



5332 Dansher Road  
Countryside, Illinois 60525

## MATERIAL SAFETY DATA SHEET

Revision Date: 8/17/2005

MSDS No. N453

Emergency Phones: 708-579-8100 (NYCO)

800-424-9300 (CHEMTREC)

PLEASE NOTE: This MSDS is being provided to your company for the purpose of providing current health and safety information to your management and for your employees who work with this material. Please read the information on these sheets, and then provide this information to those people at your company whose responsibility it is to comply with FEDERAL and STATE RIGHT-TO-KNOW regulations. Also make this information available to any employee who requests it. It is your obligation to comply with these regulations.

### SECTION I - PRODUCT IDENTITY

**PRODUCT NAME: DEOX Aluminum & Stainless Steel Cleaner**

Formula: Mixture, phosphoric and hydrofluoric acids, detergent and solvent in water.

#### HMIS RATINGS

Health = 3 (Serious)	Flammability = 0 (Insignificant)
Reactivity = 0 (Minimal)	Protection = D (Safety glasses/shield, gloves & clothing)

### SECTION II - HAZARDOUS INGREDIENTS

	PERCENT	TLV	STEL	CARCINOGEN (OSHA,TP,IARC)
Phosphoric Acid CAS No. 7664-38-02	>30%	1 mg/m <sup>3</sup>	3 mg/m <sup>3</sup>	no
Hydrofluoric acid (Hydrogen Fluoride) CAS No. 7664-39-3	1%	3 ppm as Fluoride		no
2-butoxyethanol CAS No. 111-76-2	<5%	25 ppm		no
Color additives	Trace	None		

### SECTION III - CHEMICAL AND PHYSICAL

Appearance: Pink-Red Liquid	Boiling Point: Est. 210° F.
Odor: Nil	Melting Point: N/A
Ph: <1.0	Spec. Gravity (H <sub>2</sub> O = 1): 1.3
Water Solubility: Complete	Vapor Pressure (Mm Hg): N/A
Viscosity: Water Thin	VOC Content: 4% (N.A.)

### SECTION IV - FIRE AND EXPLOSION HAZARDS

Flash Point (Method): N/A	Explosion Limits:	Upper: N/A Lower: N/A
Extinguishing Media: N/A (product is non-flammable)		
Special Firefighting Procedures and Hazards: Avoid skin and eye contact, and breathing of acid vapors. Wear head and body protection and acid respirator if exposure to liquid is likely. If involved in a fire the product may produce toxic fumes. Use water spray for diluting.		

### SECTION V - REACTIVITY INFORMATION

Stable: <input checked="" type="checkbox"/>	Unstable: <input type="checkbox"/>
<b>Precautions:</b> Incompatibility: Strong alkalis, glass (etches) materials not resistant to strong acids, active metals (zinc, aluminum, magnesium, etc.).	
Hazardous Decomposition Products: Possible phosphorus oxide and hydrogen fluoride fumes at fire temperatures. Contact with active metals can release flammable gas.	
Hazardous Polymerization: Occurs: <input type="checkbox"/>	Does Not Occur: <input checked="" type="checkbox"/>

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## SECTION VI - HEALTH HAZARDS - PROTECTIVE MEASURES - FIRST AID

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- Inhalation:** Breathing of vapor causes respiratory irritation and inflammation. Wear approved acid/vapor/mist respirator. If working in a confined area it is suggested that an acid/vapor mist respirator be worn particularly while spraying the product.
- Skin:** **Highly Corrosive.** Causes irritation and burns. Wear acid resistant protective gloves, boots and clothing when working with the product concentrate or dilutions. Prolonged contact with 2-butoxyethanol may result in the absorption of potentially harmful amounts leading to possible liver and kidney damage. Remove contaminated clothing. Provide convenient safety showers. Flush skin with water for 15 minutes. Get medical attention for any burns.
- Eyes:** Corrosive. Causes eye damage. Wear splash proof goggles or side shield safety glasses. Provide convenient eyewash stations. Flush immediately with water for 15 minutes. Get prompt medical attention.
- Ingestion:** Corrosive. Causes irritation and burning in mouth and throat. Avoid swallowing. If swallowed, drink lots of water or, preferably, milk. Get medical attention immediately. Do not induce vomiting.

Most likely routes of entry: Skin, Eyes, Inhalation

Other Important Medical or Precautionary Information: None

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## SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

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Spills and Leaks: Small spills can be flushed into normal drainage or into ground with copious amounts of water, or taken up with absorbent material. Larger spills should be contained by diking or other methods and held for collection and/or reuse, or for neutralization with alkali before collection and disposal. Personnel should use eye and skin protection and respirator.

Storage and Handling: Check daily for any leaks from containers, vessels, pumps, and piping. Have water hoses and alkali (caustic soda, lime, etc.) convenient. Only use containers and equipment designed for acid service. Use a respirator if area is poorly ventilated.

Waste Disposal: If neutralized, may be disposable in sewers if local regulations permit. Otherwise, send to licensed treatment and disposal facility. As supplied, this product is a RCRA hazardous waste.

Empty Containers: Rinse well before handling and disposal. Observe label precautions.

Other Precautions: None

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## SECTION VIII - REGULATORY INFORMATION

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Reportable for SARA Title III, S.313 (Form R): Phosphoric acid, Hydrofluoric acid and 2-butoxyethanol

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