TPO LV SINGLE PLY BONDING ADHESIVE 5 GALTPO LV SINGLE PLY BONDING ADHESIVE 5 GAL

Version 3.0
REVISION DATE: 01/16/2013

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SECTION 1 - PRODUCT IDENTIFICATION

Trade name	:	TPO LV SINGLE PLY BONDING ADHESIVE 5 GALTPO LV SINGLE PLY BONDING ADHESIVE 5 GAL
Product code	:	505215 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	:	Adhesive

SECTION 2 - HAZARDS IDENTIFICATION

Emergency Overview

Yellow. 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 inhalation or ingestion of large amounts of 1-chloro-4-(trifluoromethyl)-benzene may cause liver and kidney damage based on laboratory animal studies. 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

SECTION 3 - PRODUCT COMPOSITION

Chemical Name	CAS-No.	Weight %
Methyl acetate	79-20-9	30.0 - 60.0
Polymer	25036-16-2	15.0 - 40.0
Hydrocarbon resin	68131-77-1	15.0 - 40.0
Toluene	108-88-3	10.0 - 30.0
Halogenated Aromatic Hydrocarbon	NJ TSRN# 51721300-5382P	7.0 - 13.0
Methanol	67-56-1	- <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 : Wash area of contact thoroughly with hand cleaner followed by 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 : -13 °C, 9 °F
Method : 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.

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

Chemical Name	CAS Number	Regulation	Limit	Form
Methyl acetate	79-20-9	ACGIH TWA: ACGIH STEL: OSHA PEL:	200 ppm 250 ppm 610 mg/m3	
Toluene	108-88-3	ACGIH TWA: OSHA TWA:	20 ppm 200 ppm	
Methanol	67-56-1	ACGIH TWA: ACGIH STEL: OSHA PEL:	200 ppm 250 ppm 260 mg/m3	

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Form	:	Liquid
Color	:	Yellow
Odor	:	Aromatic Solvent
pH	:	Not available.
Vapour pressure	:	Not available.
Vapor density	:	Heavier than air
Melting point/range	:	Not available.
Freezing point	:	Not available.
Boiling point/range	:	Not available.
Water solubility	:	Negligible
Specific Gravity	:	0.964
% Volatile Weight	:	61 %

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

Methyl acetate, CAS-No.: 79-20-9

Acute oral toxicity (LD-50 oral)	3,700 mg/kg (Rabbit)

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)

Methanol, CAS-No.: 67-56-1

Acute oral toxicity (LD-50 oral)	2 g/kg (Monkey) 14.4 g/kg (Rabbit) 5,628 mg/kg (Rat) 7,300 mg/kg (Mouse) 8,000 mg/kg (Dog)
Acute inhalation toxicity (LC-50)	64,000 mg/l for 4 h (Rat) 87.5 mg/l for 6 h (Rat) 43.68 mg/l for 6 h (Cat) 85.41 mg/l for 4.5 h (Cat)
Acute dermal toxicity (LD-50 dermal)	15,800 mg/kg (Rabbit)

TREMCO

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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

CFR / DOT:

UN1133, Adhesives, 3, PG II

TDG:

UN1133, ADHESIVES, 3, PG II

IMDG:

UN1133, ADHESIVES, 3, PG II

Further Information:

The above shipping description may not be accurate for all container sizes and all modes of transportation. Please refer to Bill of Lading.

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
SARA 311/312 Hazards	:	Acute Health Hazard Fire Hazard	

OSHA Hazardous Components :

Methyl acetate	79-20-9
Toluene	108-88-3
Methanol	67-56-1

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OSHA Status: Considered hazardous based on the following criteria:	:	Irritant
OSHA Flammability	:	Not Regulated
Regulatory VOC (less water and exempt solvent)	:	242 g/l
VOC Method 310	:	61 %

U.S. State Regulations:

MASS RTK Components	:	Methyl acetate	79-20-9
		Toluene	108-88-3
Penn RTK Components	:	Methyl acetate	79-20-9
		Polymer	25036-16-2
		Hydrocarbon resin	68131-77-1
		Toluene	108-88-3
		Halogenated Aromatic Hydrocarbon	NJ TSRN# 51721300-5382P
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		Halogenated Aromatic Hydrocarbon	NJ TSRN# 51721300-5382P

Components under California Proposition 65:
WARNING! Contains chemicals known to the State of California to cause cancer, birth defects and/or other reproductive harm

SECTION 16 - OTHER INFORMATION

HMIS Rating :

Health	2
Flammability	3
Reactivity	0
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
PEL - Permissible Exposure Limit
RCRA - Resource Conservation and Recovery Act
RTK - Right To Know

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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
OSHA - Occupational Safety and Health Administration
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