



# Carlisle Roof Foam and Coatings Safety Data Sheet

## 1. Identification of Substance:

Product Name: Prime-Tek Tie In Primer

### Supplier Identification:

Carlisle Roof Foam and Coatings

### Telephone:

(770) 607-0755

### Address:

100 Enterprise Dr.  
Cartersville, GA 30120

### 24-Hr. Emergency Phone Number:

CHEMTREC (800) 424-9300  
INTERNATIONAL: +1-(703) 527-3887

Product Use: Single component polyurethane primer

## 2. Hazards Identification:

### GHS Ratings:

Flammable liquid	3	Flash point $\geq 23^{\circ}\text{C}$ and $\leq 60^{\circ}\text{C}$ (140°F)
Inhalation Toxicity	Acute Tox. 4	Gases $>2500$ + $\leq 5000$ ppm, Vapors $>10$ + $\leq 20$ mg/l, Dusts & mists $>1$ + $\leq 5$ mg/l
Skin corrosive	2	Reversible adverse effects in dermal tissue, Draize score: $\geq 2.3 < 4.0$ or persistent inflammation
Eye corrosive	2A	Eye irritant: Subcategory 2A, Reversible in 21 days
Respiratory sensitizer	1	Respiratory sensitizer
Skin sensitizer	1	Skin sensitizer
Carcinogen	2	Limited evidence of human or animal carcinogenicity
Reproductive toxin	1B	Presumed, Based on experimental animals
Organ toxin single exposure	3	Transient target organ effects- Narcotic effects- Respiratory tract irritation
Organ toxin repeated exposure	2	Presumed to be harmful to human health- Animal studies with significant toxic effects relevant to humans at generally moderate exposure (guidance)- Human evidence in exceptional cases
Aspiration hazard	1	Aspiration Toxicity Category 1: Known (regarded)- human evidence - hydrocarbons with kinematic viscosity $\geq 20.5$ mm <sup>2</sup> /s at 40° C.

### GHS Hazards

H226	Flammable liquid and vapor
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H332	Harmful if inhaled
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H351	Suspected of causing cancer

H360 May damage fertility or the unborn child  
H373 May cause damage to organs through prolonged or repeated exposure

### **GHS Precautions**

P201 Obtain special instructions before use  
P202 Do not handle until all safety precautions have been read and understood  
P210 Keep away from heat/sparks/open flames/hot surfaces – No smoking  
P233 Keep container tightly closed  
P240 Ground/bond container and receiving equipment  
P241 Use explosion-proof equipment when handling  
P242 Use only non-sparking tools  
P243 Take precautionary measures against static discharge  
P260 Do not breathe dust/fume/gas/mist/vapors/spray  
P261 Avoid breathing dust/fume/gas/mist/vapors/spray  
P264 Wash hands thoroughly after handling  
P271 Use only outdoors or in a well-ventilated area  
P272 Contaminated work clothing should not be allowed out of the workplace  
P280 Wear protective gloves/protective clothing/eye protection/face protection  
P281 Use personal protective equipment as required  
P285 In case of inadequate ventilation wear respiratory protection  
P312 Call a POISON CENTER or doctor/physician if you feel unwell  
P314 Get Medical advice/attention if you feel unwell  
P321 Specific treatment is urgent (see Section 4 First Aid measures)  
P331 Do NOT induce vomiting  
P362 Take off contaminated clothing and wash before reuse  
P363 Wash contaminated clothing before reuse  
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
P302+P352 IF ON SKIN: Wash with soap and water  
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
P304+P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing  
P305+P351+P338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing  
P308+P313 IF exposed or concerned: Get medical advice/attention  
P332+P313 If skin irritation occurs: Get medical advice/attention  
P333+P313 If skin irritation or a rash occurs: Get medical advice/attention  
P337+P313 Get medical advice/attention  
P342+P311 Call a POISON CENTER or doctor/physician  
P370+P378 In case of fire: See Section 5 for extinguishing measures  
P405 Store locked up  
P403+P233 Store in a well ventilated place. Keep container tightly closed  
P403+P235 Store in a well ventilated place. Keep cool  
P501 Dispose of contents/container in accordance with existing federal, state, and local environmental control laws.

**Signal Word: Danger**



### **Acute Toxicity:**

**Eyes:** Severe irritation, tearing, swelling, and possible damage to cornea.

**Skin:** Irritation, redness, swelling, skin sensitization, rash, scaling, and blistering.

**Inhalation:** Mucous membrane and respiratory tract irritation, tightness of chest, isocyanate sensitization, and asthma like symptoms

**Ingestion:** Gastrointestinal irritation, nausea, diarrhea, central nervous system depression.

**Conditions Aggravated by Exposure:** Asthma, respiratory disorders, skin disorders, and eye disorders.

**Chronic Effects:** Reports have associated repeated and prolonged occupational exposure to solvents with permanent brain and nervous system damage. Isocyanates may cause skin and respiratory sensitization in some individuals.

Isocyanates may cause skin and respiratory sensitivity in some individuals. Sensitized individuals may react to very low levels diisocyanates below the PEL. Sensitized people who continue to work with diisocyanates may develop symptoms sooner after each exposure. Limited evidence of possible carcinogenic effects. Possible other harmful target organ effects.

### **3. Composition/Data on Components:**

<b>Chemical Name</b>	<b>CAS number</b>	<b>Weight Concentration %</b>
Xylenes (o-, m-, p- isomers)	1330-20-7	40.00% - 50.00%
Castor oil, polymer with 1,1'-methylenebis[4-isocyanatobenzene]	68424-09-9	10.00% - 20.00%
Ethylbenzene	100-41-4	5.00% - 10.00%
Isocyanic acid, polymethylenepolyphenylene ester	9016-87-9	1.00% - 5.00%
4,4'-Methylenediphenyl diisocyanate	101-68-8	1.00% - 5.00%
Carbon black	1333-86-4	0.10% - 1.00%

### **4. First Aid Measures:**

**After Inhalation:** If person experiences nausea, headache, or dizziness, person should stop work immediately and move to fresh air until symptoms disappear.

If breathing is difficult, administer oxygen and call physician.

If person is unconscious move to fresh air and call physician immediately.

If breathing has stopped, administer artificial respiration and call physician immediately.

**After Eye Contact:** Severe eye irritant that could cause permanent damage.

Rinse opened eye for at least 15 minutes under running water.

Remove contact lenses if present and easy to do so, and continue rinsing.

Call a physician at once.

**After Skin Contact:** Moderately toxic via skin absorption. Clean affected area with soap and plenty of water.

Call a physician at once.

**After Swallowing:** Contact the nearest poison control center and follow the directions they provide.

**Notes to Physician:** Treat symptomatically. May cause cardiac arrhythmias. Aspiration hazard.

## **5. Fire Fighting Measures:**

Flash Point: 27 C (81 F)

LEL: 1.00

UEL: 7.00

**Upper and lower explosive limits listed if known.**

**Suitable Extinguishing Agents:** Water spray, CO2, Foam, Dry chemical

**Information about Protection against Explosions and Fires:** Closed containers may rupture when exposed to extreme heat.

**Dangerous Products of Decomposition:** Oxides of carbon, oxides of nitrogen, hydrocarbons, isocyanates, traces of HCN

**Protective Equipment:** Firefighters should wear a pressure demand self-contained breathing apparatus and protective clothing.

## **6. Accidental Release Measures:**

**Person-Related Safety Precautions:** Evacuate all non-essential personnel. Remove all sources of ignition. Avoid contact with skin. Do not breathe aerosols or vapors.

**Measures for Environmental Protection:** Cover and contain spill with absorbent material. Place waste in open container. Remove to well ventilated area and dilute with ammonia solution (water 90%, concentrated ammonia 8%, detergent 2%). Collect for proper disposal according to local, state, and federal regulations.

**Small Spills:** Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece) clean surface thoroughly to remove residual contamination.

**Large Spills:** Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

## **7. Handling and Storage:**

**Information for Safe Handling:** Keep containers tightly closed. Use grounded or spark resistant tools and equipment. Do not breathe fumes, vapors or mists. Use only with adequate ventilation. Avoid contact with skin or eyes. Immediately report spills or leaks.

**Information about Protection against Explosions and Fires:** Closed containers may explode when exposed to extreme heat. Avoid electrical (static) discharge. Do not store above 100°F.

**Regulatory Requirements:** Store according to all local, state, and federal regulations.

## **8. Exposure Controls and Personal Protection:**

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Xylenes (o-, m-, p- isomers) 1330-20-7	100 ppm TWA; 435 mg/m3 TWA	150 ppm STEL 100 ppm TWA	Not Established

Castor oil, polymer with 1,1'-methylenebis[4-isocyanatobenzene] 68424-09-9	Not Established	Not Established	Not Established
Ethylbenzene 100-41-4	100 ppm TWA; 435 mg/m3 TWA	20 ppm TWA	NIOSH: 100 ppm TWA; 435 mg/m3 TWA 125 ppm STEL; 545 mg/m3 STEL
Isocyanic acid, polymethylenepolyphenylene ester 9016-87-9	Not Established	Not Established	Not Established
4,4'-Methylenediphenyl diisocyanate 101-68-8	0.005 ppm TWA 0.02 ppm STEL	0.005 ppm TWA (listed under Methylene bisphenyl isocyanate (MDI))	NIOSH: 0.005 ppm TWA (listed under Methylene bisphenyl isocyanate); 0.05 mg/m3 TWA 0.020 ppm Ceiling (10 min); 0.2 mg/m3 Ceiling (10 min)
Carbon black 1333-86-4	3.5 mg/m3 TWA	3 mg/m3 TWA (inhalable fraction)	NIOSH: 3.5 mg/m3 TWA; 0.1 mg/m3 TWA (Carbon black in presence of Polycyclic aromatic hydrocarbons, as PAH)

**Engineering Controls:** Use local exhaust ventilation to maintain airborne concentrations below the TLV, especially if heating or spraying. Use only in a well ventilated area to keep vapors below exposure limits. Use local exhaust ventilation if necessary.

**General Protective and Hygienic Measures:** Usual precautionary measures should be adhered to when handling chemicals.

**Personal Protective Equipment:**

**Respiratory Protection:** Do not inhale vapors. Use NIOSH approved respiratory protection if TLV/PEL is exceeded. Do not enter storage area unless adequately ventilated.

**Hand Protection:** Protective chemical resistant gloves.

**Eye Protection:** Face shield with safety glasses.

**Body Protection:** Protective non-flammable cotton work clothing. Launder separately.

**Contaminated Gear:** Observe local requirements. Dispose of in accordance with local/state/federal regulations.

**9. Physical and Chemical Properties:**

**Physical properties listed where known.**

<p><b>Appearance:</b> Various colored liquid</p> <p><b>Vapor Pressure:</b> N/A</p> <p><b>Vapor Density:</b> N/A</p> <p><b>Specific Gravity:</b> 1.00</p> <p><b>Freezing point:</b> N/A</p>	<p><b>Odor:</b> Aromatic solvent odor</p> <p><b>Odor threshold:</b> N/A</p> <p><b>pH:</b> N/A</p> <p><b>Melting point:</b> N/A</p> <p><b>Solubility:</b> N/A</p>
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<b>Boiling range:</b> 138 - 141°C <b>Evaporation rate:</b> N/A <b>Explosive Limits:</b> 1% - 7%  <b>Autoignition temperature:</b> 240°C	<b>Flash point:</b> 81°F, 27°C <b>Flammability:</b> N/A <b>Partition coefficient N/A (n-octanol/water):</b> <b>Decomposition temperature:</b> N/A
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## 10. Stability and Reactivity:

**Chemical Incompatible Materials:** MDI will react with a wide range of common chemicals. During use of this product in the work environment, protect the product from contamination such as inadvertent contact with water, amines, strong bases and alcohols. For example, allowing water inside an MDI container will lead to the generation of carbon dioxide gas and result in the development of excess pressure if the container is tightly re-sealed.

**Hazardous Polymerization:** Not expected to occur under normal conditions.

**Dangerous Products of Decomposition:** Oxides of carbon, oxides of nitrogen, hydrocarbons, isocyanates, traces of HCN

## 11. Toxicological Information:

### Mixture Toxicity

Inhalation Toxicity LC50: 9mg/L

### Component Toxicity

100-41-4	Ethylbenzene Oral LD50: 3,500 mg/kg (Rat) Inhalation LC50: 17 mg/L (Rat)
9016-87-9	Isocyanic acid, polymethylenepolyphenylene ester Dermal LD50: 490 mg/L (Rat) Inhalation LC50: 490 mg/m3 (Rat)
101-68-8	4,4'-Methylenediphenyl diisocyanate Dermal LD50: 1 mg/L (Rat) Inhalation LC50: 369 mg/m3 (Rat)

### Individual Toxicity Values Listed if Known

#### Acute Toxicity:

**Eyes:** Severe irritation, tearing, swelling, and possible damage to cornea.

**Skin:** Irritation, redness, swelling, skin sensitization, rash, scaling, and blistering.

**Inhalation:** Mucous membrane and respiratory tract irritation, tightness of chest, isocyanate sensitization, and asthma like symptoms

**Ingestion:** Gastrointestinal irritation, nausea, diarrhea, central nervous system depression.

**Chronic Effects:** Reports have associated repeated and prolonged occupational exposure to solvents with permanent brain and nervous system damage. Isocyanates may cause skin and respiratory sensitization in some individuals. Possible other harmful target organ effects.

**Conditions Aggravated by Exposure:** Skin disorders, respiratory disorders, and eye disorders.

**Routes of Entry:** Inhalation, ingestion, skin contact, eye contact

**Target Organs:** Respiratory tract, digestive tract, eyes, skin, liver, kidneys, central nervous system

**Chemicals with Known or Possible Carcinogenic Effects:**

<u>CAS Number</u>	<u>Description</u>	<u>% Weight</u>	<u>Carcinogen Rating</u>
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100-41-4	Ethylbenzene	5 to 10%	Ethylbenzene: IARC: Possible human carcinogen OSHA: listed
1333-86-4	Carbon black	0.1 to 1.0%	Carbon black: NIOSH: potential occupational carcinogen IARC: Possible human carcinogen OSHA: listed

## **12. Ecological Information:**

**General Information:** Based on experience, no adverse effects are to be expected if correct disposal procedures have been followed as indicated in section 13.

Individual component ecotoxicity listed if known.

### **Component Ecotoxicity**

Xylenes (o-, m-, p- isomers)	96 Hr LC50 Pimephales promelas: 13.4 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 2.661 - 4.093 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 13.5 - 17.3 mg/L; 96 Hr LC50 Lepomis macrochirus: 13.1 - 16.5 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 19 mg/L; 96 Hr LC50 Lepomis macrochirus: 7.711 - 9.591 mg/L [static]; 96 Hr LC50 Pimephales promelas: 23.53 - 29.97 mg/L [static]; 96 Hr LC50 Cyprinus carpio: 780 mg/L [semi-static]; 96 Hr LC50 Cyprinus carpio: >780 mg/L; 96 Hr LC50 Poecilia reticulata: 30.26 - 40.75 mg/L [static] 48 Hr EC50 water flea: 3.82 mg/L; 48 Hr LC50 Gammarus lacustris: 0.6 mg/L
Ethylbenzene	96 Hr LC50 Oncorhynchus mykiss: 11.0 - 18.0 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 4.2 mg/L [semi-static]; 96 Hr LC50 Pimephales promelas: 7.55 - 11 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 32 mg/L [static]; 96 Hr LC50 Pimephales promelas: 9.1 - 15.6 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 9.6 mg/L [static] 48 Hr EC50 Daphnia magna: 1.8 - 2.4 mg/L 72 Hr EC50 Pseudokirchneriella subcapitata: 4.6 mg/L; 96 Hr EC50 Pseudokirchneriella subcapitata: >438 mg/L; 72 Hr EC50 Pseudokirchneriella subcapitata: 2.6 - 11.3 mg/L [static]; 96 Hr EC50 Pseudokirchneriella subcapitata: 1.7 - 7.6 mg/L [static]
4,4'-Methylenediphenyl diisocyanate	24 Hr LC50 Brachydanio rerio: >500 mg/L 24 Hr EC50 Daphnia magna: >500 mg/L

## **13. Disposal Considerations:**

**Recommendation:** Observe local requirements. Dispose of in accordance with local/state/federal regulations.

**Empty Container Precautions:** Empty containers retain product residue; observe all precautions for product. Do not heat or cut empty container with electric or gas torch because highly toxic vapors and gases are formed. Do not reuse without thorough commercial cleaning and reconditioning. If container is to be disposed, ensure all product residues are removed and container is empty prior to disposal. Contact the Reusable Industrial Packaging Association (RIPA) at 301-577-3786 to find a drum re-conditioner in North America ([www.reusablepackaging.org](http://www.reusablepackaging.org)).

## **14. Transport Information:**

### **DOT Regulated Components:**

Flammable liquid, N.O.S.  
Reportable Quantity: No minimum threshold

Material ships as follows:

<u>Agency</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
DOT	Paint, N.O.S. (Contains Xylenes)	1263	III	3
ICAO/IAT	Paint, N.O.S. (Contains Xylenes)	1263	III	3
IMDG	Paint, N.O.S. (Contains Xylenes)	1263	III	3

### **15. Regulatory Information:**

**OSHA HAZARD COMMUNICATION STANDARD:** This material is classified as hazardous in accordance with OSHA 29 CFR 1910.1200.

**SARA 311/312 Hazard Categories:** Acute health hazard, chronic health hazard, fire hazard.

**WARNING:** This product can expose you to chemicals listed below, which are known to the State of California to cause cancer, birth defects, or reproductive harm. For more information, visit [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

Carbon black 1333-86-4 0.1 to 1.0 % CARC

Ethylbenzene 100-41-4 5 to 10 % CARC

Carbon Black only requires Proposition 65 notification when in dust form and particles of respirable size

#### **Massachusetts Right To Know List:**

Carbon black 1333-86-4 0.1 to 1.0 %

4,4'-Methylenediphenyl diisocyanate 101-68-8 1 to 5 %

Ethylbenzene 100-41-4 5 to 10 %

Xylenes (o-, m-, p- isomers) 1330-20-7 40 to 50 %

#### **New Jersey Right To Know List:**

Carbon black 1333-86-4 0.1 to 1.0 %

Isocyanic acid, polymethylenepolyphenylene ester 9016-87-9 1 to 5 %

Ethylbenzene 100-41-4 5 to 10 %

Xylenes (o-, m-, p- isomers) 1330-20-7 40 to 50 %

#### **Pennsylvania Right To Know List:**

Carbon black 1333-86-4 0.1 to 1.0 %

4,4'-Methylenediphenyl diisocyanate 101-68-8 1 to 5 %

Ethylbenzene 100-41-4 5 to 10 %

Xylenes (o-, m-, p- isomers) 1330-20-7 40 to 50 %

#### **Chemicals subject to SARA 313 Reporting:**

4,4'-Methylenediphenyl diisocyanate 101-68-8 1 to 5 % Emissions

Isocyanic acid, polymethylenepolyphenylene ester 9016-87-9 1 to 5 % Emissions

Ethylbenzene 100-41-4 5 to 10 % Emissions

Xylenes (o-, m-, p- isomers) 1330-20-7 40 to 50 % Emissions

<u>Country</u>	<u>Regulation</u>	<u>All Components Listed</u>
Canada	Canada DSL	Yes
US	Toxic Substances Control Act	Yes



**16. Other Information:**

Safety Data Sheet issued by Product Safety Department

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Carlisle Roof Foam and Coatings. The data on these sheets relates only to the specific material designated herein. Carlisle Roof Foam and Coatings assumes no legal responsibility for use or reliance upon this data. It is the user's responsibility to ensure that their activities comply with federal, state, or local laws.

Date revised: 2018-12-04

Reviewer Revision

Date Prepared: 12/4/2018