

MM Expanded Rubber Sealing System

Expansion Joint System

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

- MM High Strength Epoxy
 - Part A
 - Part B

- 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

According to 29CFR1910/1200 and GHS Rev.3

Effective date: 09.15.2015

MM High Strength Epoxy Part A

SECTION 1: Identification of the substance/mixture and of the supplier

Product name: MM High Strength Epoxy Part A

Manufacture/Supplier Trade Name:

Manufacture/Supplier Article Number:

Recommended uses of the product and restrictions on use: Concrete patching/bonding

Manufacturer Details:

MM Systems Corporation

50 MM Way

Pendergrass, GA 30567

(706)824-7500

Emergency telephone number:

Infotrac 800-535-5053

SECTION 2: Hazards Identification

Classification of the substance or mixture:



Irritant

Skin irritation, category 2

Eye irritation, category 2A

Skin sensitization, category 1



Environmentally Damaged

Chronic hazards to the aquatic environment, category 2

Signal word: Warning

Hazard statement:

Harmful if swallowed

Causes skin irritation

Causes serious eye irritation

Toxic to aquatic life with long lasting effects

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MM High Strength Epoxy Part A

Precautionary statements:

Keep container tightly closed

If medical advice is needed, have product container or label at hand

Keep out reach of children

Read label before use

Avoid breathing dust/gas/mist/vapors/spray

Wash skin thoroughly after handling

Contaminated work clothing should not be allowed out of the workplace

Avoid release to the environment

Wear protective gloves/protective clothing/eye protective/face protection

IF ON SKIN: Wash with soap and water

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do.

Continue rinsing

If skin irritation or a rash occurs. Get medical advice/attention

Take off contaminated clothing and wash before reuse

Collect spillage

Store locked up

Dispose of contents and container as instructed in Section 13

Other Non-GHS Classification: none

SECTION 3: Composition/information on ingredients

Ingredients

CAS 25068-38-6	BISPHENOL-a-(EPICHLORHYDRIN) AND EPOXY RESIN	20-30%
CAS 2461-15-6	[[[2-ETHYLHEXYL]OXY]METHYL]OXIRANE	3-6%
CAS 13463-67-7	Titanium dioxide	2-3%
CAS 14808-60-7	Silicon dioxide	50-70%
CAS 12174-11-7	Attapulgite clay	6-8%

Percentages are by weight

SECTION 4: First aid measures

Description of first aid measures

After inhalation:

Safety Data Sheet

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Move exposed to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Loosen clothing and place exposed in a comfortable position.

After skin contact:

Wash hands and exposed skin with soap and plenty of water.

After eye contact:

Seek medical attention. Protect unexposed eye. Flush exposed eye gently using water for 15-20 minutes

Remove contact lenses while rinsing

After swallowing:

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention

Most important symptoms and effects, both acute and delayed:

Shortness of breath, Headache, Nausea, Dizziness, Irritation-all routes of exposure. Acute pneumoconiosis or silicosis from overwhelming exposure to crystalline silica dust has occurred. Lungs may be affected by repeated or prolonged exposure to fibers, resulting in fibrosis. This substance is possible carcinogenic to humans. Persons with impaired respiratory function may be more susceptible to the effects of this substance. Smoking can increase the risk of lung injury.

Indication of an 7y immediate medical attention and special treatment needed

If seeking medical attention provide SDS document to physician. Physician should treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam

Unsuitable extinguishing agents: None

Advice for firefighter:

Protective equipment: Wear protective eyewear, gloves, and clothing. Refer to section

Additional information (precautions)

Avoid inhaling gases, fumes, dust, mist, and aerosols. Avoid contact with skin, eyes and clothing

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SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:
Ensure adequate ventilation. Ensure that air-handling systems are operational

Environmental precautions:
Should not be released into environment. Prevent from reaching drains, sewer, or waterway

Methods and material for containment and cleaning up:
Soak up with inert absorbent material and dispose of as hazardous waste. Wear protective eyewear, gloves, and clothing. Refer to section 8. Always obey local regulations. If necessary use trained response staff or contractor. Evacuate personnel to safe areas. Containerize for disposal. Refer to section 13. Keep in suitable closed containers for disposal.
Reference to other sections: none

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling;
Avoid contact with skin, eyes, and clothing. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Follow proper disposal methods. Refer to Section 13. Do not eat, drink, smoke, or use personal products when handling chemical substance.

Conditions for safe storage, including any incompatibilities:
Store in a cool location. Keep away from food and beverages. Protect from freezing and physical damage. Provide ventilation for containers. Keep container tightly sealed, Store away from incompatible materials

SECTION 8: Exposure controls/personal protection

Control Parameters: 13463-67-7, Titanium dioxide, ACGIH TLV: 10, OSHA PEL: 10

Appropriate Engineering controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Provide exhaust ventilation or other engineering controls To keep the airborne concentrations of vapor and mist below the applicable workplace exposure limits indicated above. (Occupational Exposure-OELS)

Respiratory protection: Not required under normal conditions of use. Where risk Assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100

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Protection of skin: (US) or type P3 (EN143) respirator cartridges as a backup to engineering controls. When necessary use NIOSH approved breathing equipment. Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Use proper glove removal technique without touching outer service. Avoid skin contact with used gloves. Wear protective clothing.

Eye protection: Faceshield (8-inch minimum) with tightly fitting safety goggles are appropriate eyewear. Wear equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU)

General hygienic measures: Perform routine housekeeping. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes, and clothing. Before rewearing wash contaminated clothing.

SECTION 9: Physical and chemical properties

Appearance (physical State, color)	white, gritty paste	Explosion limit lower	Not determined
		Explosion limit upper	Not determined
Odor:	Slight sweet odor	Vapor pressure at 20⁰	Not determined
Odor threshold:	Not Determined	Vapor density	Not determined
PH-value:	Not Determined	Relative density	1.85
Melting/Freezing Point:	Not Determined	Solubilities	Insoluble in water
Boiling point/Range:	Not Determined	Partition coefficient (n-octanol/water)	Not determined
Flash point(closed cup):	Not Determined	Auto/self-ignition Temperature	Not determined
Evaporation rate:	Not Determined	Decomposition Temp	Not determined
Flammability (solid Gaseous)	Not Determined	Viscosity	a. Kinematic
			Not determined
			b. Dynamic:
			Not determined
Density at 20⁰	Not Determined		

SECTION 10: Stability and reactivity

Safety Data Sheet

According to 29CFR1910/1200 and GHS Rev.3

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Reactivity:

Nonreactive under normal conditions

Chemical stability:

Stable under normal conditions

Possible hazardous reactions:

None under normal conditions

Conditions to avoid:

Incompatible materials

Incompatible materials:

Acids, Bases, Oxidizing agents, Hydrogen fluoride, Acetylene and ammonia

Hazardous decomposition products:

25068-38-6: Strong oxidizing, acids, amines, and bases

SECTION 11: Toxicological information
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Acute Toxicity:

Oral:

25068-38-6 LD50 Oral-rat-13,600 mg/kg

2461-15-6 LD50 Oral-rat-7,800 mg/kg

Inhalation:

N/A

Chronic Toxicity:

Inhalation:

May cause respiratory irritation

Skin corrosion/irritation:

1408-60-7

Serious eye damage/irritation:

14808-60-7

Respiratory or skin sensitization:

May cause skin sensitization in some individuals

Carcinogenicity:

N/A

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MM High Strength Epoxy Part A

Reproductive Toxicity: No additional information

STOT-single and repeated exposure:

2461-15-6: Inhalation-May cause respiratory irritation

Additional toxicological information: No additional information

SECTION 12: Ecological information

Ecotoxicity:

2461-15-6: LC50-Carassius(goldfish)-14mg/l-24 h

13463-67-7: LC50-Other fish->1,000 mg/l-96 h

13463-67-7: EC50-Daphnia magna(Water flea)->1,000 mg/l-48 h

Persistence and degradability:

25068-38-6: Result: According to the results of test of biodegradability this product is not readily biodegradable. 1217-11-7: long term degradation products may arise.

Bioaccumulative potential: No additional information

Mobility in soil: no additional information

Other adverse effects: no additional information

SECTION 13: Disposal considerations

Waste disposal recommendations:

Contact a licensed professional waste disposal service to dispose of this material. Dispose of empty containers as usual product. Product or containers must not be disposed together with household garbage. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

SECTION 14: Transport information

US DOT

Not-Regulated

Safety Data Sheet

According to 29CFR1910/1200 and GHS Rev.3

Effective date: 09.15.2015

MM High Strength Epoxy Part A

UN Number: 3082
ADR,AND,DOT,IMDG,IATA

Limited Quantity : NONE

Bulk: Non Bulk

RQ (if applicable): none
Proper shipping name: Environmentally
Hazardous substance, liquid, n.o.s.
Hazardous substance, liquid, n.o.s.
(reaction product: bisphenol-A-
(epichlorhydrin) and epoxy resin(number
Average molecular weight <=700)

RQ (if applicable): none
Proper shipping name: Environmentally
Hazardous substance, liquid, n.o.s.
Hazardous substance, liquid, n.o.s.
(reaction product: bisphenol-A-
(epichlorhydrin) and epoxy resin(number
Average molecular weight <=700)

Hazard Class: 9

Hazard class: 9

Packing Group: III

Packing Group: III

Marine Pollutant(if applicable): no

Marine Pollutant (if applicable): no

SECTION 15: regulatory information

United States (USA)

SARA SECTION 311/312 (Specific toxic chemical listings):
Acute

SARA SECTION 311/312 (Specific toxic chemical listings):
None of the ingredients are listed.

RCRA (hazardous waste code):
None of the ingredients are listed.

TSCA (Toxic substance control act)
All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act)
None of the ingredients are listed.

Proposition 65 (California):

Chemicals known to cause cancer:
None of the ingredients are listed.

Chemicals known to cause reproduction toxicity for females:
None of the ingredients are listed.

Chemicals known to cause reproduction toxicity for males:
None of the ingredients are listed.

Chemicals known to cause developmental toxicity:
None of the ingredients are listed.

Safety Data Sheet

According to 29CFR1910/1200 and GHS Rev.3

Effective date: 09.15.2015

MM High Strength Epoxy Part A

Canada

Canadian Domestic Substance list (DSL)

None of the ingredients are listed.

SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take these precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of the material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

NFPA: 2-10

HMIS: 3-1-0

GHS Full Text Phrases: None

Abbreviations and Acronyms: None

Effective date: 09.15.2015

Last updated: 09.15.2015

Safety Data Sheet

According to 29CFR1910/1200 and GHS Rev.3

Effective date: 09.15.2015

MM High Strength Epoxy Part B

SECTION 1: Identification of the substance/mixture and of the supplier

Product name: MM High Strength Epoxy Part B

Manufacture/Supplier Trade Name:

Manufacture/Supplier Article Number:

Recommended uses of the product and restrictions on use: High Strength Epoxy

Manufacturer Details:

MM Systems Corporation

50 MM Way

Pendergrass, GA 30567

706-824-7500

Emergency telephone number:

Infotrac 800-535-5053

SECTION 2: Hazards Identification

Classification of the substance or mixture:



Irritant

Skin irritation, category 2

Eye irritation, category 2A

Skin sensitization, category 1

Specific target organ toxicity following single exposure, category 1

Acute toxicity(oral,dermal,inhalation), category 1



Health hazard:

Reproductive toxicity, category 2



Skin Corrosion/irritation-Skin irritation 2

Skin sensitizer 1

Eye irritation 2

STOT single exposure 3

Acute toxicity-Oral-Acute tox. 4

Reproductive toxicity-repr. 2

Signal word: Danger

Hazard statement:

Harmful if swallowed

Causes skin irritation

Causes serious eye irritation

Harmful if swallowed

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May cause an allergic skin irritation

Safety Data Sheet

According to 29CFR1910/1200 and GHS Rev.3

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MM High Strength Epoxy Part B

Precautionary statements:

Keep container tightly closed

If medical advice is needed, have product container or label at hand

Keep out reach of children

Read label before use

Avoid breathing dust/gas/mist/vapors/spray

Wash skin thoroughly after handling

Contaminated work clothing should not be allowed out of the workplace

Avoid release to the environment

Wear protective gloves/protective clothing/eye protective/face protection

IF ON SKIN: Wash with soap and water

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do.

Continue rinsing

IF INHALED: Remove victim to fresh air and keep at rest in a comfortable for breathing

If skin irritation or a rash occurs. Get medical advice/attention

Take off contaminated clothing and wash before reuse

Collect spillage

Store locked up

Store in a well ventilated place. Keep container tightly closed

Dispose of contents and container as instructed in Section 13

Other Non-GHS Classification: Health-3,Flammability-1,Physical-0,Personal Protection X

SECTION 3: Composition/information on ingredients

Ingredients

CAS 1408-60-7	Silicon dioxide	60-70%
CAS 68953-36-6	Polyamido Amine	25-30%
CAS 12174-11-7	Attapulgitte clay	5-7+%

Percentages are by weight

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According to 29CFR1910/1200 and GHS Rev.3

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MM High Strength Epoxy Part B

SECTION 4: First aid measures

Description of first aid measures

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After inhalation:

Move exposed to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Loosen clothing and place exposed in a comfortable position.

After skin contact:

Wash hands and exposed skin with soap and plenty of water. Rinse/flush exposed skin gently using soap and water for 15-20 minutes. Seek medical advice if discomfort or irritation persists. Wash away any material which may have contacted the body with copious amounts of water or soap.

After eye contact:

Seek medical attention. Protect unexposed eye. Flush exposed eye gently using water for 15-20 minutes

Remove contact lenses while rinsing

After swallowing:

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention

Most important symptoms and effects, both acute and delayed:

Shortness of breath, Headache, Nausea, Dizziness, Irritation-all routes of exposure. Acute pneumoconiosis or silicosis from overwhelming exposure to crystalline silica dust has occurred. Lungs may be affected by repeated or prolonged exposure to fibers, resulting in fibrosis. This substance is possible carcinogenic to humans. Persons with impaired respiratory function may be more susceptible to the effects of this substance. Smoking can increase the risk of lung injury.

Indication of any immediate medical attention and special treatment needed

If seeking medical attention provide SDS document to physician. Physician should treat symptomatically.

Safety Data Sheet

According to 29CFR1910/1200 and GHS Rev.3

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MM High Strength Epoxy Part B

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam. Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition. If large quantities of combustibles are involved, use water in flooding quantities as spray and fog. Use water spray to Knock-down vapors. Page 3 of 10

Unsuitable extinguishing agents: None

Advice for firefighter:

Protective equipment: Wear protective eyewear, gloves, and clothing. Refer to section Additional information (precautions)

Avoid inhaling gases, fumes, dust, mist, and aerosols. Avoid contact with skin, eyes and clothing. Additional information (precautions)

If material not on fire and not involved in fire: keep sparks, flames, and other sources of ignition away. Keep material out of water sources and sewers. Build dikes to contain flow as necessary. Avoid inhaling gases, fumes, dust, mist, vapor, and aerosols. Avoid contact with skin, eyes and clothing. Move product containers away from fire or keep cool with water spray as a protective measure, where feasible. Avoid generating dust, fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Water⁴ spill: Neutralize with agricultural lime (CaO), crushed limestone (CaCO₃) or sodium bicarbonate (NaHCO₃). If dissolved, in region of 10 ppm or greater concentration, apply activated carbon at ten times the spilled amount. Land spill: Dig a pit, pond, lagoon, holding area (should be sealed with an impermeable flexible membrane liner) to contain liquid or solid material. Dike surface flow using soil, sand bags, foamed polyurethane, or foamed concrete. Absorb bulk liquid with fly ash or cement powder. Neutralize as noted for water spill. Ensure adequate ventilation. Ensure that air-handling systems are operational

Environmental precautions:

Should not be released into environment. Prevent from reaching drains, sewer, or waterway. Collect contaminated soil for characterization per section 13.

Methods and material for containment and cleaning up:

Sweep up and shovel. Soak up with inert absorbent material and dispose of as hazardous waste. Wear protective eyewear, gloves, and clothing. Personal protection: P2 filter respirator for harmful particles. Dust deposits should not be allow to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration Avoid dispersal of dust in the air (i.e. clearing dust surface with compressed air). Collect solids in powder form using vacuum with (HEPA filter) Do not handle broken

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MM High Strength Epoxy Part B

packages unless wearing appropriate chemical protective equipment. Wash away any material which may have contacted the body with copious amounts of water and soap. Refer to section 8. Always obey local regulations. If necessary use trained response staff or contractor. Evacuate personnel to safe areas. Containerize for disposal. Refer to section 13. Keep in suitable closed containers for disposal. Page 4 of 10

Sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Reference to other sections: none

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling;

Avoid contact with skin, eyes, and clothing. Follow good hygiene procedures when handling chemical materials. Do Not take working clothes home. Refer to Section 8. Follow proper disposal methods. Combustible dusts formation is a risk. Refer to Section 13. Do not eat, drink, smoke, or use personal products when handling chemical substance.

Conditions for safe storage, including any incompatibilities:

Store in a cool location. Keep away from food and beverages. Protect from freezing and physical damage. Provide ventilation for containers. Keep container tightly sealed, Store away from incompatible materials. Avoid storage near extreme heat, ignition sources or open flame.

SECTION 8: Exposure controls/personal protection

Control Parameters:

68953-36-6 AIHA WEEL (2004-01.01) TWA 5 mg/m³

Appropriate Engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Provide exhaust ventilation or other engineering controls To keep the airborne concentrations of vapor and mist below the applicable workplace exposure limits indicated above. (Occupational Exposure-OELS). It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosive relief vents or an explosive suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e. there is no leakage from the equipment) Use under a fume hood.

Respiratory protection:

Where risk Assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN143) respirator cartridges as a backup to engineering controls. When necessary use NIOSH approved breathing equipment.

Protection of skin:

Select glove material impermeable and resistant to the

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substance. Select glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Use proper glove removal technique without touching outer service. Avoid skin contact with used gloves. Wear protective clothing.

Eye protection:

Faceshield (8-inch minimum) with tightly fitting safety goggles are appropriate eyewear. Wear equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU)

General hygienic measures:

Perform routine housekeeping. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes, and clothing. Before rewearing wash contaminated clothing.

SECTION 9: Physical and chemical properties

Appearance (physical State, color)	black, gritty paste	Explosion limit lower	N/A
		Explosion limit upper	N/A
Odor:	Slight ammonia	Vapor pressure at 20⁰	Not determined
Odor threshold:	Not Determined	Vapor density	Not determined
PH-value:	Not Determined	Relative density	1.77
Melting/Freezing Point:	Not Determined	Solubilities	N/A
Boiling point/Range:	Not Determined	Partition coefficient (n-octanol/water)	Not determined
Flash point(closed cup):	Not Determined	Auto/self-ignition Temperature	Not determined
Evaporation rate:	Not Determined	Decomposition Temp	Not determined
Flammability (solid Gaseous)	Not Determined	Viscosity	a. Kinematic Paste b. Dynamic: Paste
Density at 20⁰	Not Determined		1.77

SECTION 10: Stability and reactivity

Reactivity:

Nonreactive under normal conditions

Chemical stability:

Stable under normal conditions. Chemically inert, properties are inert; affected by change in PH

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According to 29CFR1910/1200 and GHS Rev.3

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MM High Strength Epoxy Part B

Possible hazardous reactions:

None under normal conditions

Conditions to avoid:

Incompatible materials

Incompatible materials:

Strong Acids, Strong Bases, Oxidizing agents, Hydrogen fluoride.

Hazardous decomposition products:

Carbon oxides, Nitrogen oxides, Ammonia. When heated to decomposition it emits acrid smoke and irritating fumes.

SECTION 11: Toxicological information

Acute Toxicity:

Oral:

Inhalation:

The substance can be absorbed into the body by inhalation.

Chronic Toxicity:

Inhalation:

May cause respiratory irritation

Corrosion irritation

Dermal: Section 2, Classified as skin irritant

Ocular: Section 2, Classified as eye irritant

Sensitization: Classified as a skin sensitizer

Single Target organ (STOT): Classified as respiratory irritant

Numerical measure: No Additional information

Mutagenicity: No additional information

Reproductive Toxicity: Classified as possible causing reproductive harm to fertility or unborn child

SECTION 12: Ecological information

Ecotoxicity:

Fish (acute 84852-15-3): 96 hr LC50 Pimephales promelas: 0.135 MG/L {flow-through}; 96 hr LC50 lepomis macrochirus: 0.1351 mg/l {flow-through}

Crustacea (acute 84852-15-3): 48 hr EC50 Daphnia magna: 0.14 mg/l

Algae (acute 84852-15-3): 96 hr EC50 Pseudokirchneriella subcapitata: 0.36-0.48 mg/l {static}; 72 hr EC50 Pseudokirchneriella subcapitata: 0.16-0.72 mg/l {static}; 72 hr EC50 Desmodesmus subspicatus: 1.3 mg/l

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MM High Strength Epoxy Part B

Persistence and degradability:

Bioaccumulative potential: BCF *84852-15-3): 271 species: fish

Mobility in soil: no additional information

Other adverse effects: no additional information

SECTION 13: Disposal considerations

Waste disposal recommendations:

Contact a licensed professional waste disposal service to dispose of this material. Dispose of empty containers as usual product. Product or containers must not be disposed together with household garbage. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

SECTION 14: Transport information

US DOT Not-Regulated

UN Number: N/A

Limited Quantity : NONE

Bulk: Non Bulk

RQ (if applicable): none

Proper shipping name: Environmentally

Hazardous substance, liquid, n.o.s.

Hazardous substance, liquid, n.o.s.

(reaction product: bisphenol-A-

(epichlorhydrin) and epoxy resin(number

Average molecular weight <=700)

RQ (if applicable): none

Proper shipping name: Environmentally

Hazardous substance, liquid, n.o.s.

Hazardous substance, liquid, n.o.s.

(reaction product: bisphenol-A- Page 8 of 10

(epichlorhydrin) and epoxy resin(number

Average molecular weight <=700)

Hazard Class: 9

Hazard class: 9

Packing Group: III

Packing Group: III

Marine Pollutant(if applicable): no

Marine Pollutant (if applicable): no

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MM High Strength Epoxy Part B

SECTION 15: regulatory information

United States (USA)

SARA SECTION 311/312 (Specific toxic chemical listings):

None of the ingredients is listed

SARA SECTION 313 (Specific toxic chemical listings):

84852-15-3.1.0% de minimis concentration (listed under Chemical Category Nonylphenol)

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic substance control act)

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act)

None of the ingredients are listed.

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproduction toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproduction toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Canada

Canadian Domestic Substance list (DSL)

None of the ingredients are listed.

Canadian NPRI ingredient disclosure list (limit 0.1%)

None of the ingredients is listed

Canadian NPRI ingredient disclosure list (limit 1%)

148-8-60-7 Quartz

SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take these precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information handling and use are beyond our control, we make no guarantee of results, and assume no liability for

Safety Data Sheet

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MM High Strength Epoxy Part B

damages incurred by the use of the material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material. The information contained herein is, to the best of our knowledge and belief, accurate.

GHS Full Text Phrases: None

Abbreviations and Acronyms:

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of classification and labelling of chemicals

ACGIH; American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification Systems (USA)

ACGIH: American Conference of Governmental Industrial Hygienists

WHMIS: Workplace Hazardous Materials Information System (CANADA)

DNEL: Derived No-Effect level (Reach)

PNEC: Predicted No-Effect Concentration (Reach)

CFR: Code of Federal Regulations (USA)

SARA: Superfund Amendments and Reauthorization Act (USA)

RCRA: Resource Conservation and Recovery Act (USA)

TSCA: Toxic Substance Control Act (USA)

NPRI: National Pollutant Release Inventory (CANADA)

DOT: US Department of Transportation

CAS: Chemical Abstracts Service (Division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (CANADA)

DNEL: Derived No-Effect Level (Reach)

SAFETY DATA SHEET

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 persists: 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.

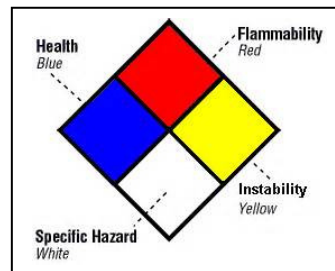
California Hazardous Substance List	None
HAPS – The formulation contains the following HAPS:	None
NJ RTK The following chemicals are listed under New Jersey RTK	71-36-3 Butyl Alcohol 1 to 5% 110-43-0 Methyl n-Amyl Ketone 5 to 10% 67-64-1 Acetone 10 to 20% 78-93-3 Methyl
California Proposition 65	WARNING: 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

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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.

Prepared by: Catherine Bimler, Regulatory Affairs Specialist

Issue date: 10/23/2014

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