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

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 02.11.2015 Page 1 of 8

Microprime G

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

Product name : Microprime G

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: Microprime G

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

Serious eye damage, category 1 Skin corrosion, category 1B



Irritant

Skin sensitization, category 1



Health hazard

Respiratory sensitization, category 1

Serious eye damage/ eye irritation - Category 1 Skin Corrosion/Irritation - Category 1B Respiratory sensitisation - Category 1 Skin sensitization - Category 1

Signal word :Danger

Hazard statements:

Causes severe skin burns and eye damage

Causes serious eye damage

May cause allergy or asthma symptoms or breathing difficulties if inhaled May cause an allergic skin reaction

Precautionary statements:

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

Keep out of reach of children

Read label before use

Wash skin thoroughly after handling

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

Effective date: 02.11.2015 Page 2 of 8

Microprime G

Do not breathe dust/fume/gas/mist/vapours/spray

Avoid breathing dust/fume/gas/mist/vapours/spray

Contaminated work clothing should not be allowed out of the workplace

In case of inadequate ventilation wear respiratory protection

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

Immediately call a POISON CENTER or doctor/physician

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

IF exposed or concerned: Get medical advice/attention

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

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

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

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

Wash contaminated clothing before reuse

Store locked up

Dispose of contents and container as instructed in Section 13

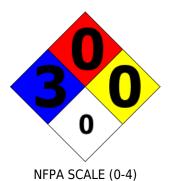
Other Non-GHS Classification:

WHMIS





NFPA/HMIS





HMIS RATINGS (0-4)

SECTION 3: Composition/information on ingredients

Ingredients:			
CAS 7732-18-5	Water	50-74 %	
CAS 111-30-8	Glutaraldehyde	1-5 %	
CAS 868-77-9	Hydroxylethyl Methacrylate	25-45 %	
	Pe	rcentages are by weight	

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 02.11.2015 Page 3 of 8

Microprime G

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.

After skin contact: Rinse/flush exposed skin gently using soap and water for 15-20 minutes. Seek medical advice if discomfort or irritation persists.

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 immediately.

After swallowing: Rinse mouth thoroughly. Do not induce vomiting. Seek medical attention if irritation, discomfort, or vomiting persists. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed:

Irritation. Headache. Nausea. Shortness of breath.;

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

For safety reasons unsuitable extinguishing agents: None identified.

Special hazards arising from the substance or mixture:

Thermal decomposition can lead to release of irritating gases and vapors.

Advice for firefighters:

Protective equipment: Wear protective eyeware, gloves, and clothing. Refer to Section 8.Use NIOSH-approved respiratory protection/breathing apparatus.

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

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 eyeware, gloves, and clothing. Refer to Section 8.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.

Reference to other sections:

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.

Effective date: 02.11.2015 Page 4 of 8

Microprime G

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: 111-30-8, Glutaraldehyde, ACGIH TLV 0.05 ppm Ceiling (activated and

inactivated)

111-30-8, Glutaraldehyde, OSHA PEL 0.2 ppm Ceiling; 0.8 mg/m3 Ceiling

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):	Clear Liquid	Explosion limit lower: Explosion limit upper:	Not applicable Not applicable
Odor:	Not Determined.	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:	Soluble
Boiling point/Boiling range:	Not Determined	Partition coefficient (noctanol/water):	Not Determined

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 02.11.2015 Page 5 of 8

Microprime G

Flash point (closed cup):	Not Determined	Auto/Self-ignition temperature:	Not Determined
Evaporation rate:	Not Determined	Decomposition temperature:	Not Determined
Flammability (solid,gaseous):	Not 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 identified.

Conditions to avoid:Incompatible materials.Prolonged Extreme Heat.Free radical initiators.

Incompatible materials: Contact with iron.

Hazardous decomposition products: Not determined.

SECTION 11: Toxicological information

Acute Toxicity:		
Dermal:	111-30-8	LD50 Rabbit 560 μL/kg (Source: NLM_CIP)
Inhalation:	111-30-8	LC50 Rat 0.1 mg/L 4 h (Source: IUCLID)
Oral:	111-30-8	LD50 Rat 252 mg/kg (Source: NLM_CIP)
Dermal:	868-77-9	Dermal LD50 Rabbit >3000 mg/kg (Source: IUCLID);
Oral:	868-77-9	LD50 Rat 5050 mg/kg (Source: NLM_CIP)
Chronic Toxicity: No	o additional information.	
Corrosion Irritation	1:	
Ocular:	[Commission of the European Communities. Legislation on Dangerous Substances - Classification and Labelling in the European Communities. Vol. II. London and Trotman Ltd., 1989., p. 404] **PEER REVIEWED**	Irritating to eyes and skin.
Ccular: [Lewis, R.J. Sr. (ed) Sax's Dangerous Properties of Industrial Materials. 11th Edition. Wiley-Interscience, Wiley & Sons, Inc. Hoboken, NJ. 2004., p. 1864] **PEER REVIEWED**		Glutaral - A severe eye and human skin irritant.
Sensitization:		No additional information.
Single Target Organ (STOT):		No additional information.
Numerical Measures:		No additional information.
Carcinogenicity:		No additional information.

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 02.11.2015 Page 6 of 8

Microprime G

Mutagenicity:	No additional information.
Reproductive Toxicity:	No additional information.

SECTION 12: Ecological information

Ecotoxicity

111-30-8: Freshwater algae: 72 Hr EC50 Desmodesmus subspicatus: 0.61 mg/L; 96 Hr EC50 Desmodesmus subspicatus: 0.84 mg/L

868-77-9: Freshwater fish: 96 Hr LC50 Pimephales promelas: 213 - 242 mg/L [flow-through]; 96 Hr LC50

Pimephales promelas: 227 mg/L

Persistence and degradability: Not determined. **Bioaccumulative potential**: Not determined.

Mobility in soil: Not determined.

Other adverse effects: None identified.

SECTION 13: Disposal considerations

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

Not Regulated

UN proper shipping name

Not Regulated

Transport hazard class(es)
Packing group:Not Regulated
Environmental hazard:
Transport in bulk:

Special precautions for user:

SECTION 15: Regulatory information

United States (USA)

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

Acute

SARA Section 313 (Specific toxic chemical listings):

111-30-8 Glutaraldehyde

868-77-9 Hydroxylethyl Methacrylate

RCRA (hazardous waste code):

None of the ingredients is listed

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 02.11.2015 Page 7 of 8

Microprime G

TSCA (Toxic Substances Control Act):

All ingredients are listed.

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

1310-58-3 Potassium hydroxide 1000 lbs 123-31-9 Hydroquinone 100 lbs

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed

Chemicals known to cause developmental toxicity:

None of the ingredients is listed

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):

None of the ingredients is listed

Canadian NPRI Ingredient Disclosure list (limit 1%):

None of the ingredients is 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:

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

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 02.11.2015 Page 8 of 8

Microprime G

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: 02.11.2015 **Last updated**: 05.14.2015

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.

Created by Global Safety Management, 1-813-435-5161 - www.GSMSDS.com

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.

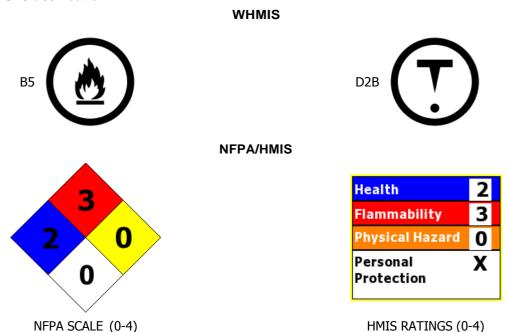
Specific treatment (see supplemental first aid instructions on this label).

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:



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, Created by Global Safety Management, 1-813-435-5161 - www.GSMSDS.com

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 eyeware, 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 eyeware, 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.

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 (noctanol/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

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	y: 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

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.

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

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.

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.

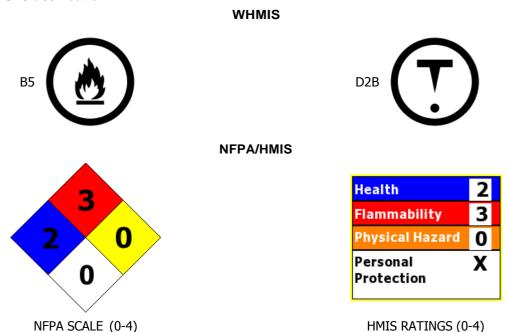
Specific treatment (see supplemental first aid instructions on this label).

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:



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, Created by Global Safety Management, 1-813-435-5161 - www.GSMSDS.com

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 eyeware, 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 eyeware, 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.

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 (noctanol/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

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	y: 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

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.

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

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:

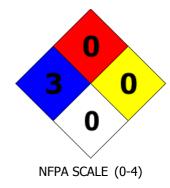
Effective date: 06.05.2015 Page 2 of 7

Sure Etch

WHMIS



NFPA/HMIS





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

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 eyeware, 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 eyeware, 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.

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 vicousliquid	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 (noctanol/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.

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 Org	an (STOT):	No additional information.			
Numerical Measur	es:	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

according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 06.05.2015 Page 6 of 7

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 Polllutant.

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

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