

# Material Safety Data Sheet

**TPO PRIMER**

**MSDS No. 310471**

Date of Preparation: 03/21/11

Revision: 004

## Section 1 - Chemical Product and Company Identification

**Product/Chemical Name:** TPO Primer

**Chemical Formula:** Mixture

**General Use:** Primer

**Manufacturer:** Carlisle SynTec, 1285 Ritner Highway, Carlisle, PA 17013, Phone: 800-479-6832

**Emergency Phone Number:** CHEMTREC (USA) 800-424-9300

## Section 2 - Hazards Identification

### ☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Danger – Highly Flammable Liquid and Vapor

Warning – Causes skin irritation

Warning – Causes serious eye irritation

Warning – May be harmful if swallowed and enters airways

Warning – Suspected of damaging fertility or the unborn child

Warning – May cause an allergic skin reaction

Warning – Suspected of causing genetic defects

Warning – May cause damage to organs (liver, kidney, ear) through prolonged or repeated exposure

Warning – May cause drowsiness and dizziness

### Potential Health Effects

**Primary Entry Routes:** Skin contact, skin absorption, eye contact, inhalation, ingestion.

**Target Organs:**

**Acute Effects**

**Inhalation:** Throat irritation on short-term exposure to liquid or vapor. Aspiration into lungs can cause chemical pneumonitis which can be fatal.

**Eye:** Can cause severe irritation, redness, tearing, blurred vision.

**Skin:** Can cause redness, irritation, dermatitis.

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

**Carcinogenicity:** IARC, NTP, and OSHA do not list this product as a carcinogen.

**Medical Conditions Aggravated by Long-Term Exposure:** Pre-existing eye, skin, and pulmonary disorders may be aggravated by exposure to this material.

**Chronic Effects:** Overexposure may result in headache, dizziness, fatigue, nausea, possible unconsciousness, even asphyxiation. Moderate irritation of skin, eyes, and mucous membranes of upper respiratory tract on prolonged/repeated contact. Dermatitis and defatting of the skin. Chronic exposure may cause reversible liver and kidney injury.

Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Repeated exposure to Toluene has been associated with high frequency hearing loss based on animal tests.

**HMIS**

**H** 1

**F** 3

**R** 0

**PPE**†

†Sec. 8

## Section 3 – Ingredient Information

Hazardous Ingredients	CAS Number	% wt
Light Aliphatic Solvent Naphtha	64742-89-8	30-60
Toluene	108-88-3	15-40
Additional Ingredients	CAS Number	% wt

## Section 4 - First Aid Measures

**Inhalation:** Remove victim to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing. Get medical attention immediately.

**Eye Contact:** Immediately flush eyes with running water for at least 15 minutes. Get medical attention.

**Skin Contact:** Immediately flush skin with running water and remove contaminated clothing. Wash exposed area with soap and water. Get medical attention.

**Ingestion:** Do not induce vomiting. Get medical attention immediately.

**Note to Physicians:** This product contains toluene and naphtha.

**Special Precautions/Procedures:** Whenever possible, remove the worker from the source of contamination.

## Section 5 - Fire-Fighting Measures

**Flash Point:** 18°F (-8 °C)

**Flash Point Method:** Based on Flash Point of the most volatile component.

**Autoignition Temperature:** 433.4°F (223 °C)

**LEL:** 1.2% v/v

**UEL:** N.A.

**Flammability Classification:**

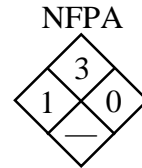
**Extinguishing Media:** Foam, dry chemical or carbon dioxide. Water may be ineffective but water should be used to keep fire exposed containers cool.

**Unusual Fire or Explosion Hazards:** Extremely flammable. Store and use away from all sources of heat, flame, or sparks. Do not smoke while applying. Vapors are heavier than air and may travel along ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electrical motors, static discharge, or other ignition sources at locations distant from material handling point and flash back. All containers should be grounded when material is transferred. Residue in "empty" containers may be explosive if exposed to an ignition source.

**Hazardous Combustion Products:** Toxic gases or vapors, such as carbon monoxide, carbon dioxide, or oxides of nitrogen may be released in a fire.

**Fire-Fighting Instructions:** This product contains solvents that are dangerous fire and explosion hazards when exposed to heat or flame. Fire fighters should wear self-contained breathing apparatus and full protective clothing with full-face pieces operated in the positive pressure demand mode.

**Fire-Fighting Equipment:** Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode.



## Section 6 - Accidental Release Measures

**Spill /Leak Procedures:** Remove all sources of ignition. Avoid breathing vapors. Use self-contained breathing apparatus in enclosed area. Ventilate area. Restrict access by unauthorized personnel. Contain and remove with inert absorbent materials and non-sparking tools.

**Large Spills**

**Containment:** For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways.

**Cleanup:** Clean-up spill as soon as possible. Collect any excess material with absorbent pads, sand, or other inert, non-combustible, absorbent materials. Place into appropriate waste containers for later disposal. Waste is considered hazardous due to its ignitability. Comply with all laws and regulations.

**Regulatory Requirements:** Follow applicable OSHA regulations (29 CFR 1910.120).

## Section 7 - Handling and Storage

**Handling Precautions:** Use away from all sources of heat, flame, or sparks. Do not smoke while using. Handling equipment must be grounded to prevent sparking. Handle with non-sparking tools. Wash with soap and water before eating or drinking. Launder contaminated clothing. Do not reuse containers unless properly reconditioned. KEEP OUT OF REACH OF CHILDREN.

**Storage Requirements:** Keep containers cool, dry, and store away from all sources of heat, flame, and sparks. Keep containers tightly closed and store with adequate ventilation. Do not pressurize, cut, weld, or grind the containers or empty containers which may contain residual product and solvent vapors that may ignite explosively.

## Section 8 - Exposure Controls / Personal Protection

**Hazardous Ingredients:**

Ingredient	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH IDLH
	TWA	STEL	TWA	STEL	TWA	STEL	
Light Aliphatic Solvent Naphtha	300 ppm	400 ppm	300 ppm	None estab.	350 ppm	None estab.	None estab.
Toluene	200 ppm	150 ppm	20 ppm	None estab.	100 ppm	150 ppm	500 ppm

**Engineering Controls:** Do not use in enclosed areas without proper explosion-proof ventilation. General and local exhaust ventilation must be sufficient to control vapor concentrations and keep the PEL below 100 ppm.

**Ventilation:** Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs. Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

**Respiratory Protection:** A NIOSH approved respirator must be used if vapor concentration is 100 ppm or above.

**Protective Clothing/Equipment:** Permeation resistant gloves (that meet ANSI/ISEA 105-2005) recommended. Glasses with side shields or goggles are recommended. Wear industrial shoes to protect feet from adhesive contact. Wear long sleeves, long trousers to protect skin from adhesive contact.

**Safety Stations:** Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

**Contaminated Equipment:** Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

**Comments:** Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

## Section 9 - Physical and Chemical Properties

**Physical State:** Liquid

**Appearance and Odor:** Clear liquid with characteristic solvent odor.

**Odor Threshold(ppm):** Not available.

**Vapor Pressure:** 38 mm Hg at 68 °F (20 °C)

**Vapor Density (Air=1):** 3.6

**Density:** 7.40 lbs./gal. (calculated)

**Specific Gravity (H<sub>2</sub>O=1, at 4°C/39°F):** 0.75 – 0.81

**pH:** N/A

**Water Solubility:** Insoluble

**Boiling Point (°F):** 185 (85°C)

**Freezing/Melting Point(°C):** N/A

**% Volatile:** 85

**Evaporation Rate ( Ethyl Ether = 1 ) :** 3.5

**VOC:** 645 gms./l.

**Flash Point:** 18°F (-8 °C)

**Flash Point Method:** Based on Flash Point of the most volatile component.

**Autoignition Temperature:** 433.4°F (223 °C)

**LEL:** 1.2% v/v

**UEL:** N.A.

## Section 10 - Stability and Reactivity

**Stability:** Stable.

**Possibility of Hazardous Reactions:** Will not occur.

**Chemical Incompatibilities:** Strong oxidizing agents, acids, bases.

**Conditions to Avoid:** Heat, sparks, and flames; ignition sources.

**Hazardous Decomposition Products:** Toxic gases or vapors such as carbon monoxide, aldehydes and other decomposition products may be released in a fire.

## Section 11- Toxicological Information

**Eye Effects:** Irritation at or above PEL of 100 ppm.

**Skin Effects:** Irritation at or above PEL of 100 ppm.

### Toxicity Data:

**Acute Inhalation Effects:** Product toxicity has not been determined.

The following is component data:

Toluene – Rat, Inhalation, LC<sub>Lo</sub>: 4000ppm/4 hrs

**Acute Oral Effects:** Product toxicity has not been determined.

The following is component data:

Toluene - Rat, oral, LD<sub>50</sub>:5000mg/kg

**Carcinogenicity:** Not listed in IARC or NTP.

**Mutagenicity:** Some evidence in animal exposure to Toluene.

**Teratogenicity:** Some evidence in animal exposure to Toluene.

## Section 12 - Ecological Information

This product has not been tested. No data available.

## Section 13 - Disposal Considerations

**Disposal:** Dispose of in accordance with all local, state, and federal regulations.

## Section 14 - Transport Information

### DOT Transportation Data (49 CFR 172.101):

**Shipping Name:** Adhesives

**Shipping Symbols:**

**Hazard Class:** 3

**ID No.:** UN1133

**Packing Group:** II

**Label:** Red caution label required

**Special Provisions (172.102):**

149, B52, IB2, T4, TP1, TP8

**Packaging Authorizations**

a) **Exceptions:** 173.150

b) **Non-bulk Packaging:** 173.173

c) **Bulk Packaging:** 173.242

**Quantity Limitations**

a) **Passenger, Aircraft, or Railcar:** 5 L

b) **Cargo Aircraft Only:** 60 L

**Vessel Stowage Requirements**

a) **Vessel Stowage:** B

b) **Other:** N/A

## Section 15 - Regulatory Information

### EPA Regulations:

TSCA Inventory: All components are included in the EPA Toxic Substance Control Act (TSCA) Chemical Substance Inventory.

RCRA Hazardous Waste Number (40 CFR 261.33): Toluene U220

RCRA Hazardous Waste Classification (40 CFR 261.31): Classified Hazardous Waste

CERCLA Hazardous Substance (40 CFR 302.4) listed/unlisted specific per RCRA, Sec. 3001; CWA, Sec. 311 (b)(4); CWA, Sec. 307(a), CAA, Sec. 112

CERCLA Reportable Quantity (RQ), Toluene 1,000 lb (454.5 kg)

SARA 311/312 Codes: Fire, Acute (Immediate) Health Hazard, Chronic (Delayed) Health Hazard.

SARA Toxic Chemical (40 CFR 372.65): Toluene, CAS# 108-88-3, 20 –15-40%

SARA EHS (Extremely Hazardous Substance) (40 CFR 355): Not listed

### OSHA Regulations:

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): Not listed

Clean Air Act Data: Toluene HAP Code: XOY

Clean Water Act: Toluene is listed as a priority pollutant. RQ: 1,000 lbs. (454.5 kg)

### State Regulations:

California Proposition 65: This product contains the following chemical(s) known to the state of California to cause birth defects or other reproductive harm: Toluene.

Delaware Air Quality Management List: Toluene DRQ: 1,000 State: Y

Massachusetts Hazardous Substance Codes: Toluene 108-88-3 2,4,5,6,F7,F8,F9

Michigan Critical Materials Register: Toluene 108-88-3 Report: -- Class: --

Minnesota Hazardous Substance: Toluene Codes: ANO Hazards: skin Carcinogen: No

New Jersey RTK Hazardous Substance: Toluene Dot#: 1294 Substance#: 1866 TPQ: -- EHS: No

New York List of Hazardous Substances: Toluene RQ Air: 1,000 RQ Land: 1 Acutely Hazardous: No

Pennsylvania Hazardous Substance Code: Methyl Benzene (Toluene) 108-88-3 Code: E

Washington Permissible Exposure Limits for Air Contaminants: Toluene, 108-88-3, TWA 100 ppm, TWA 375 mg  
STEL 150 ppm, STEL 560 mg

**Canadian WHMIS Classification:** Class: B  
Division 2

### Section 16 - Other Information

**Prepared By:** Research & Development

**Revision Notes:** General Revision.

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