-No UN1866  
Proper shipping name Resin Solution  
Hazard Class 3  
Packing Group III  
EMS NO. F-E, S-E  
Special Provisions 223, 955  
Description UN1866, Resin Solution, 3, III

**RID**

UN-No UN1866  
Proper shipping name Resin Solution  
Hazard Class 3  
Packing Group III  
Classification Code F1  
Description UN1866, Resin Solution, 3, III

**ADR/RID**

UN-No UN1866  
Proper shipping name Resin Solution  
Hazard Class 3  
Packing Group III  
Classification Code F1  
Tunnel Restriction Code (D/E)  
Special Provisions 640E  
Description UN1866, Resin Solution, 3, III  
ADR/RID-Labels 3

**ADN**

Proper shipping name Resin Solution  
Hazard Class 3  
Packing Group III  
Classification Code F1  
Special Provisions 640E  
Description UN1866, Resin Solution, 3, III  
Hazard Labels 3  
Limited Quantity 5L  
Ventilation VE01



## SECTION 15: REGULATORY INFORMATION

### INTERNATIONAL INVENTORIES

<b>TSCA</b>	All components are listed or exempted
<b>DSL/NDSL</b>	Not Determined
<b>EINECS/ELINCS</b>	Not Determined
<b>ENCS</b>	Not Determined
<b>IECSC</b>	Not Determined
<b>KECL</b>	Not Determined
<b>PICCS</b>	Not Determined
<b>AICS</b>	Not Determined

<b>TSCA</b>	United States Toxic Substances Control Act Section 8(b) Inventory
<b>DSL/NDSL</b>	Canadian Domestic Substances List/Non-Domestic Substances List
<b>EINECS/ELINCS</b>	European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
<b>ENCS</b>	Japan Existing and New Chemical Substances
<b>IECSC</b>	China Inventory of Existing Chemical Substances
<b>KECL</b>	Korean Existing and Evaluated Chemical Substances
<b>PICCS</b>	Phillippines Inventory of Chemicals and Chemical Substances
<b>AICS</b>	Australian Inventory of Chemical Substances

### U.S. FEDERAL REGULATIONS

**SARA 313** Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical Name	CAS #	Weight %	SARA 313 - Threshold Values %
Styrene Monomer (100-42-5)	100-42-5	30.20-37.97	0.1

**CLEAN WATER ACT** This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical Name	CWA Reportable Qtys	CWA Toxic Pollutants	CWA Priority Pollutants	CWA Hazardous Substances
Styrene Monomer 100-42-5	1000 lb.	-	-	X

**CERCLA** This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CECLA) (40 CFR 302).

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQs
Styrene Monomer 100-42-5	1000 lb.	-	RQ 1000 lb. final RQ RQ 454 kg final RQ

### U.S. STATE REGULATIONS

**CALIFORNIA PROPOSITION 65:** This product does not contain any Proposition 65 chemicals.

### U.S. STATE RIGHT TO KNOW REGULATIONS

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Styrene Monomer 100-42-5	Present	Present	Environmental Hazard

**CANADA:** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**WHMIS HAZARD CLASS:** B2 Flammable Liquid  
D2A Very Toxic Materials

**SECTION 16: OTHER INFORMATION**

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 constitute a guarantee for any specific property of this product. No warranty is expressed or implied regarding the accuracy of this data or the result obtained from the use thereof. Our company assumes no responsibility for personal injury or property damage to the vendee, users or third parties caused by the material. Such vendees or users assume all risks associated with the use of this material.