

SAFETY DATA SHEETS

This SDS packet was issued with item:

072343424

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

072343374 072343382

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

070701268 070841890 072343390 072343416 072343432 072343440 072343457 072343465 072343473 072362606
072363653 273032361 273036997 273044285

1. Identification

Product identifier	MicroPrime™ G
Other means of identification	
Document number	SDS-012-ZD Rev. A
Recommended use	Desensitizer.
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/Distributor information	
Supplier	
Company name	Danville Materials
Address	2875 Loker Avenue East Carlsbad, CA 92010
Telephone	1-800-827-7940
Contact	Customer Service
E-mail	danvillecs@zestdent.com
Website	www.zestdent.com
Emergency telephone number	800-451-8346 / 760-602-8703

2. Hazard(s) identification

Physical hazards	Not classified.	
Health hazards	Acute toxicity, oral	Category 4
	Acute toxicity, inhalation	Category 3
	Skin corrosion/irritation	Category 1B
	Serious eye damage/eye irritation	Category 1
	Sensitization, respiratory	Category 1
	Sensitization, skin	Category 1A
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 2
	Hazardous to the aquatic environment, long-term hazard	Category 3
OSHA defined hazards	Not classified.	
Label elements		



Signal word	Danger
Hazard statement	Harmful if swallowed. Toxic if inhaled. Causes severe skin burns and eye damage. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. Toxic to aquatic life. Harmful to aquatic life with long lasting effects.
Precautionary statement	
Prevention	Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. In case of inadequate ventilation wear respiratory protection. Avoid release to the environment.

Response	If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. If swallowed: Rinse mouth. Do NOT induce vomiting. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. If inhaled: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center/doctor.
Storage	Store locked up. Store in a well-ventilated place. Keep container tightly closed.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	Corrosive to the respiratory tract.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Water	7732-18-5	50 - 70
Glutaraldehyde	111-30-8	1 - 10

Composition comments	The specific chemical identity and/or exact percentage of component(s) have been withheld as a trade secret. All concentrations are in percent by weight. Components not listed are either non-hazardous or are below reportable limits.
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4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.
Ingestion	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Most important symptoms/effects, acute and delayed	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Difficulty in breathing. May cause an allergic skin reaction. Dermatitis. Rash. Causes digestive tract burns. Causes respiratory tract burns.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	This material will not burn until the water has evaporated. Residue can burn.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Prevent product from entering drains.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. Persons susceptible to allergic reactions should not handle this product. When using, do not eat, drink or smoke. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Keep away from heat. Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components

Type

Value

Glutaraldehyde (CAS 111-30-8)

Ceiling

0.05 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components

Type

Value

Glutaraldehyde (CAS 111-30-8)

Ceiling

0.8 mg/m³

0.2 ppm

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. General ventilation normally adequate. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles) and a face shield. Wear a full-face respirator, if needed.

Skin protection

Hand protection

Wear appropriate chemical resistant gloves. Nitrile or butyl rubber gloves are recommended. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. Suitable gloves can be recommended by the glove supplier.

Skin protection

Other

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Wear NIOSH approved respirator appropriate for airborne exposure at the point of use.

Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance

Physical state	Liquid.
Form	Liquid.
Color	Not available.
Odor	Not available.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Does not flash.
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	> 20.5 mm ² /s
Viscosity temperature	104 °F (40 °C)
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials. Excessive heat.
Incompatible materials	Strong oxidizing agents. Free radical initiators. Peroxides. Steel.
Hazardous decomposition products	Thermal decomposition of this product can generate carbon monoxide and carbon dioxide.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Toxic if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Causes respiratory tract burns.
Skin contact	Causes severe skin burns. May cause an allergic skin reaction.
Eye contact	Causes serious eye damage.

Ingestion	Harmful if swallowed. Causes digestive tract burns.	
Symptoms related to the physical, chemical and toxicological characteristics	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Difficulty in breathing. May cause an allergic skin reaction. Dermatitis. Rash. Causes digestive tract burns. Causes respiratory tract burns.	
Information on toxicological effects		
Acute toxicity	Toxic if inhaled. Harmful if swallowed.	
Components	Species	Test Results
Glutaraldehyde (CAS 111-30-8)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Inhalation		
Vapor		
LC50	Rat	0.96 mg/l, 4 Hours
Aerosol		
LC50	Rat	0.28 mg/l, 4 Hours
Oral		
LD50	Rat	154 mg/kg
Skin corrosion/irritation	Causes severe skin burns.	
Serious eye damage/eye irritation	Causes serious eye damage.	
Respiratory or skin sensitization		
ACGIH sensitization		
GLUTARALDEHYDE, ACTIVATED AND INACTIVATED (CAS 111-30-8)	Dermal sensitization	
	Respiratory sensitization	
Respiratory sensitization	May cause allergy or asthma symptoms or breathing difficulties if inhaled.	
Skin sensitization	May cause an allergic skin reaction.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	Not classifiable as to carcinogenicity to humans.	
IARC Monographs. Overall Evaluation of Carcinogenicity		
Not listed.		
NTP Report on Carcinogens		
Not listed.		
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)		
Not regulated.		
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.	
Specific target organ toxicity - single exposure	Not classified.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Not an aspiration hazard.	
Chronic effects	Prolonged inhalation may be harmful.	
Further information	Symptoms may be delayed.	
12. Ecological information		
Ecotoxicity	Toxic to aquatic life. Harmful to aquatic life with long lasting effects.	
Persistence and degradability	No data is available on the degradability of this product.	
Bioaccumulative potential		
Mobility in soil	No data available for this product.	
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.	

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number	UN2922
UN proper shipping name	Corrosive liquids, toxic, n.o.s. (Glutaraldehyde)
Transport hazard class(es)	
Class	8
Subsidiary risk	6.1(PGIII)
Label(s)	8+6.1
Packing group	III
Environmental hazards	
Marine pollutant	No
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	IB3, T7, TP1, TP28
Packaging exceptions	154
Packaging non bulk	203
Packaging bulk	241

IATA

UN number	UN2922
UN proper shipping name	Corrosive liquid, toxic, n.o.s. (Glutaraldehyde)
Transport hazard class(es)	
Class	8
Subsidiary risk	6.1(PGIII)
Label(s)	8+6.1
Packing group	III
Environmental hazards	No
ERG Code	8P
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

IMDG

UN number	UN2922
UN proper shipping name	CORROSIVE LIQUID, TOXIC, N.O.S. (GLUTARALDEHYDE)
Transport hazard class(es)	
Class	8
Subsidiary risk	6.1(PGIII)
Packing group	III
Environmental hazards	
Marine pollutant	No
EmS	F-A, S-B
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

15. Regulatory information

US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
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TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)**SARA 302 Extremely hazardous substance**

Not listed.

SARA 311/312 Hazardous chemical

Yes

Classified hazard categories

Acute toxicity (any route of exposure)
 Skin corrosion or irritation
 Serious eye damage or eye irritation
 Respiratory or skin sensitization

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

US state regulations**US. Massachusetts RTK - Substance List**

Glutaraldehyde (CAS 111-30-8)

US. New Jersey Worker and Community Right-to-Know Act

Glutaraldehyde (CAS 111-30-8)

US. Pennsylvania Worker and Community Right-to-Know Law

Glutaraldehyde (CAS 111-30-8)

US. Rhode Island RTK

Glutaraldehyde (CAS 111-30-8)

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Glutaraldehyde (CAS 111-30-8)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 21-February-2018

Revision date -

Version # 01

NFPA ratings



Disclaimer

Danville Materials cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 06.06.2015

Page 1 of 7

Prelude

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

Product name: Prelude

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: 90989

Recommended uses of the product and restrictions on use:

Manufacturer Details:

Danville Materials
3420 Fostoria Way Suite a200
San Ramon, CA 94583

Supplier Details:

Danville Materials
3420 Fostoria Way Suite a200
San Ramon, CA 94583

Emergency telephone number:

ChemTrec Inc 1-800-424-9300, 703-527-3887 (CHEMTREC)

SECTION 2 : Hazards identification

Classification of the substance or mixture:



Irritant

Skin irritation, category 2
Eye irritation, category 2A
Skin sensitization, category 1



Flammable

Flammable liquids, category 2

Skin Irritation - Category 2.

Eye Irritation - Category 2.

Skin Sensitiser - Category 1.

Flammable Liquid - Category 2.

Signal word: Danger

Hazard statements:

Highly flammable liquid and vapor. Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eye irritation.

Precautionary statements:

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

Keep out of reach of children.

Read label before use. Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Contaminated work clothing should not be allowed out of the workplace.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/light/equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

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

Wash skin thoroughly after handling.

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 06.06.2015

Page 2 of 7

Prelude

Avoid breathing dust/fume/gas/mist/vapors/spray. If eye irritation persists get medical advice/attention.

Eliminate all ignition sources if safe to do so.

IF ON SKIN (or hair): Immediately remove/take off all contaminated clothing. Rinse skin with water/shower.

In case of fire: Use agents recommended in section 5 for extinction.

Specific treatment (see supplemental first aid instructions on this label).

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

Wash contaminated clothing before reuse.

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

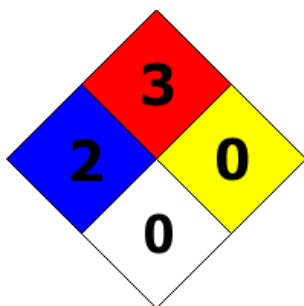
Continue rinsing. Store in a well ventilated place. Keep cool. Dispose of contents and container as instructed in Section 13.

Other Non-GHS Classification:

WHMIS



NFPA/HMIS



NFPA SCALE (0-4)

Health	2
Flammability	3
Physical Hazard	0
Personal Protection	X

HMIS RATINGS (0-4)

SECTION 3 : Composition/information on ingredients

Ingredients:		
CAS 64-17-5	Ethyl alcohol	15-25 %
CAS N/A	Alkyl Methacrylate Resins	34-45 %
Percentages are by weight		

SECTION 4 : First aid measures

Description of first aid measures

After inhalation: Loosen clothing as necessary and position individual in a comfortable position. Move exposed to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Get medical assistance if cough or other symptoms appear. Vapors may cause drowsiness and dizziness.

After skin contact: Rinse/flush exposed skin gently using soap and water for 15-20 minutes. Seek medical advice if discomfort or irritation persists. May cause allergic reaction on contact with the skin. Avoid contact of uncured resin with skin, especially in people known to be allergic to methacrylates.

After eye contact: Protect unexposed eye. Rinse/flush exposed eye(s) gently using water for 15-20 minutes. Remove contact lens(es) if able to do so during rinsing. Seek medical attention if irritation persists or if concerned.

After swallowing: Rinse mouth thoroughly. Do not induce vomiting. Seek medical attention if irritation,

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 06.06.2015

Page 3 of 7

Prelude

discomfort, or vomiting persists. Never give anything by mouth to an unconscious person. Drink two glasses of water or milk. Seek medical attention if a substantial amount has been ingested.

Most important symptoms and effects, both acute and delayed:

Irritation. Headache. Nausea. Shortness of breath. Repeated exposure may cause skin dryness or cracking.

Indication of any 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: Dry chemical powder, foam or carbon dioxide.

For safety reasons unsuitable extinguishing agents: None identified. Water spray or jet may prove ineffective and/or may cause fire to spread.

Special hazards arising from the substance or mixture:

Combustion products may include carbon oxides or other toxic vapors. Dangerous fire hazard when exposed to heat, sparks and open flames.

Advice for firefighters:

Protective equipment: Wear protective eyewear, gloves, and clothing. Refer to Section 8. Use NIOSH-approved respiratory protection/breathing apparatus. Use spark-proof tools and explosion-proof equipment.

Additional information (precautions): Avoid inhaling gases, fumes, dust, mist, vapor, and aerosols.

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:

Wear protective eyewear, gloves, and clothing. Refer to Section 8. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Always obey local regulations. Containerize for disposal. Refer to Section 13. If necessary use trained response staff or contractor. Evacuate personnel to safe areas. Keep in suitable closed containers for disposal. Dam spill and collect with sand, silicagel or other absorbent non-flammable material and place in suitable waste containers. Ventilate area of leak or spill.

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 substances. Take precautions against static discharge.

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. Do not store in heat in excess of 40°C, direct sunlight or intense light.

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 06.06.2015

Page 4 of 7

Prelude

SECTION 8 : Exposure controls/personal protection



Control Parameters:

64-17-5, Ethanol, ACGIH TLV: 1000 ppm STEL.
64-17-5, Ethanol, NIOSH: 3300 ppm IDLH (10% LEL).
64-17-5, Ethanol, OSHA PEL: 1000 ppm TWA; 1900 mg/m3 TWA.

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 mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

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 (US) or type P3 (EN 143) 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 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 surface. Avoid skin contact with used gloves. Wear protective clothing.

Eye protection:

Wear equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses or goggles are appropriate eye protection.

General hygienic measures:

Perform routine housekeeping. Wash hands before breaks and at the end of work. Avoid contact with skin, eyes, and clothing. Before wearing wash contaminated clothing.

SECTION 9 : Physical and chemical properties

Appearance (physical state,color):	Pale pink liquid	Explosion limit lower: Explosion limit upper:	Not Determined Not Determined
Odor:	Fruity	Vapor pressure:	Not Determined
Odor threshold:	Not Determined	Vapor density:	Not Determined
pH-value:	Not Determined	Relative density:	Not Determined
Melting/Freezing point:	Not Determined	Solubilities:	Miscible (for uncured material).
Boiling point/Boiling range:	Not Determined	Partition coefficient (n-octanol/water):	Not Determined
Flash point (closed cup):	18°C (64° F)	Auto/Self-ignition temperature:	Not Determined
Evaporation rate:	Not Applicable	Decomposition temperature:	Not Determined

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 06.06.2015

Page 5 of 7

Prelude

Flammability (solid,gaseous):	Highly flammable	Viscosity:	a. Kinematic: Not Determined b. Dynamic: Not Determined
Density: Not Determined			

SECTION 10 : Stability and reactivity

Reactivity: Nonreactive under normal conditions.

Chemical stability: Stable under normal conditions.

Possible hazardous reactions: None under normal processing.

Conditions to avoid: Incompatible materials. Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Heat in excess of 40°C, direct sunlight or intense light.

Incompatible materials: Strong acids, bases, and oxidizing agents.

Hazardous decomposition products: Thermal decomposition or burning may produce carbon monoxide, carbon dioxide, hydrogen, and irritating gases.

SECTION 11 : Toxicological information

Acute Toxicity:		
Inhalation:	64-17-5	LC50 Rat 124.7 mg/L 4 h (Source: OECD_SIDS)
Oral:	64-17-5	LD50 Rat 7060 mg/kg (Source: NLM_CIP)
Chronic Toxicity: No additional information.		
Corrosion Irritation: No additional information.		
Sensitization:	No additional information.	
Single Target Organ (STOT):	No additional information.	
Numerical Measures:	No additional information.	
Carcinogenicity:	No additional information.	
Mutagenicity:	No additional information.	
Reproductive Toxicity:	No additional information.	

SECTION 12 : Ecological information

Ecotoxicity

64-17-5: 96 Hr LC50 Oncorhynchus mykiss: 12.0 - 16.0 mL/L [static]; 96 Hr LC50 Pimephales promelas: >100 mg/L [static]; 96 Hr LC50 Pimephales promelas: 13400 - 15100 mg/L [flow-through]

64-17-5: 48 Hr LC50 Eisenia foetida: 0.1 - 1 mg/cm2 [filter paper]

Persistence and degradability: Not determined.

Bioaccumulative potential: Not determined.

Mobility in soil: Not determined.

Other adverse effects: None identified.

SECTION 13 : Disposal considerations

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 06.06.2015

Page 6 of 7

Prelude

Waste disposal recommendations:

Contact a licensed professional waste disposal service to dispose of this material. Dispose of empty containers as unused product. Product or containers must not be disposed 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 determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification.

SECTION 14 : Transport information

UN-Number

1170

UN proper shipping name

Ethanol Mixture

Transport hazard class(es)



Class:

3 Flammable liquids

Packing group: II

Environmental hazard: None

Transport in bulk:

Special precautions for user: None

SECTION 15 : Regulatory information

United States (USA)

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

Acute, Fire

SARA Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic Substances 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 reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive 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 : 06.06.2015

Page 7 of 7

Prelude

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):

None of the ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 1%):

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 those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

GHS Full Text Phrases:

None

Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

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 Substances Control Act (USA)

NPRI: National Pollutant Release Inventory (Canada)

DOT: US Department of Transportation

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 System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

DNEL: Derived No-Effect Level (REACH)

Effective date: 06.06.2015

Last updated: 06.17.2015

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 06.06.2015

Page 1 of 7

Prelude

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

Product name: Prelude

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: 90989

Recommended uses of the product and restrictions on use:

Manufacturer Details:

Danville Materials
3420 Fostoria Way Suite a200
San Ramon, CA 94583

Supplier Details:

Danville Materials
3420 Fostoria Way Suite a200
San Ramon, CA 94583

Emergency telephone number:

ChemTrec Inc 1-800-424-9300, 703-527-3887 (CHEMTREC)

SECTION 2 : Hazards identification

Classification of the substance or mixture:



Irritant

Skin irritation, category 2
Eye irritation, category 2A
Skin sensitization, category 1



Flammable

Flammable liquids, category 2

Skin Irritation - Category 2.

Eye Irritation - Category 2.

Skin Sensitiser - Category 1.

Flammable Liquid - Category 2.

Signal word: Danger

Hazard statements:

Highly flammable liquid and vapor. Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eye irritation.

Precautionary statements:

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

Keep out of reach of children.

Read label before use. Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Contaminated work clothing should not be allowed out of the workplace.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/light/equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

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

Wash skin thoroughly after handling.

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 06.06.2015

Page 2 of 7

Prelude

Avoid breathing dust/fume/gas/mist/vapors/spray. If eye irritation persists get medical advice/attention.

Eliminate all ignition sources if safe to do so.

IF ON SKIN (or hair): Immediately remove/take off all contaminated clothing. Rinse skin with water/shower.

In case of fire: Use agents recommended in section 5 for extinction.

Specific treatment (see supplemental first aid instructions on this label).

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

Wash contaminated clothing before reuse.

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

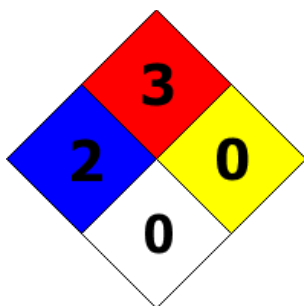
Continue rinsing. Store in a well ventilated place. Keep cool. Dispose of contents and container as instructed in Section 13.

Other Non-GHS Classification:

WHMIS



NFPA/HMIS



NFPA SCALE (0-4)

Health	2
Flammability	3
Physical Hazard	0
Personal Protection	X

HMIS RATINGS (0-4)

SECTION 3 : Composition/information on ingredients

Ingredients:		
CAS 64-17-5	Ethyl alcohol	15-25 %
CAS N/A	Alkyl Methacrylate Resins	34-45 %
Percentages are by weight		

SECTION 4 : First aid measures

Description of first aid measures

After inhalation: Loosen clothing as necessary and position individual in a comfortable position. Move exposed to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Get medical assistance if cough or other symptoms appear. Vapors may cause drowsiness and dizziness.

After skin contact: Rinse/flush exposed skin gently using soap and water for 15-20 minutes. Seek medical advice if discomfort or irritation persists. May cause allergic reaction on contact with the skin. Avoid contact of uncured resin with skin, especially in people known to be allergic to methacrylates.

After eye contact: Protect unexposed eye. Rinse/flush exposed eye(s) gently using water for 15-20 minutes. Remove contact lens(es) if able to do so during rinsing. Seek medical attention if irritation persists or if concerned.

After swallowing: Rinse mouth thoroughly. Do not induce vomiting. Seek medical attention if irritation,

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 06.06.2015

Page 3 of 7

Prelude

discomfort, or vomiting persists. Never give anything by mouth to an unconscious person. Drink two glasses of water or milk. Seek medical attention if a substantial amount has been ingested.

Most important symptoms and effects, both acute and delayed:

Irritation. Headache. Nausea. Shortness of breath. Repeated exposure may cause skin dryness or cracking.

Indication of any 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: Dry chemical powder, foam or carbon dioxide.

For safety reasons unsuitable extinguishing agents: None identified. Water spray or jet may prove ineffective and/or may cause fire to spread.

Special hazards arising from the substance or mixture:

Combustion products may include carbon oxides or other toxic vapors. Dangerous fire hazard when exposed to heat, sparks and open flames.

Advice for firefighters:

Protective equipment: Wear protective eyewear, gloves, and clothing. Refer to Section 8. Use NIOSH-approved respiratory protection/breathing apparatus. Use spark-proof tools and explosion-proof equipment.

Additional information (precautions): Avoid inhaling gases, fumes, dust, mist, vapor, and aerosols.

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:

Wear protective eyewear, gloves, and clothing. Refer to Section 8. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Always obey local regulations. Containerize for disposal. Refer to Section 13. If necessary use trained response staff or contractor. Evacuate personnel to safe areas. Keep in suitable closed containers for disposal. Dam spill and collect with sand, silicagel or other absorbent non-flammable material and place in suitable waste containers. Ventilate area of leak or spill.

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 substances. Take precautions against static discharge.

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. Do not store in heat in excess of 40°C, direct sunlight or intense light.

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 06.06.2015

Page 4 of 7

Prelude

SECTION 8 : Exposure controls/personal protection



Control Parameters:

64-17-5, Ethanol, ACGIH TLV: 1000 ppm STEL.
64-17-5, Ethanol, NIOSH: 3300 ppm IDLH (10% LEL).
64-17-5, Ethanol, OSHA PEL: 1000 ppm TWA; 1900 mg/m3 TWA.

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 mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

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 (US) or type P3 (EN 143) 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 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 surface. Avoid skin contact with used gloves. Wear protective clothing.

Eye protection:

Wear equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses or goggles are appropriate eye protection.

General hygienic measures:

Perform routine housekeeping. Wash hands before breaks and at the end of work. Avoid contact with skin, eyes, and clothing. Before wearing wash contaminated clothing.

SECTION 9 : Physical and chemical properties

Appearance (physical state,color):	Pale pink liquid	Explosion limit lower: Explosion limit upper:	Not Determined Not Determined
Odor:	Fruity	Vapor pressure:	Not Determined
Odor threshold:	Not Determined	Vapor density:	Not Determined
pH-value:	Not Determined	Relative density:	Not Determined
Melting/Freezing point:	Not Determined	Solubilities:	Miscible (for uncured material).
Boiling point/Boiling range:	Not Determined	Partition coefficient (n-octanol/water):	Not Determined
Flash point (closed cup):	18°C (64° F)	Auto/Self-ignition temperature:	Not Determined
Evaporation rate:	Not Applicable	Decomposition temperature:	Not Determined

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 06.06.2015

Page 5 of 7

Prelude

Flammability (solid,gaseous):	Highly flammable	Viscosity:	a. Kinematic: Not Determined b. Dynamic: Not Determined
Density: Not Determined			

SECTION 10 : Stability and reactivity

Reactivity: Nonreactive under normal conditions.

Chemical stability: Stable under normal conditions.

Possible hazardous reactions: None under normal processing.

Conditions to avoid: Incompatible materials. Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Heat in excess of 40°C, direct sunlight or intense light.

Incompatible materials: Strong acids, bases, and oxidizing agents.

Hazardous decomposition products: Thermal decomposition or burning may produce carbon monoxide, carbon dioxide, hydrogen, and irritating gases.

SECTION 11 : Toxicological information

Acute Toxicity:		
Inhalation:	64-17-5	LC50 Rat 124.7 mg/L 4 h (Source: OECD_SIDS)
Oral:	64-17-5	LD50 Rat 7060 mg/kg (Source: NLM_CIP)
Chronic Toxicity: No additional information.		
Corrosion Irritation: No additional information.		
Sensitization:	No additional information.	
Single Target Organ (STOT):	No additional information.	
Numerical Measures:	No additional information.	
Carcinogenicity:	No additional information.	
Mutagenicity:	No additional information.	
Reproductive Toxicity:	No additional information.	

SECTION 12 : Ecological information

Ecotoxicity

64-17-5: 96 Hr LC50 Oncorhynchus mykiss: 12.0 - 16.0 mL/L [static]; 96 Hr LC50 Pimephales promelas: >100 mg/L [static]; 96 Hr LC50 Pimephales promelas: 13400 - 15100 mg/L [flow-through]

64-17-5: 48 Hr LC50 Eisenia foetida: 0.1 - 1 mg/cm2 [filter paper]

Persistence and degradability: Not determined.

Bioaccumulative potential: Not determined.

Mobility in soil: Not determined.

Other adverse effects: None identified.

SECTION 13 : Disposal considerations

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 06.06.2015

Page 6 of 7

Prelude

Waste disposal recommendations:

Contact a licensed professional waste disposal service to dispose of this material. Dispose of empty containers as unused product. Product or containers must not be disposed 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 determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification.

SECTION 14 : Transport information

UN-Number

1170

UN proper shipping name

Ethanol Mixture

Transport hazard class(es)



Class:

3 Flammable liquids

Packing group: II

Environmental hazard: None

Transport in bulk:

Special precautions for user: None

SECTION 15 : Regulatory information

United States (USA)

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

Acute, Fire

SARA Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic Substances 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 reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive 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 : 06.06.2015

Page 7 of 7

Prelude

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):

None of the ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 1%):

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 those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

GHS Full Text Phrases:

None

Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

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 Substances Control Act (USA)

NPRI: National Pollutant Release Inventory (Canada)

DOT: US Department of Transportation

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 System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

DNEL: Derived No-Effect Level (REACH)

Effective date: 06.06.2015

Last updated: 06.17.2015

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 06.05.2015

Page 1 of 7

Sure Etch

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

Product name: Sure Etch

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: 89011-00

Recommended uses of the product and restrictions on use:

Manufacturer Details:

Danville Materials
3420 Fostoria Way Suite a200
San Ramon, CA 94583

Supplier Details:

Danville Materials
3420 Fostoria Way Suite a200
San Ramon, CA 94583

Emergency telephone number:

ChemTrec Inc 1-800-424-9300, 703-527-3887 (CHEMTREC)

SECTION 2 : Hazards identification

Classification of the substance or mixture:



Corrosive

Skin corrosion, category 1B

Corrosive to metals, category 1

Serious eye damage, category 1

Corrosive to Metals 1.

Skin Corrosion 1B.

Serious eye damage 1.

Signal word: Danger

Hazard statements:

May be corrosive to metals. Causes severe skin burns and eye damage.

Precautionary statements:

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

Keep out of reach of children.

Read label before use. Wear protective gloves/protective clothing/eye protection/face protection.

Keep only in original container.

Wash skin thoroughly after handling. Immediately call a POISON CENTER or doctor/physician.

Wash contaminated clothing before reuse.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

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

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

Continue rinsing.

Absorb spillage to prevent material damage.

Specific treatment (see supplemental first aid instructions on this label). Store locked up.

Store in corrosive resistant stainless steel container with a resistant inner liner. Dispose of contents and container as instructed in Section 13.

Other Non-GHS Classification:

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 06.05.2015

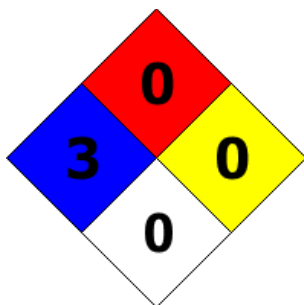
Page 2 of 7

Sure Etch

WHMIS



NFPA/HMIS



NFPA SCALE (0-4)

Health	3
Flammability	0
Physical Hazard	0
Personal Protection	X

HMIS RATINGS (0-4)

SECTION 3 : Composition/information on ingredients

Ingredients:		
CAS 7664-38-2	Phosphoric Acid	34-48 %
CAS 7732-18-5	Water	54-62 %
CAS 56-81-5	Glycerin	1-5 %
Percentages are by weight		

SECTION 4 : First aid measures

Description of first aid measures

After inhalation: Seek medical attention immediately. Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position.

After skin contact: Remove contaminated clothing and wash before reuse or discard. Wash affected area with soap and water. Rinse exposed skin with water for 20 minutes. Immediately seek medical attention.

After eye contact: Protect unexposed eye. Flush exposed eye gently using water for 15-20 minutes. Immediately seek medical attention. Continue rinsing eyes during transport to the hospital.

After swallowing: Seek medical attention immediately. Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water.

Most important symptoms and effects, both acute and delayed:

Irritation. Nausea. Headache. Shortness of breath. Spasm, inflammation and edema of the larynx. Burning sensation. Inflammation and edema of the bronchi, pneumonitis, pulmonary edema. 7664-38-2: Stomach - Irregularities - Based on Human Evidence. 7664-38-2: Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention, provide SDS document to physician.

SECTION 5 : Firefighting measures

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 06.05.2015

Page 3 of 7

Sure Etch

Extinguishing media

Suitable extinguishing agents: Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.

For safety reasons unsuitable extinguishing agents: None

Special hazards arising from the substance or mixture:

Hydrogen gas is released in contact with most metals. Thermal decomposition can lead to release of irritating gases and vapors.

Advice for firefighters:

Protective equipment: Wear protective eyewear, gloves, and clothing. Refer to Section 8.

Additional information (precautions): None

SECTION 6 : Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation. Ensure that air-handling systems are operational.

Environmental precautions:

Prevent from reaching drains, sewer or waterway. Collect contaminated soil for characterization per Section 13.

Methods and material for containment and cleaning up:

Evacuate personnel to safe areas. Containerize for disposal. Refer to Section 13. Keep in suitable closed containers for disposal. Soak up with inert absorbent material. Wear protective eyewear, gloves, and clothing. Refer to Section 8. Always obey local regulations. If necessary use trained response staff or contractor.

Reference to other sections:

None

SECTION 7 : Handling and storage

Precautions for safe handling:

Wash hands after handling. Avoid contact with skin and eyes. 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 substances.

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:

7664-38-2, Phosphoric Acid, ACGIH TLV: 1 mg/m³ as TWA.
7664-38-2, Phosphoric Acid, ACGIH TLV 3 mg/m³ as STEL.
7664-38-2, Phosphoric Acid, OSHA PEL⁺: TWA 1 mg/m³ (See 29 CFR 1910.1000 Appendix G).
7664-38-2, Phosphoric Acid, NIOSH REL: TWA 1 mg/m³.
7664-38-2, Phosphoric Acid, NIOSH REL ST: 3 mg/m³.
7664-38-2, Phosphoric Acid, NIOSH IDLH: 1000 mg/m³.

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 06.05.2015

Page 4 of 7

Sure Etch

Appropriate Engineering controls:	Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use/handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.
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 (US) or type P3 (EN 143) 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 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 surface. Avoid skin contact with used gloves. Wear protective clothing.
Eye protection:	Wear equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles and faceshield (8 - inch minimum) are appropriate eye protection.
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):	Red,slightly viscousliquid	Explosion limit lower: Explosion limit upper:	Not Determined Not Determined
Odor:	None	Vapor pressure:	<1
Odor threshold:	Not Determined	Vapor density:	Not Determined
pH-value:	1 - 1.5	Relative density:	Not Determined
Melting/Freezing point:	Not Determined	Solubilities:	Soluble in water.
Boiling point/Boiling range:	220° C	Partition coefficient (n-octanol/water):	Not Determined
Flash point (closed cup):	Not Determined	Auto/Self-ignition temperature:	Not Determined
Evaporation rate:	Not Determined	Decomposition temperature:	Not Determined
Flammability (solid,gaseous):	Not Determined	Viscosity:	a. Kinematic: Not Determined b. Dynamic: Not Determined
Density: >1.2			

SECTION 10 : Stability and reactivity

Reactivity: Nonreactive under normal conditions.
Chemical stability: Stable under normal conditions.
Possible hazardous reactions: None under normal processing.
Conditions to avoid: Prolonged extreme heat.

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 06.05.2015

Page 5 of 7

Sure Etch

Incompatible materials: Metals, strong bases, amines, alcohols, aldehydes.

Hazardous decomposition products: Oxides of phosphorus, reactions with certain metals may release explosive and flammable hydrogen gases.

SECTION 11 : Toxicological information

Acute Toxicity:		
Oral:	7664-38-2	LD50 orl - rat: 1530 mg/m3
Chronic Toxicity: No additional information.		
Corrosion Irritation:		
Dermal:	7664-38-2	Skin corrosion/irritation Irritating to skin.
Ocular:	7664-38-2	Eyes - Rabbit Result : Corrosive to eyes
Sensitization:		No additional information.
Single Target Organ (STOT):		No additional information.
Numerical Measures:		No additional information.
Carcinogenicity:		No additional information.
Mutagenicity:		No additional information.
Reproductive Toxicity:		No additional information.

SECTION 12 : Ecological information

Ecotoxicity

7664-38-2: Phosphoric acid has moderate acute and chronic toxicity to aquatic life in waters of low alkalinity.

Persistence and degradability: Readily degradable in the environment.

Bioaccumulative potential: The phosphorus element is an essential nutrient for flora and fauna.

Mobility in soil: Aqueous solution has high mobility in soil.

Other adverse effects: None

SECTION 13 : Disposal considerations

Waste disposal recommendations:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Cover spill with soda ash or calcium carbonate. Mix and add water to form slurry. Decant to drain. Treat the solid residue as normal refuse. Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification. Dispose of empty containers as unused product. Product or containers must not be disposed together with household garbage.

SECTION 14 : Transport information

UN-Number

1805

Sure Etch

UN proper shipping name

Phosphoric Acid Solution

Transport hazard class(es)



Class:

8 Corrosive substances

Packing group: III

Environmental hazard: Not listed as a Marine Pollutant.

Transport in bulk:

Special precautions for user: None

SECTION 15 : Regulatory information

United States (USA)

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

Acute, Chronic

SARA Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

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

7664-38-2 Phosphoric acid 5000

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):

None of the ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 1%):

7664-38-2 Phosphoric acid

SECTION 16 : Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 06.05.2015

Page 7 of 7

Sure Etch

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 those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

GHS Full Text Phrases:

None

Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

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 Substances Control Act (USA)

NPRI: National Pollutant Release Inventory (Canada)

DOT: US Department of Transportation

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 System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

DNEL: Derived No-Effect Level (REACH)

Effective date: 06.05.2015

Last updated: 06.17.2015