

Material Safety Data Sheet

Material Name: METALPREP® 79

ID: 234461

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

Product Trade Name METALPREP® 79

Manufacturer Information

Henkel Surface 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
Not Available	Surfactant(s)	1-10
112-34-5	Diethylene glycol monobutyl ether	1-10

Component Related Regulatory Information

This product may be regulated, have exposure limits or other information identified as the following: Glycol ethers.

*** Section 3 - Hazards Identification ***

Emergency Overview:

DANGER -- CORROSIVE! COMBUSTIBLE! May cause severe irritation or burns to the eyes, skin, gastrointestinal tract, and respiratory system.

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.

Skin Absorption:

A component in this product may be absorbed through the skin, especially if skin is damaged. Product contains a glycol ether which caused blood disorders in rabbits.

Ingestion:

This product may produce corrosive damage to the gastrointestinal tract if it is swallowed.

Inhalation:

This product is severely irritating to the respiratory system. Excessive inhalation of this material causes headache, dizziness, nausea and incoordination.

Medical Conditions Aggravated by Exposure:

Pre-existing eye, skin and respiratory disorders. Disorders of the blood.

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

Eye Contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Skin Contact:

For skin contact, flush with large amounts of water. If irritation persists, get medical attention.

Ingestion:

If the material is swallowed, get immediate medical attention or advice -- Do not induce vomiting.

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

No additional information available.

Material Safety Data Sheet

Material Name: METALPREP® 79

ID: 234461

*** Section 5 - Fire Fighting Measures ***

Flash Point: 175 °F (79.44 °C)

Method Used: T.C.C.

Flammability Classification: Combustible

Upper Flammable Limit (UFL): Not determined

Lower Flammable Limit (LFL): Not determined

Fire & Explosion Hazards:

Fire and explosion hazards are moderate when this product is exposed to heat or flame.

Decomposition Products:

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

Extinguishing Media:

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 clean-up. Remove sources of ignition.

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:

Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists of this product. Wash thoroughly after handling. For industrial use only. Do not take internally.

Storage Procedures:

Keep container tightly closed and in a cool, well-ventilated place away from incompatible materials. Do not handle or store near an open flame, heat or other sources of ignition. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition; they may explode.

*** Section 8 - Exposure Controls / Personal Protection ***

Exposure Guidelines:

A: General Product Information

Follow all applicable exposure limits.

The supplier recommends the following exposure limit for diethylene glycol butyl ether: 35 ppm.

B: Component Exposure Limits

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

Material Safety Data Sheet

Material Name: METALPREP® 79

ID: 234461

Phosphoric acid (7664-38-2)

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

Engineering Controls:

Ventilation should effectively remove and prevent buildup of any vapor or mist generated from the handling of this product.

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

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: Liquid	Appearance: Clear, medium blue
Odor: Solvent	Vapor Pressure: Not determined
Vapor Density: Not determined	Boiling Point: >200 °F (>93.3 °C)
Specific Gravity: 1.17 - 1.19	pH: <1
Viscosity: Not determined	VOC: 1.69 lb./gal.
Solubility Water: Complete	Evaporation Rate: Not determined
Percent Volatile: Not determined	Percent Solids: Not applicable

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

Chemical Stability:

Stable under normal conditions.

Conditions to Avoid:

Avoid excessive heat and ignition sources.

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.

Hazardous Polymerization:

Will not occur.

Material Safety Data Sheet

Material Name: METALPREP® 79

ID: 234461

*** Section 11 - Toxicological Information ***

Acute Toxicity:

A: General Product Information

No information available for the product.

B: Component Analysis - LD50/LC50

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

Inhalation LC50 Rat: 450 mg/kg/4H; Inhalation LC50 Mouse: 700 mg/kg/7H; Oral LD50 Rat: 470 mg/kg; Oral LD50 Mouse: 1230 mg/kg; Dermal LD50 Rabbit: 220 mg/kg

Phosphoric acid (7664-38-2)

Inhalation LC50 Rat: >850 mg/m³/1H; Oral LD50 Rat: 1530 mg/kg; Dermal LD50 Rabbit: 2740 mg/kg

Diethylene glycol monobutyl ether (112-34-5)

Oral LD50 Rat: 5660 mg/kg; Oral LD50 Mouse: 2400 mg/kg; Dermal LD50 Rabbit: 2700 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 - Animal Carcinogen

Chronic Toxicity

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.

Ethylene glycol n-butyl ether has produced nonsignificant and reversible effects on testicular weights in rats. Other studies have shown no testicular effects on mice or rats. The embryo- and fetotoxic effects of ethylene glycol n-butyl ether was shown upon inhalation in pregnant rats, however, maternal toxicity was also present. Other studies have found no embryo- or fetotoxic effects.

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

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

Test & Species		Conditions
96 Hr LC50 bluegill	1490 mg/L	Static
24 Hr LC50 goldfish	1650 mg/L	
24 Hr LC50 water flea	1720 mg/L	

Material Safety Data Sheet

Material Name: METALPREP® 79

ID: 234461

Phosphoric acid (7664-38-2)

Test & Species

96 Hr LC50 mosquito fish 138 mg/L

Conditions

Diethylene glycol monobutyl ether (112-34-5)

Test & Species

96 Hr LC50 bluegill 1300 mg/L

24 Hr LC50 goldfish 2700 mg/L

24 Hr LC50 water flea 2850 mg/L

Conditions

Static

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

All wastes must be handled in accordance with local, state and federal regulations.

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.

*** 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).

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

SARA 313: 1.0 percent de minimis concentration (applies to R-(OCH₂CH₂)_n-OR' ethers, 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)

Phosphoric acid (7664-38-2)

CERCLA: 5000 lb final RQ; 2270 kg final RQ

Diethylene glycol monobutyl ether (112-34-5)

SARA 313: 1.0 percent de minimis concentration (applies to R-(OCH₂CH₂)_n-OR' ethers, 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

Material Safety Data Sheet

Material Name: METALPREP® 79

ID: 234461

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
Ethylene glycol n-butyl ether	111-76-2	Yes	No	Yes	Yes	Yes	Yes
Phosphoric acid	7664-38-2	Yes	No	Yes	Yes	Yes	Yes
Diethylene glycol monobutyl ether (¹related to Glycol ethers)	112-34-5	No	No	No	No	No	Yes¹

Other Regulations

A: General Product Information

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

B: Component Analysis - Inventory

Component	CAS #	TSCA	DSL	EINECS
Ethylene glycol n-butyl ether	111-76-2	Yes	Yes	Yes
Phosphoric acid	7664-38-2	Yes	Yes	Yes
Diethylene glycol monobutyl ether	112-34-5	Yes	Yes	Yes

C: Component Analysis - WHMIS IDL

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

Component	CAS #	Minimum Concentration
Ethylene glycol n-butyl ether	111-76-2	1 % (English Item 721, French Item 824)
Phosphoric acid	7664-38-2	1 % (English Item 1291, French Item 127)
Diethylene glycol monobutyl ether	112-34-5	1 % (English Item 581, French Item 814)

* * * 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: Regulatory Affairs and Product Acceptance

Contact Phone: (248) 583-9300

Material Safety Data Sheet

Material Name: METALPREP® 79

ID: 234461

This is the end of MSDS # 234461