Material Name: ALUMIPREP® 33 ID: 234449

* * * Section 1 - Chemical Product and Company Identification * * *

Product Trade Name ALUMIPREP® 33 **Manufacturer Information**

Henkel Technologies Henkel Corporation 32100 Stephenson Highway Madison Heights, MI 48071 Contact Phone: (248) 583-9300

Chemtrec Emergency # (800) 424-9300

* * * Section 2 - Composition / Information on Ingredients * * *

CAS#	Component	Percent
7664-38-2	Phosphoric acid	10-30
111-76-2	Ethylene glycol n-butyl ether	10-30
7778-77-0	Dihydrogen potassium phosphate	1-10
Proprietary	Alkylphenol ethoxylates	1-10

Component Related Regulatory Information

This product may be regulated, have exposure limits or other information identified as the following: Phosphorus compounds, inorganic, Glycol ethers, Alkylphenol ethoxylates, Alkylphenol, n.o.s..

* * * Section 3 - Hazards Identification * * *

Emergency Overview:

DANGER -- CORROSIVE! COMBUSTIBLE! Contact with this material will cause burns to the skin, eyes and mucous membranes. Product contains a glycol ether which caused blood disorders in rabbits.

Eye Contact:

This product is severely irritating to the eyes and may cause irreversible damage including burns and blindness.

Skin Contact:

Corrosive to the skin. Contact with the skin or mucous membranes may cause severe irritation and burns. Following skin exposure to this product, the sensation of irritation or pain may be delayed.

Skin Absorption:

A component in this product may be harmful or fatal if absorbed through the skin.

Ingestion:

This product may produce corrosive damage to the gastrointestinal tract if it is swallowed. May cause dizziness, incoordination, headache, nausea, and vomiting.

Inhalation:

Inhalation of mists of this product may cause severe irritation and burns to the respiratory tract. Inhalation of mists or vapors may produce upper airway edema, wheezing, pulmonary edema, pneumonitis and respiratory failure.

Medical Conditions Aggravated by Exposure:

Pre-existing eye, skin and respiratory disorders.

* * * Section 4 - First Aid Measures * * *

Eve Contact:

In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention.

Skin Contact:

Immediately take off all contaminated clothing. For skin contact, flush with large amounts of water. Seek immediate medical attention.

Ingestion:

If the material is swallowed, get immediate medical attention or advice -- Do not induce vomiting. Give one to two glasses of water or milk. Never give anything by mouth to a victim who is unconscious or is having convulsions.

Material Name: ALUMIPREP® 33 ID: 234449

Inhalation:

If mist or vapor of this product is inhaled, remove person immediately to fresh air. Seek medical attention if symptoms develop or persist.

First Aid: Notes to Physician

Provide general supportive measures and treat symptomatically.

Section 5 - Fire Fighting Measures

Flash Point: 145 °F (62.8 °C) Method Used: T.C.C. Flammability Combustible

Classification:

Upper Flammable Not applicable Lower Flammable Not applicable

Limit (UFL): Limit (LFL):

Fire & Explosion Hazards:

Fire and explosion hazards are moderate when this product is exposed to heat or flame. Vapors are heavier than air and may travel along the ground to some distant source of ignition and flash back.

Decomposition Products:

Irritating and toxic gases or fumes may be released during a fire.

Extinguishing Media:

Dry chemical, foam, carbon dioxide, water fog. Use any media suitable for the surrounding fires.

Fire-Fighting Instructions:

Firefighters should wear full protective clothing including self contained breathing apparatus.

Section 6 - Accidental Release Measures

Containment Procedures:

Stop the flow of material, if this is without risk. Wear appropriate protective equipment and clothing during cleanup.

Clean-Up Procedures:

Absorb spill with inert material. Shovel material into appropriate container for disposal. Dispose of collected material according to regulation.

Section 7 - Handling and Storage

Handling Procedures:

Do not get this material in your eyes, on your skin, or on your clothing. Wash thoroughly after handling. Do not inhale vapors or mists of this product. Keep this product from heat, sparks, or open flame. For industrial use only.

Storage Procedures:

Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Do not pressurize, cut, heat or weld containers. Empty product containers may contain product residue. Do not reuse empty containers. Manufacturer recommends storing above 40 °F. Thaw and mix thoroughly if frozen. Do not store above 100 °F.

Section 8 - Exposure Controls / Personal Protection

Exposure Guidelines:

A: General Product Information

Follow all applicable exposure limits.

B: Component Exposure Limits

Phosphoric acid (7664-38-2)

1 mg/m3 TWA ACGIH: 3 mg/m3 STEL

1 mg/m3 TWA OSHA: 3 mg/m3 STEL

NIOSH: 1 mg/m3 TWA

3 mg/m3 STEL

Issue Date: 10/25/05 Revision: 1.0005

Page 2 of 7

Material Name: ALUMIPREP® 33 ID: 234449

Ethylene glycol n-butyl ether (111-76-2)

ACGIH: 20 ppm TWA

OSHA: prevent or reduce skin absorption 50 ppm TWA; 240 mg/m3 TWA NIOSH: 5 ppm TWA; 24 mg/m3 TWA

Potential for dermal absorption

Engineering Controls:

Use general ventilation and use local exhaust, where possible, in confined or enclosed spaces.

PERSONAL PROTECTIVE EQUIPMENT

As prescribed in the OSHA Standard for Personal Protective Equipment (29 CFR 1910.132), employers must perform a Hazard Assessment of all workplaces to determine the need for, and selection of, proper protective equipment for each task performed.

Eyes/Face Protective Equipment:

Wear chemical goggles; face shield (if splashing is possible).

Skin Protection:

Use impervious gloves. Use of impervious apron and boots are recommended. Gloves should be tested to determine suitability for prolonged contact.

Respiratory Protection:

If ventilation is not sufficient to effectively prevent buildup of aerosols or vapors, appropriate NIOSH/MSHA respiratory protection must be provided.

Work Practices:

Eye wash fountain and emergency showers are recommended.

* * * Section 9 - Physical & Chemical Properties * * *

Physical State:LiquidAppearance:Clear, colorlessOdor:Slight solventVapor Pressure:Not determinedVapor Density:Not determinedBoiling Point:>200 °F (>93.3 °C)

<2

Specific Gravity: 1.12-1.16 at 60 °F (16 °C)

Viscosity:Not applicableVOC:14%Solubility Water:CompleteEvaporation Rate:Not determined

Percent Volatile: Not determined Percent Solids: 38-41

* * * Section 10 - Chemical Stability & Reactivity Information * * *

Chemical Stability:

Stable under normal conditions.

Conditions to Avoid:

Keep away from heat, ignition sources and incompatible materials.

Incompatibility:

This product may react with strong oxidizing agents.

Decomposition Products:

Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. May liberate hydrogen fluoride.

Hazardous Polymerization:

Will not occur.

* * * Section 11 - Toxicological Information * * *

Acute Toxicity:

A: General Product Information

No information available for the product.

Material Name: ALUMIPREP® 33 ID: 234449

B: Component Analysis - LD50/LC50

Phosphoric acid (7664-38-2)

Inhalation LC50 Rat: >850 mg/m3/1H; Oral LD50 Rat: 1530 mg/kg; Dermal LD50 Rabbit: 2730 mg/kg

Ethylene glycol n-butyl ether (111-76-2)

Inhalation LC50 Rat: 2.21 mg/L/4H; Inhalation LC50 Rat: 450 ppm/4H; Oral LD50 Rat: 470 mg/kg; Dermal LD50 Rat: 2270 mg/kg; Dermal LD50 Rabbit: 220 mg/kg

Dihydrogen potassium phosphate (7778-77-0)

Dermal LD50 Rabbit: >4640 mg/kg

Alkylphenol ethoxylates (Proprietary)

Oral LD50 Rat: 4190 mg/kg

Carcinogenicity:

A: General Product Information

No information available for the product.

B: Component Carcinogenicity

Ethylene glycol n-butyl ether (111-76-2)

ACGIH: A3 - Confirmed animal carcinogen with unknown relevance to humans

Chronic Toxicity

Chronic fluoride exposure can produce fluorosis, a condition characterized by nausea, vomiting, loss of appetite, diarrhea or constipation, anemia, weakness, and joint stiffness. Ethylene glycol n-butyl ether has caused red blood cell hemolysis in laboratory animals and secondary injury to the kidney and liver.

Epidemiology:

No information available for the product.

Neurotoxicity:

No information available for the product.

Mutagenicity:

No information available for the product.

Teratogenicity:

No information available for the product.

Other Toxicological Information:

None available.

Section 12 - Ecological Information

Ecotoxicity:

A: General Product Information

No data available for this product.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Phosphoric acid (7664-38-2)

Test & Species **Conditions**

96 Hr LC50 mosquito fish 138 mg/L

Ethylene glycol n-butyl ether (111-76-2)

Conditions Test & Species 96 Hr LC50 blueaill 1490 ma/L static

24 Hr LC50 goldfish 1650 ma/L 24 Hr LC50 water flea 1720 mg/L

Page 4 of 7 Issue Date: 10/25/05 Revision: 1.0005

Material Name: ALUMIPREP® 33 ID: 234449

Environmental Fate:

No data is available concerning the environmental fate, biodegradation or bioconcentration for this product.

Section 13 - Disposal Considerations

US EPA Waste Numbers & Descriptions:

A: General Product Information

This product, if discarded directly, would be a characteristic RCRA corrosive waste (D002).

B: Component Waste Numbers

No EPA Waste Numbers are applicable for this product's components.

Disposal Instructions:

Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

Section 14 - Transportation Information

US DOT Information

Shipping Name: Please refer to the container label for transportation information.

Page 5 of 7 Issue Date: 10/25/05 Revision: 1.0005

Material Name: ALUMIPREP® 33 ID: 234449

14-TRN-01

* * * Section 15 - Regulatory Information * * *

US Federal Regulations

A: General Product Information

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

B: Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

Phosphoric acid (7664-38-2)

CERCLA: 5000 lb final RQ; 2270 kg final RQ

Ethylene glycol n-butyl ether (111-76-2)

SARA 313: 1.0 % de minimis concentration (applies to R-(OCH2CH2)n-OR', where n = 1,2, or 3, R=alkyl C7 or less, or R = phenyl or alkyl substituted phenyl, R' = H or alkyl C7 or less, or OR' consisting of carboxylic acid ester, sulfate, phosphate, nitrate, or sulfonate, Chemical Category N230) (related to Glycol ethers)

SARA 311/312: Acute: Yes Chronic: Yes Fire: Yes Pressure: No Reactive: No

State Regulations

A: General Product Information

No additional information available.

B: Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS#	CA	FL	MA	MN	NJ	PA
Phosphoric acid	7664-38-2	Yes	No	Yes	Yes	Yes	Yes
Ethylene glycol n-butyl ether	111-76-2	Yes	No	Yes	Yes	Yes	Yes

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer.

WARNING! This product contains a chemical known to the state of California to cause reproductive/developmental effects.

Other Regulations

A: General Product Information

All components are on the U.S. EPA TSCA Inventory List.

Material Name: ALUMIPREP® 33 ID: 234449

B: Component Analysis - Inventory

Component	CAS#	TSCA	DSL	EINECS
Phosphoric acid	7664-38-2	Yes	Yes	Yes
Ethylene glycol n-butyl ether	111-76-2	Yes	Yes	Yes
Dihydrogen potassium phosphate	7778-77-0	Yes	Yes	Yes
Alkylphenol ethoxylates	Proprietary	Yes	Yes	No

C: Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS#	Minimum Concentration
Phosphoric acid	7664-38-2	1 %
Ethylene glycol n-butyl ether	111-76-2	1 %
Alkylphenol ethoxylates	Proprietary	1 %

* * * Section 16 - Other Information * * *

NFPA Ratings: Health: 3 Fire: 2 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

HMIS Ratings: Health: 3* Fire: 2 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

Key/Legend

EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration; NFPA = National Fire Protection Association; HMIS = Hazardous Material Identification System; CERCLA = Comprehensive Environmental Response, Compensation and Liability Act; SARA = Superfund Amendments and Reauthorization Act

The information presented herein is believed to be factual as it has been derived from the works and opinions of persons believed to be qualified experts; however, nothing contained in this information is to be taken as a warranty or representation for which Henkel Surface Technologies bears legal responsibility. The user should review any recommendations in the specific context of the intended use to determine whether they are appropriate.

Contact: Product Safety and Regulatory Affairs

Contact Phone: (248) 583-9300

This is the end of MSDS # 234449