

MM[®] Vertical Compression Seal

Expansion Joint System

SAFETY DATA SHEET

MM Systems Corp. • 50 MM Way, Pendergrass, GA 30567 • 866.506.6929 • www.mmsystemscorp.com

The products listed below along with their corresponding Safety Data Sheets (SDS) are contained in this document:

- SM7108 Polyurethane Sealant
- Elastobond Activator
 - Promotes adhesion of Epoxy to rubber seal
- Loctite Adhesive
 - Used in splicing rubber seals
- Loctite Primer
 - Used in splicing rubber seals

SAFETY DATA SHEET

Date Issued : 10/17/2014
MSDS No : SM7108
Date Revised : 12/9/2014
Revision No : 7

PERMATHANE SM7108 Polyurethane Sealant

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: PERMATHANE SM7108 Polyurethane Sealant

MANUFACTURER

ITW Polymers Sealants North America
 111 South Nursery Road
 Irving, TX 75060

Product Stewardship: (972) 438-9111

24 HR. EMERGENCY TELEPHONE NUMBERS

CHEMTREC (US Transportation): (800) 424-9300

COMMENTS: PERMATHANE is a registered trademark of Illinois Tool Works, Inc.

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Acute Toxicity (Inhalation), Category 3
 Respiratory Sensitization, Category 1
 Skin Sensitization, Category 1
 Carcinogenicity, Category 2
 Reproductive Toxicity, Category 1B
 Target Organ Toxicity (Repeated exposure), Category 2
 Aspiration Hazard, Category 1

Environmental:

Acute Hazards to the Aquatic Environment, Category 1
 Chronic Hazards to the Aquatic Environment, Category 1

Physical:

Flammable Liquids, Category 4

GHS LABEL



Skull and
crossbones



Exclamation
mark



Health
hazard



Environment

SIGNAL WORD: DANGER

HAZARD STATEMENTS

H227: Combustible liquid.
 H304: May be fatal if swallowed and enters airways.
 H317: May cause an allergic skin reaction.
 H331: Toxic if inhaled.
 H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 H351: Suspected of causing cancer.
 H360: May damage fertility or the unborn child.
 H373: May cause damage to organs through prolonged or repeated exposure.
 H400: Very toxic to aquatic life.

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H410: Very toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENT(S)

Prevention:

80975E8A: 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.
P260: Do not breathe dust/fume/gas/mist/vapours/spray.
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.
P284: Wear respiratory protection.
P273: Avoid release to the environment.

Response:

P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302+P352: IF ON SKIN: Wash with plenty of soap and water.
P304+P340: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P308+P313: IF exposed or concerned: Get medical advice/attention.
P311: Call a POISON CENTER or doctor/physician.
P314: Get medical advice/attention if you feel unwell.
P321: Specific treatment (see section 4).
P331: Do NOT induce vomiting.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P362: Take off contaminated clothing and wash before reuse.
P370+P378: In case of fire: Use appropriate media to extinguish.
P391: Collect spillage.

Storage:

P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P403+P235: Store in a well-ventilated place. Keep cool.
P405: Store locked up.

Disposal:

P501: Dispose of contents/container according to local, regional, national, and international regulations.

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Liquid with a mild solvent odor

IMMEDIATE CONCERNS: CAUTION! Combustible liquid and vapor. Causes eye and skin irritation. Contains small amount of Toluene Diisocyanate (CAS No. 26471-62-5). May cause respiratory tract irritation. May cause allergic respiratory reaction. Harmful if inhaled. Respiratory sensitizer. May cause lung damage. Lung damage and respiratory sensitization may be permanent. May cause skin irritation. May cause allergic skin reaction. Skin sensitizer. Animal tests and other research indicate that skin contact with TDI can cause isocyanate desensitization and respiratory reaction.

POTENTIAL HEALTH EFFECTS

EYES: Moderately irritating to the eyes.

SKIN: May cause mild skin irritation. Repeated or prolonged skin contact may result in allergic dermatitis.

INGESTION: Not likely route of entry. Harmful if swallowed, may cause nausea. Consult a physician.

INHALATION: May cause mild irritation to the respiratory tract. May aggravate existing respiratory conditions.

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ROUTES OF ENTRY: Eye and Skin Contact, Inhalation and Ingestion

IRRITANCY: Irritant to eyes, skin and respiratory tract.

SENSITIZATION: May cause allergic respiratory and skin reaction. Respiratory and skin sensitizer.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt. %	CAS
Butyl Benzyl Phthalate	10 - 20	85-68-7
Toluene	2 - 5	108-88-3
Toluene Diisocyanate	1 - 5	26471-62-5

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of tempered water (at least 15-20 minutes) lifting upper and lower eye lids occasionally. Get immediate medical attention.

SKIN: Immediately flush skin with plenty of water. Remove clothing. Get medical attention immediately. Wash clothing separately before reuse.

INGESTION: Do not induce vomiting. Get medical attention immediately. Never give anything by mouth to an unconscious person.

INHALATION: Under normal conditions of use, inhalation of product is unlikely. If fumes are inhaled and become irritant, remove person from the area to fresh air. Seek immediate medical attention if exposure has occurred.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Causes eye irritation.

SKIN: Contact causes skin irritation. Contains a component that is a skin sensitizer.

INGESTION: Not likely route of entry. May cause vomiting if ingested.

INHALATION: Respiratory tract irritation. Contains a component that is a respiratory sensitizer.

ACUTE TOXICITY: Irritant to the eyes, skin and respiratory tract.

CHRONIC EFFECTS: Frequent or prolonged contact may irritate the skin and cause a skin rash (dermatitis).

NOTES TO PHYSICIAN: Treat symptomatically.

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: Class IIIA

GENERAL HAZARD: Combustible Liquid.

EXTINGUISHING MEDIA: Use methods appropriate for the surrounding fire. Water spray, dry chemical, carbon dioxide, AFFF or alcohol resistant foams are all appropriate.

OTHER CONSIDERATIONS: This material can burn but will not readily ignite. This material will release vapors when heated above the flash point temperature that can ignite when exposed to a source of ignition. In enclosed spaces, heated vapor can ignite with explosive force. Mists or sprays may burn at temperatures below the flash point.

EXPLOSION HAZARDS: Solid water stream may spread fire. When exposed to extreme heat, closed containers may rupture. Cool containers with flooding quantities of water until after the fire is completely extinguished.

FIRE FIGHTING PROCEDURES: This product may release flammable vapors that are slightly heavier than air.

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FIRE FIGHTING EQUIPMENT: As in any fire, wear Self-Contained Breathing Apparatus (SCBA) MSHA/NIOSH approved or equivalent and full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Dike area to contain spill. Take precautions as necessary to prevent contamination of ground and surface waters. Recover spilled material on absorbent, such as sawdust or vermiculite, and sweep into closed containers for disposal. Do not flush to sewer. If area of spill is porous, remove as much contaminated earth and gravel, etc. as necessary and place in closed containers for disposal. Only those persons who are adequately trained, authorized, and wearing the appropriate personal protective equipment (PPE) should participate in spill response and clean-up.

LARGE SPILL: Keep spectators away. Only those persons who are adequately trained, authorized and wearing the required personal protective equipment (PPE) should participate in spill response and clean-up. Ventilate the area by natural means or by explosion proof mechanical means (i.e. fans). Know and prepare for spill response before using or handling this product. Eliminate all ignition sources (flames, hot surfaces, portable heaters and sources of electrical, static, or frictional sparks). Dike and contain spill with inert material (e.g. sand, earth). Transfer liquids to covered and labeled metal containers for recovery or disposal, or remove with inert absorbent. Use only non-sparking tools and appropriate PPE. Place absorbent diking materials in covered metal containers for disposal. Prevent contamination of sewers, streams, and groundwater with spilled material or used absorbent.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Avoid run-off into storm drains, ditches and waterways.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: For professional or industrial use only. Follow label instructions. Keep out of the reach of children. Not for consumption. No smoking. Do not breathe vapors. Avoid contact with body. Turn off all pilot lights, flames, stoves, heaters, electric motors, welding equipment and other sources of ignition. Empty containers must not be washed and re-used for any purpose. Contact lens wearers must wear protective eye wear around chemical vapors and liquid. Wash hands thoroughly after handling. To prevent build-up of vapors, use adequate natural and/or mechanical ventilation (e.g. open all windows and doors to achieve cross ventilation). Vapors may be heavier than air and will collect in low areas. Containers may be hazardous when empty.

HANDLING: Use with sufficient ventilation to keep employee exposure below recommended limits. Provide adequate ventilation for storage, handling and use, especially for enclosed or low spaces. Avoid contact of liquid with eyes and prolonged skin exposure. Follow all SDS/label precautions even after container is emptied because they may retain product residues.

STORAGE: Keep container closed when not in use. Store in a dry well ventilated area and away from the sun, heat, sparks and open flames. Material will start to cure in the presence of humid air or moisture. Do not store in the same area with oxidizers and amines.

SHELF LIFE: 12 months from date of manufacture when stored below 80 F (26.7 C)

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)					
		EXPOSURE LIMITS			
		OSHA PEL		ACGIH TLV	
Chemical Name		ppm	mg/m ³	ppm	mg/m ³
Butyl Benzyl Phthalate	TWA	NL [1]	NL [1]	NL [1]	NL [1]
	STEL	NL [1]	NL [1]	NL [1]	NL [1]
Toluene	TWA	200 ppm	NL	20 ppm	NL
	STEL	300 ppm [2]	NL [2]	NL [1]	NL [1]
Toluene Diisocyanate	TWA	0.005 ppm	0.04 mg/m ³	0.005 ppm [1]	NL [1]
	STEL	0.02 ppm	0.15 mg/m ³	0.02 ppm [1]	NL [1]
Footnotes: 1. NL = Not Listed 2. C = Ceiling					

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use only in a well ventilated area. To determine exposure levels, monitoring should be performed as outlined by OSHA Standard 29 CFR 1910.1052.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear safety glasses with side shields, goggles or full-face shield as required by 29 CFR 1910.133 - OSHA Eye and Face Protection Standard. A suitable emergency eye wash station and safety shower should be located near the work station.

SKIN: Wear chemical resistant, impervious gloves.

RESPIRATORY: NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection. A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

WORK HYGIENIC PRACTICES: Use good hygiene practices when handling this material. Wash hands thoroughly after use.

OTHER USE PRECAUTIONS: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Viscous Liquid

ODOR: Mild Solvent

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COLOR: Various

pH: 7.02

PERCENT VOLATILE: 3.1

Notes: by weight

FLASHPOINT AND METHOD: (160°F) Setaflash CC Tester-ASTM D 3828

FLAMMABLE LIMITS: N/A to N/A

AUTOIGNITION TEMPERATURE: Not Determined

VAPOR PRESSURE: Not Determined

VAPOR DENSITY: Not Determined

BOILING POINT: Not Determined

FREEZING POINT: Not Determined

MELTING POINT: Not Determined

POUR POINT: Not Determined

SOLUBILITY IN WATER: Nonsoluble

EVAPORATION RATE: Not Determined

DENSITY: 12.64 lbs/gal

PARTICLE SIZE: Not Determined

SPECIFIC GRAVITY: 1.516

VISCOSITY: Not Determined

MOLECULAR WEIGHT: Not Determined

(VOC): 43.100 EPA Method 24 VOC

COEFF. OIL/WATER: Not Determined

OXIDIZING PROPERTIES: Not Determined

WEIGHT PER VOLUME: Not Determined

10. STABILITY AND REACTIVITY

STABLE: Yes

HAZARDOUS POLYMERIZATION: No

STABILITY: Stable.

POLYMERIZATION: Product will not undergo polymerization.

CONDITIONS TO AVOID: Avoid heat, flames, sparks, and other sources of ignition. Keep away from strong oxidizing conditions and agents.

POSSIBILITY OF HAZARDOUS REACTIONS: None

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide and hydrocarbon fumes if heated to decomposition.

INCOMPATIBLE MATERIALS: Strong oxidizing agents and amines.

11. TOXICOLOGICAL INFORMATION

ACUTE

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Chemical Name	ORAL LD ₅₀ (rat)	DERMAL LD ₅₀ (rabbit)	INHALATION LC ₅₀ (rat)
Butyl Benzyl Phthalate	2330 mg/kg (rats)	> 10000 mg/kg (rabbits)	No data
Toluene	2600 to 7500 mg/kg	12124 mg/kg	8000 ppm (4- hr dose)
Toluene Diisocyanate	4130 to 5110 mg/kg (rats)	> 9400 mg/kg (rabbits)	49 to 5034 ppm (4-hr dose - rat)

EYE EFFECTS: Acute exposure: Contact with the eyes may cause mild irritation, pain, reddening and watering.
Chronic exposure: same effects as acute.

SKIN EFFECTS: Contact with product may cause skin irritation. No known chronic effects.

CARCINOGENICITY

Chemical Name	NTP Status	IARC Status
Toluene		3
Toluene Diisocyanate	2	2B

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: This product contains components that will normally float on water. These components may be harmful to aquatic organisms and may cause long term adverse effects in the aquatic environment.

ECOTOXICOLOGICAL INFORMATION: Contains components that are potentially toxic to freshwater and saltwater ecosystems.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Consult with your state and local hazardous waste requirements or guidelines to ensure compliance. Arrange disposal in accordance with EPA, state and local requirements.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Non-Regulated Material per 49 CFR 173.150(f)

UN/NA NUMBER: NA

PACKING GROUP: NA

AIR (ICAO/IATA)

SHIPPING NAME: Adhesives

UN/NA NUMBER: 1133

PRIMARY HAZARD CLASS/DIVISION: 3

PACKING GROUP: III

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VESSEL (IMO/IMDG)

SHIPPING NAME: Adhesives
UN/NA NUMBER: 1133
PRIMARY HAZARD CLASS/DIVISION: 3
PACKING GROUP: II
MARINE POLLUTANT #1: Butyl Benzyl Phthalate
NOTE: contains (Toluene)

15. REGULATORY INFORMATION

UNITED STATES
SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

FIRE: No **PRESSURE GENERATING:** No **REACTIVITY:** No **ACUTE:** Yes **CHRONIC:** Yes

EPCRA SECTION 313 SUPPLIER NOTIFICATION

Chemical Name	Wt.%	CAS
Toluene	2 - 5	108-88-3
Toluene Diisocyanate	1 - 5	26471-62-5

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

Chemical Name	Wt.%	CERCLA RQ
Toluene	2 - 5	1,000 lbs.
Toluene Diisocyanate	1 - 5	100

TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
Butyl Benzyl Phthalate	85-68-7
Toluene	108-88-3
Toluene Diisocyanate	26471-62-5

CLEAN AIR ACT

Chemical Name	Wt.%	CAS
Toluene	2 - 5	108-88-3
Toluene Diisocyanate	1 - 5	26471-62-5

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STATES WITH SPECIAL REQUIREMENTS

Chemical Name	Requirements
Butyl Benzyl Phthalate	Massachusetts Right to Know List New Jersey Right to Know List Pennsylvania Right to Know List
Toluene	New Jersey Right to Know List Pennsylvania Right to Know List Massachusetts Toxic Use Reduction Act (TURA) Reportable Chemical
Toluene Diisocyanate	Massachusetts Right to Know List New Jersey Right to Know List Pennsylvania Right to Know List

CALIFORNIA PROPOSITION 65: This product contains toluene and butyl benzyl phthalate, chemicals known to the state of California to cause birth defects or other reproductive harm.

This product contains traces of Toluene Diisocyanate, a chemical known to the state of California to cause cancer.

Chemical Name	Wt.%	Listed
Butyl Benzyl Phthalate	10 - 20	<ul style="list-style-type: none"> ● Developmental Toxicity ● Female Reproductive ● Male Reproductive
Toluene	2 - 5	<ul style="list-style-type: none"> ● Developmental Toxicity
Toluene Diisocyanate	1 - 5	Cancer

CANADA

WHMIS HAZARD SYMBOL AND CLASSIFICATION



Toxic



Combustible
Liquid

16. OTHER INFORMATION

INFORMATION CONTACT: (972) 438-9111

REVISION SUMMARY: This MSDS replaces the 12/5/2014 MSDS. Revised: **Section 14:** AIR (ICAO/IATA) (PRIMARY HAZARD CLASS/DIVISION, PACKING GROUP, UN/NA NUMBER), ROAD AND RAIL (ADR/RID), ROAD AND RAIL (ADR/RID) (UN NUMBER, PACKING GROUP).

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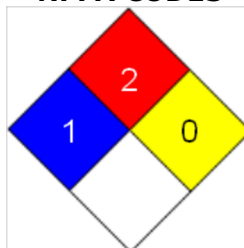
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HMIS RATING

HEALTH	*	1
FLAMMABILITY		2
PHYSICAL HAZARD		0
PERSONAL PROTECTION		B

NFPA CODES



GENERAL STATEMENTS: Keep out of reach of children
For professional or industrial use only

MANUFACTURER DISCLAIMER: This document may be used to comply with OSHA's Hazardous Communication Standard, 29 CFR 1910.1200.

To the best of our knowledge, the information contained in this SDS is accurate. It is intended to assist the user in his/her evaluation of the product's hazards and safety precautions to be taken in its use. The data in this SDS relate only to the specific material designated herein. We do not assume liability for the use of, or reliance on this information, nor do we guarantee its accuracy or completeness.

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of ITW Polymers Sealants North America. The data on this sheet relates only to the specific material designated herein. ITW Polymers Sealants North America assumes no legal responsibility for use or reliance upon these data.

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Section 1 – Product and Company Identification

ADDRESS: MM SYSTEMS CORPORATION
 50 MM WAY
 PENDERGRASS, GA 30567
 Toll Free Domestic - 800-241-3460 International - 1-706-824-7500

PRODUCT NAME: **MM Elastobond Adhesion Promoter**
 PRODUCT USE: Adhesion promoter

24 HR EMERGENCY TELEPHONE NUMBER:
WITHIN USA & CANADA: 800-424-9300
OUTSIDE USA & CANADA: +1 703-527-3887

Section 2 – Hazards Identification

Classification of the substance or mixture

GHS RATINGS:

Flammable liquid	2	Flash point < 23° C and initial boiling point > 35° C (95° F)
Inhalation Toxicity	Acute Tox. 4	Gases >2500 +<=20000ppm, Vapors >10+<=20mg/l, Dusts & mists >1+<=5 mg/l
Skin corrosive	2	Reversible adverse effects in dermal tissue. Draize score: >=2.3 < 4.0 or persistent inflammation
Eye corrosive	2.A	Eye irritant: Subcategory 2A, Reversible in 21 days
Skin sensitizer	1	Skin sensitizer
Mutagen	1B	Known to produce heritable mutations in human germ cells Subcategory 1B, Positive results: In vivo heritable germ cell tests in mammals. Human germ cell tests. In vivo somatic mutagenicity tests, combined with some evidence of germ cell mutagenicity.
Carcinogen	1B	Presumed Human Carcinogen. Based on demonstrated animal carcinogenicity
Organ toxin single exposure	3	Transient target organ effect – 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 ? 20.5 mm ² /s at 40° C

GHS Hazards		GHS Precautions	
H225	Highly flammable liquid and vapor	P101	If medical advice is needed, have product container or label on hand
H304	May be fatal if swallowed and enters airways	P102	Keep out of reach of children
H315	Causes skin irritation	P103	Read label before use
H317	May cause an allergic skin reaction	P201	Obtain specialty instructions before use
H319	Causes serious eye irritation	P202	Do not handle until all safety precautions have been read and understood
H332	Harmful if inhaled	P210	Keep away from heat, sparks, open flames and hot surfaces – No smoking
H336	May cause drowsiness or dizziness	P233	Keep container tightly closed
H340	May cause genetic defects	P240	Ground and bond container and receiving equipment
H350	May cause cancer	P241	Use explosion-proof electrical, ventilating, lighting and motorized equipment
H373	May cause damage to organs through prolonged or repeated exposure	P242	Use only non-sparking tools
		P243	Take precautionary measures against static discharge

		P260	Do not breathe dust, mist, vapors or spray
		P264	Wash contacted skin 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 and respiratory protection
		P312	Call a POISON CENTER or doctor if you feel unwell
		P321	Specific treatment (see first aid instructions on SDS)
		P331	Do NOT induce vomiting
		P362	Take off contaminated clothing and wash before reuse
		P301 + P310	If SWALLOWED: Immediately call a POISON CENTER or doctor/physician
		P303+P361+P353	IF ON SKIN (or hair): Immediately take off all contaminated clothing. Wash skin with soap and water
		P304+P340	IF INHALED: 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
		P333+P313	If skin irritation or a rash occurs: Get medical advice
		P337+P313	If eye irritation persists: Get medical advice
		P370+P378	In case of fire: Use dry chemical, CO2, foam or water fog to extinguish
		P405	Store locked up
		P403+P235	Store in a well ventilated place. Keep cool
		P501	Dispose of contents and container in accordance with local, regional, national and international regulations

Danger



Hazards not otherwise classified (HNOC) or not covered by GHS:

None known

Section 3 – Composition

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Light Aliphatic Solvent Naphtha (Petroleum 64742-89-8 50 percent Vapor Pressure: 5.3	PEL=300pm	PEL=300PPM	
Methyl Ethyl Ketone 78-93-3 20 percent Vapor Pressure: 12.13 25C	200 ppm TWA; 590 mg/m3 TWA	300 ppm STEL 200 ppm TWA	NIOSH: 200 ppm TWA; 590 mg/m3 TWA 300 ppm STEL; 885 mg/m3 STEL
Acetone 67-64-1 10 to 20%	1000 ppm TWA; 2400 mg/m3 TWA	750 ppm STEL 500 ppm TWA	NIOSH: 250 [[, TWA' 590 mg/m3 TWA
Methyl n-Amyl Ketone 110-43-0 5 to 10%	100 ppm TWA; 465 mg/m3 TWA	50 ppm TWA	NIOSH: 100 ppm TWA; 465 mg/m3 TWA
Butyl Alcohol 71-36-3 1 to 5%	100 ppm TWA 300 mg/m3 TWA	20 ppm TWA	NIOSH: 50 ppm Ceiling; 150 mg/m3 Ceiling
Maleic anhydride modified chlorinated polypropylene 68609-36-9 1 to 5%	None Listed	None	
Bisphenol A epoxy resin 25068-38-6 1 to 5%			

Section 4 – First Aid Measures

INHALATION: If inhaled: Remove person to fresh air and keep comfortable for breathing. . If breathing difficulty persists, seek medical attention.

EYE CONTACT: Rinse continuously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for a minimum of 15 minutes while holding eye lids open. If eye irritation persist: seek medical attention.

SKIN CONTACT: Take off all contaminated clothing immediately. Wash exposed area thoroughly with soap and water. Seek medical attention if irritation persists. Do NOT use solvents or thinners to wash off.

INGESTION: If swallowed, seek medical attention immediately and have product container and label at hand. DO NOT INDUCE VOMITING unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed:

Dizziness, breathing difficulty, headaches, & loss of coordination.

May cause skin sensitization or allergic skin reaction.

Indication of any immediate medical attention and special treatment needed.

Seek professional medical attention for all over-exposures and/or persistent problems.

Section 5 – Fire Fighting Measures

LEL: 1.0%

UEL: 112.8%

Extinguishing Media: Dry Chemical, Foam, CO2 or water fog.

Unsuitable Extinguishing Media: High volume water jets

Unusual Fire and Explosion Hazards: Vapors can travel to a source of ignition and flash back. Closed containers may explode when exposed to extreme heat or burst when contaminated with water (CO₂ gas evolved). Hazards apply to empty containers. Combustion generates toxic fumes.

Hazardous Combustion Products: oxides of carbon, oxides of nitrogen, formaldehyde, toxic fumes

Special Firefighting Procedures: Highly toxic fumes may be generated by thermal decomposition. Water runoff from firefighting can cause environmental damage. Dike and collect water used to fight fire.

Fire Equipment: Full fire fighter equipment including SCBA should be worn to avoid skin contact and inhalation of concentrated vapors. Minimize skin exposure.

Section 6 – Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Avoid breathing vapors and mist. Ensure adequate ventilation. Eliminate all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulation to form explosive concentrations. Vapors can accumulate in low areas. For personal protection see section 8.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let products enter drains.

Methods and materials for containment and cleaning up: Dike spill area and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth. Sweep up and dispose of in appropriate containers in accordance to Federal, State and/or Local regulations. Clean preferably with a detergent; avoid use of solvents.

Section 7 – Handling and Storage

Safe Handling Measures: Avoid contact with skin and eyes. May cause skin sensitization or allergic skin reaction. Avoid inhalation of vapor or mist. Ground and bond container and receiving equipment. Use non-sparking tools and explosion proof equipment when handling this material. Keep away from sources of ignition – No Smoking. Use in cool, well-ventilated areas. Keep containers closed when not in use. Take measures to prevent the build up of electrostatic charge. Follow all SDS and label precautions even after container is emptied because they may retain product residues. For precautions see section 2.

Storage Requirements: Keep container tightly closed. Keep away from heat, sparks, open flames and hot surfaces. No Smoking. Store in a cool, dry and well-ventilated place. Do not reuse container when empty.

Section 8 – Exposure Control and PPE

Chemical Name / CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Light Aliphatic Solvent Naphtha (Petroleum 64742-89-8 50 percent Vapor Pressure: 5.3	PEL=300pm	PEL=300PPM	
Methyl Ethyl Ketone 78-93-3 20 percent Vapor Pressure: 12.13 25C	200 ppm TWA; 590 mg/m ³ TWA	300 ppm STEL 200 ppm TWA	NIOSH: 200 ppm TWA; 590 mg/m ³ TWA 300 ppm STEL; 885 mg/m ³ STEL
Acetone 67-64-1 10 to 20%	1000 ppm TWA; 2400 mg/m ³ TWA	750 ppm STEL 500 ppm TWA	NIOSH: 250 [[, TWA' 590 mg/m ³ TWA
Methyl n-Amyl Ketone 110-43-0 5 to 10%	100 ppm TWA; 465 mg/m ³ TWA	50 ppm TWA	NIOSH: 100 ppm TWA; 465 mg/m ³ TWA
Butyl Alcohol 71-36-3 1 to 5%	100 ppm TWA 300 mg/m ³ TWA	20 ppm TWA	NIOSH: 50 ppm Ceiling; 150 mg/m ³ Ceiling

Maleic anhydride modified chlorinated polypropylene 68609-36-9 1 to 5%	None Listed	None	
Bisphenol A epoxy resin 25068-38-6 1 to 5%			

Engineering Controls: Ground and bond container and receiving equipment. Use explosion proof electrical, ventilation, lighting and motorized equipment. Use non-sparking tools. Ensure adequate ventilation.

Ventilation: General mechanical ventilation or local exhaust should be utilized to keep vapor concentrations below exposure limits (PEL & TLV). Ventilation equipment must be explosion proof.

Safe Work Practices: Eye washes and safety showers in the workplace are recommended. Avoid contact with skin and eyes. Avoid breathing vapors. Wash hands thoroughly after using and before eating, drinking or smoking. Employee education and training in the safe use and handling of this product is required under the OSHA Hazard Communication Standard 29CFR1200. Smoking in area where this material is used should be strictly prohibited. Always use protective clothing and equipment. Remove all contaminated clothing and wash thoroughly when finished working. Keep food and drink away from material and from area where material is being used. Spraying of material can cause an oxygen deficient environment. Use proper ventilation to remove vapors, mist and fumes combined with NIOSH approved respirator.

Respiratory Protection: When working with this material use a MSHA/NIOSH approved cartridge respirator or suitable respiratory protection to keep airborne mists and vapor concentrations below the PEL & TLV limits. When using in poorly ventilated and confined spaces, use a fresh-air supplying respirator or a self-contained breathing apparatus.

Eye/Face Protection: Use safety glasses with chemical splash goggles or faceshield.

Skin Protection: Use chemical resistant gloves.

Body Protection: Impervious clothing, flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Contaminated Gear: Take off contaminated clothing immediately and wash before reuse.

Section 9 – Physical and Chemical Properties

This mixture typically exhibits the following properties under normal circumstances:

Appearance: Pale Yellow Odor: Organic Solvent pH: No data available Freezing point: No data available Flash point: -4 F, -20 C Flammability: No data available Vapor Pressure: 38.9 mmHg Density (Lb/Gal) 6.60 Partition coefficient (n-octanol water): No data available Decomposition temperature: No data available Regulatory Coating VOC g/L 742 Actual Coating VOC g/L 656 Weight Percent Volatile 94.51 % Weight VOC 83.01 % Wt Exempt VOC 11.50	Physical State: Liquid Odor Threshold: No data available Melting point: No data available Boiling range: 56° C Evaporation rate: No data available Explosive Limits: 1% - 13% Vapor Density: 1.7 Solubility: No data available Autoignition temperature: 343° C Viscosity: No data available Regulatory Coating VOC lb/gal: 6.19 Actual Coating VOC lb/ga: 5.48 Specific Gravity (SG): 0.791 % Weigh Water 0.0 % Vol Exempt VOC: 11.48
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Section 10 – Stability and Reactivity

Reactivity: No data available

Stability: Stable under recommended storage conditions

Possibility of hazardous reactions: Vapors may form explosive mixture with air. Hazardous polymerization will not occur.

Conditions to avoid: Heat, flame and sparks. Extreme temperature and direct sunlight.

Incompatibility with: Acids, Strong bases, Strong oxidizers

Hazardous products produced under decomposition: Carbon Monoxide, Carbon Dioxide.

Section 11 – Toxicological Information

Mixture Toxicity

Oral Toxicity: 3.27mg/kg

Dermal Toxicity: 4,363 mg/kg

Inhalation Toxicity: 17 mg/L

Component Toxicity

64742-89-8	Light Aliphatic Solvent Naphtha (Petroleum) Oral: 5,000 mg/kg (Mouse) Dermal: 3,000 mg/kg (Rabbit)
78-93-3	Methyl Ethyl Ketone Oral: 2,484 mg/kg (Rat) Dermal: 5,000 mg/kg (Rabbit)
110-43-0	Methyl n-Amyl Ketone Oral: 1,600 mg/kg (Rat) Inhalation: 4,000 ppm (Rat)
71-36-3	Butyl Alcohol Oral: 700 mg/kg (Rat) Dermal: 3,402 mg/kg (Rabbit)

This mixture has not been tested for toxicological effects.

Acute Effects:

INHALATION – Dizziness, breathing difficulty, headaches, & loss of coordination

EYE CONTACT – Moderate irritation, tearing, redness, and blurred vision

SKIN CONTACT: Moderate irritant. Can dry and defat skin causing cracks, irritation, and dermatitis.

INGESTION: Can cause gastrointestinal irritation, vomiting, nausea, & diarrhea.

Chronic Effects: May affect liver, kidney and central nervous system with repeated exposure. Prolonged or repeated exposure may cause lung injury. May cause skin sensitization or allergic skin reaction.

Routes of Entry: Inhalation – Skin Contact – Eye Contact – Ingestion

Target Organs: Eyes – Kidneys – Liver – Lungs – Central Nervous System – Reproductive System – Skin – Peripheral Nervous System – Respiratory System - Other

EFFECTS OF OVEREXPOSURE

Short Term Exposure The vapors of butyl alcohols irritates the eyes and respiratory tract. They can irritate the skin and cause rash or burning feeling on contact. May affect the central nervous system. Exposure to high concentrations could cause headache, nausea, vomiting, and dizziness. Exposure to high levels of the n-isomer may cause unconsciousness and may lead to irregular heartbeat. The oral LD50 value for rats for the various isomers are as follows: (n-) 790 mg/kg; (sec-) 6,480 mg/kg; (iso-) 2,460 mg/kg; (tert-) 3,500 mg/kg. Methyl n-amyl ketone can affect you when breathed in and by passing through your skin. Irritates the eyes and the respiratory tract. May affect the central nervous system. Breathing the vapor can cause dizziness and lightheadedness, and can make you pass out. Irritates the eyes and the respiratory tract. May affect the central nervous system. Contact can irritate the skin. Exposure can irritate the eyes and respiratory tract. Exposure to high concentrations can cause dizziness, lightheadedness, and unconsciousness.

Long Term Exposure Repeated or prolonged contact with skin may cause dermatitis, drying and cracking of the skin. Exposure to the n-isomer can damage the liver, heart, and kidneys, cause hearing loss and affect sense of balance. Causes skin irritation with cracking and drying; destroys the skin's natural oils. May cause liver and kidney damage. May affect the nervous system. Repeated skin exposure can cause drying and cracking of the skin. This chemical has not been adequately evaluated to determine whether brain or nerve damage could occur with repeated exposure. However, many solvents and other petroleum-based chemicals have been shown to cause such. Effects may include reduced memory and concentration, personality changes (withdrawal, irritability), and fatigue, sleep disturbances, reduced coordination, and/or effects on the nerves to the arms and legs (weakness, "pins and needles"). Has been implicated in certain nervous system and brain disorders characterized by weakness, fatigue, sleep disturbances, reduced coordination, heaviness in chest and numbness of hand and feet. These symptoms may develop after 1 year of exposure to vapor concentrations of 50 – 200 ppm. Improvement is gradual and may take years after exposure is discontinued. Animal tests show that this chemical is a teratogen in animals and possibly causes toxic effects upon human reproduction.

The following chemicals comprise of at least 0.1% of this mixture and are listed and/or classified as carcinogens of potential carcinogens by the NTP, IARC, OSHA (mandatory listing) or ACGIH (optional listing).

<u>CAS Number</u>	<u>Description</u>	<u>% Weight</u>	<u>Carcinogen Rating</u>
64742-89-8	Light Aliphatic Solvent Naphtha (Petroleum)	50 to 60%	Light Aliphatic Solvent Naphtha (Petroleum): EU REACH: Present (P)

Section 12 – Ecological Information

This material has not been tested for ecological effects.

Persistence and degradability: No data available.

Bioaccumulative potential: No data available.

Mobility in soil: No data available

Other adverse effects: Contains photochemically reactive solvent.

Component Ecotoxicity

Light Aliphatic Solvent Naphtha (Petroleum)	72 Hr EC50 Pseudokirchneriella subcapitata: 4700 mg/L
Methyl Ethyl Ketone	96 Hr LC50 Pimephales promelas: 3130 – 3320 mg/L [flow-through] 48 Hr EC40 Daphnia magna: >520 mg/L; 48 Hr EC50 Daphnia magna: 5091 mg/L; 48 Hr EC50 Daphnia magna: 4025-6440 mg/L [Static]
Acetone	96 Hr LC50 Oncorhynchus mykiss: 4.74 – 6.33 mL/L; 96 Hr LC50 Pimephales promelas: 6210-8120 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 8300 mg/L 48 Hr EC50 Daphnia magna: 10294 – 17705 mg/L [Static]; 48 Hr EC50 Daphnia magna: 12600 – 12700 mg/L
Methyl n-Amyl Ketone	96 Hr LC50 Pimephales promelas: 126 – 137 mg/L [flow-through]
Cutyl Alcohol	96 Hr LC50 Pimephales promelas: 1730-1910 mg/L [static]; 96 Hr LC50 Pimephales promelas: 1910000 mg/L [static] 48 Hr EC50 Daphnia magna: 1983 mg/L; 48 Hr EC50 Daphnia magna: 1897 – 2072 mg/L [static] 96 Hr EC50 Desmodesmus subspicatus: >500 mg/L; 72 Hr EC50 Desmodesmus subspicatus: >500 mg/L.

Section 13 – Disposal Considerations

Product should be disposed of in accordance with all Federal, State and local regulations. Contact a licensed professional waste disposal service to dispose of this material. Subject to hazardous waste generation, treatment, storage and disposal rules under RCRA, 40CFR261.

Section 14 – Transportation Information

The following transportation information is provided based on MM Systems Corporation's interpretation of shipping regulations. Each shipper is responsible for identifying, naming, marking and labeling prior to offering for transport.

Agency	Proper Shipping Name	UN Number	Packing Group	Hazard Class
USDOT	Paint Related Material	UN1263	II	3
IMDG	Paint Related Material	UN1263	II	3
IATA	Paint Related Material	UN1263	II	3

For inner packagings not exceeding 5L each packaged in a strong outer box: Limited Quantity

Section 15 – Regulatory Information

The information listed in this section is not all inclusive of all regulations for this product or the chemical components of this product.

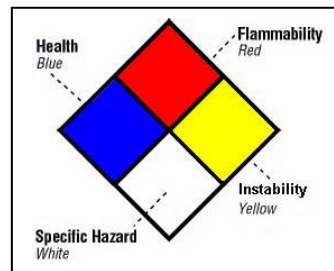
California Hazardous Substance List	None
HAPS – The formulation contains the following HAPS:	None
NJ RTK The following chemicals are listed under New Jersey RTK	71-36-3 Butyl Alcohol 1 to 5% 110-43-0 Methyl n-Amyl Ketone 5 to 10% 67-64-1 Acetone 10 to 20% 78-93-3 Methyl
California Proposition 65	WARNING: This product contains the following chemical(s) known to the State of California to cause birth defects or other reproductive harm – 50-00-1 Formaldehyde 24 PPM
California Proposition 65	WARNING: This product contains the following chemical(s) known to the State of California
PA RTK	The following chemicals are listed under Pennsylvania RTK: 71-36-3 Butyl Alcohol 1 to 5% 110-43-0 Methyl n-Amyl Ketone 5 to 10% 67-64-1 Acetone 10 to 20% 78-93-3 Methyl Ethyl Ketone 10 to 20%
EU REACH SIN	The chemicals listed below are on the EU REACH SIN list None

SARA 312	This Product contains the following chemicals subject to the reporting requirements of SARA 312: 71-36-3 Butyl Alcohol 1 to 5% 78-93-3 Methyl Ethyl Ketone 10 to 20%
SARA 313	This Product contains the following chemicals subject to the reporting requirements of SARA 313: 67-56-1 Methyl Alcohol 30 to 40 PPM 78-93-3 Methyl Ethyl Ketone 10 to 20%
WHMIS	71-36-3 Butyl Alcohol 1 to 5% 110-43-0 Methyl n-Amyl Ketone 5 to 10% 67-64-1 Acetone 10 to 20% 78-93-3 Methyl Ethyl Ketone 10 to 20%
TSCA	The following are not listed under TSCA: None
SARA	The following are reportable under SARA 71-36-3 Butyl Alcohol 1.0 – 5% 64742-89-8 Light Aliphatic Solvent Naphtha (Petroleum) 50 – 60% 78-93-3 Methyl Ethyl Ketone 10 – 20%

Section 16 – Other Information

Note: HMIS Ratings involve data and interpretations that can vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all information contained in this SDS must be considered.

HEALTH HAZARD <i>(Possible injury)</i>		<input type="checkbox"/>
FLAMMABILITY <i>(Susceptibility to burning)</i>		<input type="checkbox"/>
REACTIVITY <i>(Susceptibility to release energy)</i>		<input type="checkbox"/>
PERSONAL PROTECTION <i>(Check all Protective Equipment that apply)</i>		
<input type="checkbox"/> Safety Glasses	<input type="checkbox"/> Apron	
<input type="checkbox"/> Face Shield	<input type="checkbox"/> Full Suit	
<input type="checkbox"/> Splash Goggles	<input type="checkbox"/> Boots	
<input type="checkbox"/> Vapor Respirator	<input type="checkbox"/> Dust Respirator	
<input type="checkbox"/> Gloves	<input type="checkbox"/> Other _____	



Date Prepared: 1/21/2015

To the best of our knowledge, the information contained herein is accurate, obtained from sources believed by MM Systems Corporation to be accurate. As with all chemicals, KEEP AWAY FROM CHILDREN AND ANIMALS. FOR PROFESSIONAL USE ONLY. The hazard information contained herein is offered solely for the consideration of the user, subject to his own investigation and verification of compliance with applicable regulations, including the safe use of the project under every foreseeable condition.



Revision Number: 003.0

Issue date: 08/08/2014

1. PRODUCT AND COMPANY IDENTIFICATION

Product name:	LOCTITE 401 ADH INST known as LOCTITE PRISM 401	IDH number:	229586
Product type:	Cyanoacrylate	Item number:	17738
Restriction of Use:	None identified	Region:	United States
Company address:	Henkel Corporation One Henkel Way Rocky Hill, Connecticut 06067	Contact information:	Telephone: (860) 571-5100 MEDICAL EMERGENCY Phone: Poison Control Center 1-877-671-4608 (toll free) or 1-303-592-1711 TRANSPORT EMERGENCY Phone: CHEMTREC 1-800-424-9300 (toll free) or 1-703-527-3887 Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING: BONDS SKIN IN SECONDS.
COMBUSTIBLE LIQUID.
CAUSES EYE IRRITATION.
MAY CAUSE RESPIRATORY IRRITATION.

HAZARD CLASS	HAZARD CATEGORY
FLAMMABLE LIQUID	4
EYE IRRITATION	2B
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	3

PICTOGRAM(S)



Precautionary Statements

Prevention: Keep away from heat, sparks, open flames, hot surfaces - no smoking. Avoid breathing vapors, mist, or spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves, eye protection, and face protection.

Response: IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing. Call a poison control center or physician if you feel unwell. If eye irritation persists: Get medical attention. In case of fire: Use foam, dry chemical or carbon dioxide to extinguish.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
Ethyl 2-cyanoacrylate	7085-85-0	60 - 100
Thickener	Proprietary	5 - 10

* Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If symptoms develop and persist, get medical attention.
Skin contact:	Do not pull bonded skin apart. Soak in warm soapy water. Gently peel apart using a blunt instrument. If skin is burned due to the rapid generation of heat by a large drop, seek medical attention. If lips are bonded, apply warm water to the lips and encourage wetting and pressure from saliva in mouth. Peel or roll lips apart. Do not pull lips apart with direct opposing force.
Eye contact:	Immediately flush with plenty of water for at least 15 minutes. Get medical attention. If eyelids are bonded closed, release eyelashes with warm water by covering with a wet pad. Do not force eye open. Cyanoacrylate will bond to eye protein and will cause a lachrymatory effect which will help to debond the adhesive. Keep eye covered until debonding is complete, usually within 1-3 days. Medical attention should be sought in case solid particles of polymerized cyanoacrylate trapped behind the eyelid caused abrasive damage.
Ingestion:	Ensure breathing passages are not obstructed. The product will polymerize rapidly and bond to the mouth making it almost impossible to swallow. Saliva will separate any solidified product in several hours. Prevent the patient from swallowing any separated mass.
Symptoms:	See Section 11.
Notes to physician:	Surgery is not necessary to separate accidentally bonded tissues. Experience has shown that bonded tissues are best treated by passive, non-surgical first aid. If rapid curing has caused thermal burns they should be treated symptomatically after adhesive is removed.

5. FIRE FIGHTING MEASURES

Extinguishing media:	Water spray (fog), foam, dry chemical or carbon dioxide.
Special firefighting procedures:	Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA).
Unusual fire or explosion hazards:	Not available.

Hazardous combustion products: Trace amounts of toxic and/or irritating fumes may be released and the use of breathing apparatus is recommended.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions: Do not allow product to enter sewer or waterways.

Clean-up methods: Do not use cloths for mopping up. Flood with water to complete polymerization and scrape off the floor. Cured material can be disposed of as non-hazardous waste. Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up.

7. HANDLING AND STORAGE

Handling: Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists of this product. Wash thoroughly after handling. Avoid contact with fabric or paper goods. Contact with these materials may cause rapid polymerization which can generate smoke and strong irritating vapors, and cause thermal burns.

Storage: Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use.

For information on product shelf life contact Henkel Customer Service at (800) 243-4874.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Ethyl 2-cyanoacrylate	0.2 ppm TWA	None	None	None
Thickener	None	None	None	None

Engineering controls: Use positive down-draft exhaust ventilation if general ventilation is insufficient to maintain vapor concentration below established exposure limits.

Respiratory protection: Use NIOSH approved respirator if there is potential to exceed exposure limit(s).

Eye/face protection: Safety goggles or safety glasses with side shields. Full face protection should be used if the potential for splashing or spraying of product exists.

Skin protection: Use nitrile gloves and aprons as necessary to prevent contact. Do not use PVC, nylon or cotton.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid
Color: Colorless, Transparent
Odor: Sharp
Odor threshold: 1 - 2 ppm
pH: Not available.
Vapor pressure: < 0.2 mm hg
Boiling point/range: > 149 °C (> 300.2 °F)
Melting point/ range: Not available.
Specific gravity: 1.05
Vapor density: Approximate 3
Vapor density: 3
Flash point: 80 - 93 °C (176°F - 199.4 °F)

Flammable/Explosive limits - lower: Not available.
Flammable/Explosive limits - upper: Not available.
Autoignition temperature: 485 °C (905°F)
Evaporation rate: Not available.
Solubility in water: Polymerises in presence of water.
Partition coefficient (n-octanol/water): Not applicable
VOC content: < 2 %; < 20 g/l (California SCAQMD Method 316B) (Estimated)
Viscosity: Not available.
Decomposition temperature: Not available.

10. STABILITY AND REACTIVITY

Stability: Stable under recommended storage conditions.
Hazardous reactions: Rapid exothermic polymerization will occur in the presence of water, amines, alkalis and alcohols.
Hazardous decomposition products: None
Incompatible materials: Water, Amines, Alkalis, Alcohols.
Reactivity: Not available.
Conditions to avoid: Spontaneous polymerization.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes

Potential Health Effects/Symptoms

Inhalation: May cause respiratory tract irritation. Exposure to vapors above the established exposure limit results in respiratory irritation, which may lead to difficulty in breathing and tightness in the chest.
Skin contact: May cause skin irritation. Bonds skin in seconds. Cyanoacrylates have been reported to cause allergic reaction but due to rapid polymerization at the skin surface, an allergic response is rare. Cyanoacrylates generate heat on solidification. In rare circumstances a large drop will burn the skin. Cured adhesive does not present a health hazard even if bonded to the skin.
Eye contact: Irritating to eyes. Causes excessive tearing. Eyelids may bond.
Ingestion: Not expected to be harmful by ingestion. Rapidly polymerizes (solidifies) and bonds in mouth. It is almost impossible to swallow.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Ethyl 2-cyanoacrylate	None	Irritant, Allergen, Respiratory
Thickener	None	Irritant

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Ethyl 2-cyanoacrylate	No	No	No
Thickener	No	No	No

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.
Hazardous waste number: Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: Combustible liquid, n.o.s. (Cyanoacrylate ester)
Hazard class or division: Combustible Liquid
Identification number: NA 1993
Packing group: III

International Air Transportation (ICAO/IATA)

Proper shipping name: Aviation regulated liquid, n.o.s. (Cyanoacrylate ester)
Hazard class or division: 9
Identification number: UN 3334
Packing group: III
Exceptions: Primary packs containing less than 500ml are unregulated by this mode of transport and may be shipped unrestricted.

Water Transportation (IMO/IMDG)

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
TSCA 12 (b) Export Notification: None above reporting de minimis
CERCLA/SARA Section 302 EHS: None above reporting de minimis
CERCLA/SARA Section 311/312: Immediate Health, Delayed Health, Fire, Reactive
CERCLA/SARA Section 313: None above reporting de minimis
California Proposition 65: No California Proposition 65 listed chemicals are known to be present.

Canada Regulatory Information

CEPA DSL/NDSL Status: Contains one or more components listed on the Non-Domestic Substances List. All other components are listed on or are exempt from listing on the Domestic Substances List. Components listed on the NDSL must be tracked by all Canadian Importers of Record as required by Environment Canada. They may be imported into Canada in limited quantities. Please contact Regulatory Affairs for additional details.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: New Safety Data Sheet format.

Prepared by: Catherine Bimler, Regulatory Affairs Specialist
Issue date: 08/08/2014

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.



Revision Number: 006.0

Issue date: 10/23/2014

1. PRODUCT AND COMPANY IDENTIFICATION

Product name:	LOCTITE SF 770 PRIMER known as LOCTITE® 770™ Primer Prism® P	IDH number:	135266
Product type:	Primer	Item number:	18396
Restriction of Use:	None identified	Region:	United States
Company address:	Contact information:		
Henkel Corporation	Telephone: (860) 571-5100		
One Henkel Way	MEDICAL EMERGENCY Phone: Poison Control Center		
Rocky Hill, Connecticut 06067	1-877-671-4608 (toll free) or 1-303-592-1711		
	TRANSPORT EMERGENCY Phone: CHEMTREC		
	1-800-424-9300 (toll free) or 1-703-527-3887		
	Internet: www.henkelna.com		

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER: HIGHLY FLAMMABLE LIQUID AND VAPOR.
MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS.
CAUSES SKIN IRRITATION.
CAUSES SERIOUS EYE IRRITATION.
MAY CAUSE DROWSINESS OR DIZZINESS.

HAZARD CLASS	HAZARD CATEGORY
FLAMMABLE LIQUID	2
SKIN IRRITATION	2
EYE IRRITATION	2A
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	3
ASPIRATION HAZARD	1

PICTOGRAM(S)



Precautionary Statements

Prevention: Keep away from heat, sparks, open flames, hot surfaces - no smoking. Keep container tightly closed. No release into water. Use explosion-proof equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing vapors, mist, or spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves, eye protection, and face protection.

Response: IF SWALLOWED: Immediately call a physician or poison control center. If on skin (or hair): Take off immediately all contaminated clothing. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing. Call a poison control center or physician if you feel unwell. Do NOT induce vomiting. If skin irritation occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off contaminated clothing. In case of fire: Use foam, dry chemical or carbon dioxide to extinguish.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local

governmental regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
n-Heptane	142-82-5	60 - 100

* Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation:	Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. If symptoms develop and persist, get medical attention.
Skin contact:	Immediately wash skin thoroughly with soap and water. If symptoms develop and persist, get medical attention. Wash clothing before reuse.
Eye contact:	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
Ingestion:	Do not induce vomiting. Get medical attention.
Symptoms:	See Section 11.
Notes to physician:	Aspiration may cause pulmonary edema or aspiration pneumonia.

5. FIRE FIGHTING MEASURES

Extinguishing media:	Foam, dry chemical or carbon dioxide.
Special firefighting procedures:	Water should be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.
Unusual fire or explosion hazards:	Vapors may accumulate in low or confined areas, travel considerable distance to source of ignition, and flash back.
Hazardous combustion products:	Oxides of carbon. Oxides of nitrogen.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions:	Remove all sources of ignition. Do not allow product to enter sewer or waterways.
Clean-up methods:	Ensure adequate ventilation. Store in a partly filled, closed container until disposal. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up.

7. HANDLING AND STORAGE

- Handling:** Use only with adequate ventilation. Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling.
- Storage:** For safe storage, store between 0 °C (32°F) and 49 °C (120.2 °F) Keep in a cool, well ventilated area. Keep container closed. Store away from ignition sources.

For information on product shelf life contact Henkel Customer Service at (800) 243-4874.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
n-Heptane	400 ppm TWA 500 ppm STEL	500 ppm (2,000 mg/m ³) PEL	None	None

- Engineering controls:** Local exhaust ventilation is recommended when general ventilation is not sufficient to control airborne contamination below occupational exposure limits.
- Respiratory protection:** Use NIOSH approved respirator if there is potential to exceed exposure limit(s). Observe OSHA regulations for respirator use (29 CFR 1910.134).
- Eye/face protection:** Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing. Full face protection should be used if the potential for splashing or spraying of product exists.
- Skin protection:** Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical state:** Liquid
- Color:** Transparent, colourless, Clear
- Odor:** Aliphatic
- Odor threshold:** Not available.
- pH:** Not available.
- Vapor pressure:** 35 mm hg (20 °C (68°F))
- Boiling point/range:** 205 - 210 °F (96.1 - 98.9 °C) None
- Melting point/ range:** Not available.
- Specific gravity:** 0.68
- Vapor density:** 3.45
- Flash point:** -2 °C (28.4 °F)
- Flammable/Explosive limits - lower:** 1.1 %
- Flammable/Explosive limits - upper:** 6.7 %
- Autoignition temperature:** Not available.
- Evaporation rate:** 2.7 (Ether = 1)
- Solubility in water:** Not miscible
- Partition coefficient (n-octanol/water):** Not available.
- VOC content:** 99.9 %; 680 g/l
- Viscosity:** Not available.
- Decomposition temperature:** Not available.

10. STABILITY AND REACTIVITY

Stability:	Stable
Hazardous reactions:	Will not occur.
Hazardous decomposition products:	No data
Incompatible materials:	Acids. Oxidizing agents.
Reactivity:	Not available.
Conditions to avoid:	Heat, flames, sparks and other sources of ignition.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes, Ingestion

Potential Health Effects/Symptoms

Inhalation:	May cause dizziness, incoordination, headache, nausea, and vomiting.
Skin contact:	Causes skin irritation.
Eye contact:	Causes serious eye irritation.
Ingestion:	This product may be fatal if it is swallowed. Principal hazard of ingestion is aspiration into the lungs and subsequent pneumonitis.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
n-Heptane	Inhalation LC50 (RAT, 4 h) = 103 mg/l	Central nervous system, Irritant

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
n-Heptane	No	No	No

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number: D001: Ignitable.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name:	Heptanes
Hazard class or division:	3
Identification number:	UN 1206
Packing group:	II

International Air Transportation (ICAO/IATA)

Proper shipping name: Heptanes
Hazard class or division: 3
Identification number: UN 1206
Packing group: II
Exceptions: May Qualify as Consumer Commodity, ID8000, (Not more than 500 ml)

Water Transportation (IMO/IMDG)

Proper shipping name: HEPTANES
Hazard class or division: 3
Identification number: UN 1206
Packing group: II
Exceptions: Limited quantity (Not more than 1 L).

15. REGULATORY INFORMATION**United States Regulatory Information**

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
TSCA 12 (b) Export Notification: None above reporting de minimis
CERCLA/SARA Section 302 EHS: None above reporting de minimis
CERCLA/SARA Section 311/312: Immediate Health, Delayed Health, Fire
CERCLA/SARA Section 313: None above reporting de minimis
CERCLA Reportable quantity: n-Heptane (CAS# 142-82-5) 100 lbs. (45.4 kg)
California Proposition 65: No California Proposition 65 listed chemicals are known to be present.

Canada Regulatory Information

CEPA DSL/NDL Status: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: New Safety Data Sheet format.

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