

**MATERIAL SAFETY DATA SHEET**  
**Safe n' Easy Metal Restorer**

**SECTION 1 IDENTIFICATION**

**Product Name:** Safe n' Easy Metal Restorer

**Manufactured for:**  
DUMOND CHEMICALS, INC  
104 Interchange Plaza, Ste. 202  
Monroe Township, NJ 08831  
(609) 655-7700

MSDS Date of Preparation: 5/6/11

**EMERGENCY PHONE:** (800)457-4280 (InfoTrac) #79363

**SECTION 2: HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW**

**DANGER!**

This product is a thick yellow/orange liquid with no odor. Corrosive. Contact may cause eye and skin burns. May be harmful if absorbed through the skin. Mists may cause respiratory irritation. Harmful if swallowed.

**SECTION 3 PRODUCT COMPONENTS**

<b>Components</b>	<b>CAS#.</b>	<b>WT.%</b>
Phosphoric Acid	7664-38-2	10-20
2-Butoxyethanol	111-76-2	1-5
Nonionic surfactant	9016-45-9	1-5
Glycolic Acid	79-14-1	1-5

**SECTION 4 EMERGENCY and FIRST AID PROCEDURES**

**EYE CONTACT:** Immediately flush eyes with water for at least 20 minutes while lifting the upper and lower lids. Get immediate medical attention.

**SKIN CONTACT:** Immediately flush skin with water for 15 minutes while removing contaminated clothing and shoes. Wash thoroughly with soap and water. Get medical attention.

**INHALATION:** Remove to fresh air. If breathing has stopped give artificial respiration. If breathing is difficult have qualified personnel administer oxygen. Get medical attention.

**INGESTION:** If conscious, give 1 glass of water to dilute. Do not induce vomiting. Never give anything by mouth to a person who is unconscious or convulsing. Get immediate medical attention.

**SECTION 5 FIRE and EXPLOSION HAZARD DATA**

**EXTINGUISHING MEDIA:** Use any media appropriate for surrounding fire. Cool fire exposed containers with water.

**SPECIAL FIREFIGHTING PROCEDURES:** Firefighters should wear full emergency equipment and NIOSH approved positive pressure self-contained breathing apparatus.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** None known.

**SECTION 6 ACCIDENTAL RELEASE MEASURES**

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:** Wear appropriate protective clothing and equipment to prevent eye and skin contact. Dike spill and neutralize with sodium bicarbonate. Collect into closable containers for disposal with an inert absorbent. Prevent spill from entering sewers and waterways. Wash spill area with water.

## SECTION 7 HANDLING and STORAGE

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:** Store in a tightly closed container. Store in a cool, well ventilated area. Keep away from incompatible materials. Protect containers from physical damage.

Prevent eye and skin contact. Do not breathe vapors or mists. Use only with adequate ventilation and appropriate protective clothing (See Section 8). Immediately remove and launder contaminated clothing before re-use. Wash thoroughly after handling and before eating, drinking, smoking, or using toilet facilities.

**OTHER PRECAUTIONS:** Empty containers retain product residues. Follow all MSDS precautions in handling empty containers.

## SECTION 8 EXPOSURE CONTROLS and PERSONAL PROTECTION

<u>Components</u>	<u>Exposure Limits</u>
Phosphoric Acid	1 mg/m <sup>3</sup> TWA OSHA PEL 1 mg/m <sup>3</sup> TWA ACGIH TLV, 3 mg/m <sup>3</sup> STEL
2-Butoxyethanol	50 ppm, skin TWA OSHA PEL 20 ppm, skin TWA ACGIH TLV
Nonionic surfactant	None Established
Glycolic Acid	None Established

**RESPIRATORY PROTECTION:** If the exposure limits are exceeded an approved full facepiece organic vapor/dust mist respirator, supplied air respirator (with escape bottle if required) or self-contained breathing apparatus may be required. Selection of respiratory protection depends on the contaminant type, form and concentration. Select in accordance with OSHA 1910.134 and good Industrial Hygiene practice.

**VENTILATION:** Good general room ventilation (equivalent to outdoors) should be adequate under normal conditions. If the recommended exposure limit is exceeded increased mechanical ventilation such as local exhaust may be required.

**GLOVES:** Neoprene, nitrile, butyl rubber or other impervious gloves are recommended to prevent skin contact.

**PROTECTIVE CLOTHING:** Impervious apron, boots and other clothing are recommended if needed to prevent contact or if splashing is possible.

**EYE PROTECTION:** Wear chemical goggles and/or faceshield to prevent eye contact. Do not wear contact lenses.

**OTHER PROTECTIVE EQUIPMENT:** A safety shower and an eye wash facility should be available in the immediate work area.

## SECTION 9 PHYSICAL and CHEMICAL PROPERTIES

**APPEARANCE AND ODOR:** Thick yellow/orange liquid with no odor. The odor threshold for 2-butoxyethanol is 0.1 ppm.

**BOILING POINT (@ 760 mmHg):** Not available

**SPECIFIC GRAVITY (H<sub>2</sub>O=1):** 1.17

**VOLATILE:** >75%

**EVAPORATION RATE:** Not available

**pH:** 1.0

**VOC Content:** 35 g/L

**FLASH POINT:** Non-flammable

**FLAMMABLE LIMITS: (vol % in air)**

**MELTING POINT:** Not applicable

**VAPOR PRESSURE:** 0.88 mm Hg @ 25°C (2-butoxyethanol)

**VAPOR DENSITY (AIR=1):** Not available

**SOLUBILITY IN WATER:** Complete

**COEFFICIENT OF WATER/OIL:** Not available

**AUTOIGNITION TEMPERATURE:** Not applicable

**LEL – N/A**

**UEL – N/A**

## SECTION 10 STABILITY and REACTIVITY

**STABILITY:** This material is stable.

**CONDITIONS TO AVOID:** Contact with chlorides and stainless steel may release flammable hydrogen gas.

**INCOMPATIBILITY:** Avoid aldehydes, amines, amides, caustics, ketones, organic peroxides, sulfides, cyanides, alkalies, strong oxidizing agents, ammonia, chlorates and sodium hydroxide.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal decomposition may yield toxic carbon dioxide, carbon monoxide, aldehydes, ketones and phosphorus oxides.

**HAZARDOUS POLYMERIZATION:** Will not occur.

**CONDITIONS TO AVOID:** Not applicable.

## SECTION 11 TOXICOLOGICAL INFORMATION

### HEALTH HAZARDS:

**INHALATION:** Mist may cause irritation to the eyes, mucous membranes and upper respiratory tract. High concentrations may cause severe irritation or burns and pulmonary edema.

**SKIN CONTACT:** Skin contact may cause severe irritation or burns with redness, pain and swelling. 2-Butoxyethanol can be absorbed through the skin causing central nervous system effects including headache and nausea.

**EYE CONTACT:** May cause severe irritation or burns with redness, pain, tearing, swelling and blurred vision. May cause permanent eye damage.

**INGESTION:** Swallowing may cause severe to the mouth, throat or stomach, abdominal pain, nausea, vomiting, shock, circulatory collapse and death.

**CHRONIC EFFECTS OF OVEREXPOSURE:** Prolonged or repeated exposure may cause metabolic acidosis and changes in the kidney and liver. Repeated skin contact with diluted solutions or mists may cause dermatitis.

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** Individuals with chronic pulmonary, skin, kidney or liver disorders may be at increased risk from exposure to this material.

**TOXICOLOGY DATA:** This product has not been tested as a whole. Toxicity values for the components are:

	<u>LD50</u>	<u>LC50</u>
2-Butoxyethanol	560 mg/kg oral rat 400 mg/kg skin rabbit	450 ppm/4 hr Inhalation rat
Phosphoric Acid	1,530 mg/kg oral rat 2,740 mg/m <sup>3</sup> skin rabbit	No data available
Nonionic Surfactant	3000 mg/kg oral rat 4400 mg/kg skin rabbit	No data available
Glycolic Acid	1950 mg/kg Oral rat	7.7 mg/L/4 hr Inhalation rat

None of the components are listed as a carcinogen or suspect carcinogen by IARC, NTP, ACGIH or OSHA.

2-Butoxyethanol has been found to be mutagenic in bacteria (*S. typhimurium*).

None of the components are known to cause sensitization in animals or humans.

2-Butoxyethanol has been found to cause adverse reproductive effects in laboratory animals (both effects on fertility and developmental abnormalities by inhalation and oral routes).

## SECTION 12: ECOLOGICAL INFORMATION

2-Butoxyethanol: 96 hr LC50 Cyprinodon variegatus (Sheepshead minnow) 116 mg/L  
Nonionic Surfactant: 96 hr LC50 Lepomis macrochirus (Bluegill sunfish) >10 mg/L  
Glycolic Acid: 96 hr LC50 fathead minnow 164 ppm; 96 hr LC50 zebra fish >5000 mg/L; 48 hr EC50 daphnia magna 141 mg/L

## SECTION 13: DISPOSAL INFORMATION

**WASTE DISPOSAL METHOD:** Dispose in accordance with all local, state and federal regulations.

## SECTION 14: TRANSPORTATION INFORMATION

**DOT SHIPPING NAME:** UN1805, Phosphoric Acid Solution, 8, PG III  
**DOT HAZARD CLASSIFICATION:** Class 8, PG III (Corrosive Liquid)  
**DOT LABELS REQUIRED (49CFR172.101):** Corrosive  
**UN NUMBER:** UN1805

## SECTION 15: REGULATORY INFORMATION

**OSHA HAZARD CLASSIFICATION:** Corrosive, target organ effects

**EPA SARA 311 HAZARD CLASSIFICATION:** Acute health, Chronic health

**EPA SARA 313:** This product contains the following chemicals regulated under SARA Title III, section 313:

Phosphoric Acid	7664-38-2	10-20%
2-Butoxyethanol (glycol ethers)	111-76-2	1-5%

**CERCLA Hazardous Substances (Section 103)/RQ:** Spills of this product over the RQ (reportable quantity) must be reported to the National Response Center. The RQ for the product, based on the RQ for Phosphoric Acid (5% maximum) of 5,000 lbs, is 100,000 lbs. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

**WHMIS CLASSIFICATION:** Class E (Corrosive)

This MSDS has been prepared according to the criteria of the Controlled Products Regulation (CPR) and the MSDS contains all of the information required by the CPR.

**TOXIC SUBSTANCES CONTROL ACT:** All of the components of this product are listed on the TSCA inventory.

**CALIFORNIA PROPOSITION 65:** This product contains the following chemicals known to the State of California to cause cancer and reproductive toxicity: ethylene oxide <1 ppm (cancer, developmental, male reproductive toxicity, female reproductive toxicity), 1,4 dioxane <0.2 ppm (cancer)

**CANADIAN ENVIRONMENTAL PROTECTION ACT:** All of the components of this product are listed on the Canadian Domestic Substances List (DSL).

**SECTION 16: OTHER INFORMATION**

NFPA Rating: Health: 3 Fire: 0 Reactivity: 0

Revision History: Section 1: Emergency Overview, Section 2: Composition, Section 4: Eyes, skin and ingestion, Section 8: Exposure limits, Section 9: Respiratory protection, ventilation, Section 9: Specific gravity, pH, vapor pressure, VOC Section 11: Skin contact, eye contact, ingestion, chronic effects, toxicology data, Section 12: Ecotoxicity data, Section 15: California Proposition 65, WHMIS classification, Section 16: NFPA ratings