

**TPA BONDING ADHESIVE 5 GL**

Version 2.

Print Date 10/17/2008

REVISION DATE: 10/16/2008

**SECTION 1 - PRODUCT IDENTIFICATION**

Trade name : TPA BONDING ADHESIVE 5 GL  
Product code : 505400 805

COMPANY : Tremco Incorporated  
3735 Green Road  
Cleveland, OH 44122

Telephone : (216) 292-5000 8:30 - 5:00 EST  
Emergency Phone: : (216) 765-6727 8:30 - 5:00 EST  
After Hours: Chemtrec 1-800-424-9300

Product use : Coating

**SECTION 2 - HAZARDS IDENTIFICATION****Emergency Overview**

Cream. Liquid. May cause moderate irritation to the respiratory system. May cause nausea, headaches, and dizziness. May cause drowsiness, weakness, and fatigue. Move to fresh air. If required, artificial respiration or administration of oxygen can be performed by trained personnel. Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention.

**Acute Potential Health Effects/ Routes of Entry**

Inhalation : May cause moderate irritation to the respiratory system. May cause nausea, headaches, and dizziness. May cause drowsiness, weakness, and fatigue.

Eyes : Vapor and/or mist may cause eye irritation. Direct contact may cause temporary redness and discomfort.

Ingestion : May cause irritation to the mouth, throat and stomach. May cause gastrointestinal irritation, nausea, and vomiting.

Skin : May cause moderate irritation.

**Aggravated Medical Conditions**

Pre-existing eye, skin, liver, kidney, and respiratory disorders may be aggravated by exposure.

**Chronic Health Effects**

Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Prolonged or repeated exposure to xylene may cause defatting, drying, and irritation of the skin, dermatitis, central nervous system (CNS) effects, heart muscle sensitization and arrhythmia, hearing loss, and brain, liver, kidney damage. Xylene overexposure may affect fetal development. Prolonged or repeated overexposure to acetone may cause liver damage, Central Nervous System depression and narcosis. The International Agency for Research on Cancer (IARC) has evaluated ethylbenzene and classified it as a possible human carcinogen (Group 2B) based on sufficient evidence for carcinogenicity in experimental animals, but inadequate evidence for cancer in exposed humans. Prolonged or repeated exposure may cause defatting, drying, and irritation of the skin, dermatitis, central nervous system (CNS) effects, heart muscle sensitization and arrhythmia, hearing loss, and brain, liver, kidney, and testes damage. Toluene overexposure may cause burns of the skin, respiratory tract damage. May be harmful to the human fetus based on animal tests and limited epidemiology data. Fillers are encapsulated and not expected to be released from product under normal conditions of use.

**Target Organs:** Skin, Eye, Lung, Liver, Kidney, Nerve, Reproductive

**TPA BONDING ADHESIVE 5 GL**

Version 2.

Print Date 10/17/2008

REVISION DATE: 10/16/2008

**SECTION 3 - PRODUCT COMPOSITION**

Chemical Name	CAS-No.	Weight %
Toluene	108-88-3	30.0 - 60.0
Acetone	67-64-1	15.0 - 40.0
Polymer	NJ TSRN# 51721300-5674P	10.0 - 30.0
Synthetic Rubber	NJ TSRN# 51721300-5675P	7.0 - 13.0
Hydrocarbon Resin	NJ TSRN# 51721300-5677P	1.0 - 5.0
Phenolic Resin	NJ TSRN# 51721300-5676P	1.0 - 5.0
Xylene	1330-20-7	1.0 - 5.0
Ethylbenzene	100-41-4	- <1.0

**SECTION 4 - FIRST AID MEASURES**

Get immediate medical attention for any significant overexposure.

- Inhalation : Move to fresh air. If required, artificial respiration or administration of oxygen can be performed by trained personnel. Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention.
- Eye contact : Flush with water for at least 15 minutes while holding eye lids apart. Get medical attention immediately.
- Skin contact : Clean area of contact thoroughly using soap and water. If irritation, rash or other disorders develop, get medical attention immediately.
- Ingestion : Do not induce vomiting unless advised by a physician. Call nearest Poison Control Center or Physician immediately.

**SECTION 5 - FIRE FIGHTING MEASURES**

- Flash point : < 0 °F, < -18 °C
- Method : Setaflash Closed Cup
- Lower explosion limit : Not available.
- Upper explosion limit : Not available.
- Autoignition temperature : Not available.
- Extinguishing media : If water fog is ineffective, use carbon dioxide, dry chemical or foam.
- Hazardous combustion products : Smoke, fumes. Carbon monoxide and carbon dioxide can form. Nitrogen oxides can form.
- Protective equipment for firefighters : Use accepted fire fighting techniques. Wear full firefighting protective clothing, including self-contained breathing apparatus (SCBA). Water may be used to cool containers to minimize pressure build-up.
- Fire and explosion conditions : Vapor concentrations in enclosed areas may ignite explosively. Product may ignite if heated in excess of its flash point. Vapors may travel to sources of ignition and flashback. Closed container, may burst when exposed to extreme heat. Empty containers may contain ignitable vapors.



**TPA BONDING ADHESIVE 5 GL**

Version 2.  
REVISION DATE: 10/16/2008

Print Date 10/17/2008

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

Use appropriate protective equipment. Avoid contact with material. Remove sources of ignition immediately. Stop flow of material if safe to do so. Contain spill and keep out of water courses. Ventilate area.

**SECTION 7 - HANDLING AND STORAGE**

Prevent inhalation of vapor, ingestion, and contact with skin eyes and clothing. Keep container closed when not in use. Precautions also apply to emptied containers. To prevent generation of static discharges, use bonding/grounding connection when pouring liquid. Extinguish all ignition sources including pilot lights, non-explosion proof motors and electrical equipment until vapors dissipate. Personal protective equipment must be worn during maintenance or repair of contaminated mixer, reactor, or other equipment. Keep container closed when not in use. Vapor may migrate to sources of ignition. Do not smoke, weld, generate sparks, or use flame near container. Store in sealed containers in a cool, dry, ventilated warehouse location.

**SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Personal protection equipment**

- Respiratory protection : Wear appropriate, properly fitted NIOSH/MSHA approved organic vapor or supplied air respirator when airborne contaminant level(s) are expected to exceed exposure limits indicated on the MSDS. Follow manufacturer's directions for respirator use.
- Hand protection : Use suitable impervious nitrile or neoprene gloves and protective apparel to reduce exposure.
- Eye protection : Wear appropriate eye protection. Wear chemical safety goggles and/or face shield to prevent eye contact. Do not wear contact lenses. Do not touch eyes with contaminated body parts or materials. Have eye washing facilities readily available.
- Protective measures : Use professional judgment in the selection, care, and use. Inspect and replace equipment at regular intervals.
- Engineering measures : Use only in well ventilated areas. Provide maximum ventilation in enclosed areas. Use local exhaust when the general ventilation is inadequate.

**Exposure Limits**

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Regulation</u>	<u>Limit</u>	<u>Form</u>
Toluene	108-88-3	ACGIH TWA: OSHA TWA:	20 ppm 200 ppm	
Acetone	67-64-1	ACGIH TWA: ACGIH STEL: OSHA PEL:	500 ppm 750 ppm 2,400 mg/m3	
Xylene	1330-20-7	ACGIH TWA: ACGIH STEL: OSHA PEL:	100 ppm 150 ppm 435 mg/m3	

**TPA BONDING ADHESIVE 5 GL**

Version 2.

Print Date 10/17/2008

REVISION DATE: 10/16/2008

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Regulation</u>	<u>Limit</u>	<u>Form</u>
Ethylbenzene	100-41-4	ACGIH TWA: ACGIH STEL: OSHA PEL:	100 ppm 125 ppm 435 mg/m <sup>3</sup>	

**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

Form	: Liquid
Color	: Cream
Odor	: Aromatic Solvent
pH	: Not available.
Vapour pressure	: 185 hPa
Vapor density	: Heavier than air
Melting point/range	: Not available.
Freezing point	: Not available.
Boiling point/range	: 133 °F, 56 °C
Water solubility	: Negligible
Specific Gravity	: 0.876
% Volatile Weight	: 60 %

**SECTION 10 - REACTIVITY / STABILITY**

Substances to avoid	: Oxidizing agents.Strong acids.Strong bases.
Stability	: Stable under normal conditions. Avoid welding arcs, flames or other high temperature sources.
Hazardous polymerization	: Will not occur.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

Toluene, CAS-No.: 108-88-3	
Acute oral toxicity (LD-50 oral)	2,600 - 7,500 mg/kg ( Rat ) 5,000 mg/kg ( Rat )
Acute inhalation toxicity (LC-50)	26,700 mg/l for 1 h ( Rat ) 400 mg/l for 24 h ( Mouse ) 5,320 mg/l for 8 h ( Mouse )
Acute dermal toxicity (LD-50 dermal)	12,124 mg/kg ( Rabbit )
Xylene, CAS-No.: 1330-20-7	
Acute oral toxicity (LD-50 oral)	4,300 mg/kg ( Rat ) 1,590 mg/kg ( Mouse ) 6,670 mg/kg ( Rat ) 3,523 - 8,600 mg/kg ( Rat ) 5,627 mg/kg ( Mouse )
Acute inhalation toxicity (LC-50)	6,350 mg/l for 4 h ( Rat ) 3,907 mg/l for 6 h ( Mouse ) 8,000 mg/l for 4 h ( Rat )
Ethylbenzene, CAS-No.: 100-41-4	
Acute oral toxicity (LD-50 oral)	5,460 mg/kg ( Rat ) 3,500 mg/kg ( Rat )
Acute dermal toxicity (LD-50 dermal)	17,800 mg/kg ( Rabbit )



**TPA BONDING ADHESIVE 5 GL**

Version 2.  
REVISION DATE: 10/16/2008

Print Date 10/17/2008

**SECTION 12 - ECOLOGICAL INFORMATION**

No Data Available

**SECTION 13 - DISPOSAL CONSIDERATIONS**

RCRA Class : D001: Reportable Quantity = 100 lbs. (Characteristic of ignitability)  
This classification applies only to the material as it was originally produced.  
Disposal Method : Subject to hazardous waste treatment, storage, and disposal requirements under RCRA. Recycle or incinerate waste at EPA approved facility or dispose of in compliance with federal, state and local regulations.

**SECTION 14 - TRANSPORTATION / SHIPPING DATA**

**TDG / DOT Shipping Description:**  
FLAMMABLE LIQUID, N.O.S. (Toluene, Acetone), 3, UN1993, PG II

**SECTION 15 - REGULATORY INFORMATION**

**North American Inventories:**

All components are listed or exempt from the TSCA inventory.  
This product or its components are listed on, or exempt from the Canadian Domestic Substances List.

**U.S. Federal Regulations:**

SARA 313 Components : Toluene 108-88-3  
Xylene 1330-20-7  
Ethylbenzene 100-41-4

SARA 311/312 Hazards : Acute Health Hazard  
Fire Hazard  
Chronic Health Hazard

**OSHA Hazardous Components :**

Toluene 108-88-3  
Acetone 67-64-1  
Xylene 1330-20-7  
Ethylbenzene 100-41-4

OSHA Status: Considered : Irritant  
hazardous based on the following criteria:

OSHA Flammability : IB

Regulatory VOC (less water and exempt solvent) : 527 g/l

VOC Method 310 : 60 %

**TPA BONDING ADHESIVE 5 GL**

Version 2.

Print Date 10/17/2008

REVISION DATE: 10/16/2008

**U.S. State Regulations:**

MASS RTK Components	:	Toluene	108-88-3
		Acetone	67-64-1
		Xylene	1330-20-7
Penn RTK Components	:	Toluene	108-88-3
		Acetone	67-64-1
		Polymer	NJ TSRN# 51721300-5674P
		Synthetic Rubber	NJ TSRN# 51721300-5675P
		Xylene	1330-20-7
NJ RTK Components	:	Toluene	108-88-3
		Acetone	67-64-1
		Polymer	NJ TSRN# 51721300-5674P
		Synthetic Rubber	NJ TSRN# 51721300-5675P
		Hydrocarbon Resin	NJ TSRN# 51721300-5677P
		Phenolic Resin	NJ TSRN# 51721300-5676P
		Xylene	1330-20-7

WARNING! Contains chemicals known to the State of California to cause cancer, birth defects and/or other reproductive harm:

108-88-3	Toluene
100-41-4	Ethylbenzene

**SECTION 16 - OTHER INFORMATION**

**HMIS Rating :**

Health	2
Flammability	4
Reactivity	1
PPE	

0 = Minimum  
 1 = Slight  
 2 = Moderate  
 3 = Serious  
 4 = Severe

**Further information:**

For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.

**Prepared by: Rich Mikol**

**Legend**

ACGIH - American Conference of Governmental Hygienists  
 CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act  
 DOT - Department of Transportation  
 DSL - Domestic Substance List  
 EPA - Environmental Protection Agency  
 HMIS - Hazardous Materials Information System  
 IARC - International Agency for Research on Cancer  
 MSHA - Mine Safety Health Administration  
 NDSL - Non-Domestic Substance List  
 NIOSH - National Institute for Occupational Safety and Health  
 NTP - National Toxicology Program

PEL - Permissible Exposure Limit  
 RCRA - Resource Conservation and Recovery Act  
 RTK - Right To Know  
 SARA - Superfund Amendments and Reauthorization Act  
 STEL - Short Term Exposure Limit  
 TLV - Threshold Limit Value  
 TSCA - Toxic Substances Control Act  
 TWA - Time Weighted Average  
 V - Volume  
 VOC - Volatile Organic Compound  
 WHMIS - Workplace Hazardous Materials Information System



**TPA BONDING ADHESIVE 5 GL**

Version 2.

Print Date 10/17/2008

REVISION DATE: 10/16/2008

OSHA - Occupational Safety and Health Administration