

Distribution  
Formulation  
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Packaging

**Better Chemistry. Better Business.**

## **Emerald: Safer Alternatives. Sustainable Solutions.**

The Emerald product line from Hubbard-Hall offers earth friendly metal cleaning and pre-treatment solutions, formulated to be highly effective yet safer for the environment and workers.

### **Products Available**



#### **Emerald Acid Clean LF**

*Low Foam, Heavy Duty Acid Cleaner*

- Compatible with aluminum, stainless steel, copper, brass, Monel and other high nickel alloys.
- Non-fuming and contains no mineral acids
- High detergency
- Removes lubricants, machining oils, light rust and scale
- Contains a high percentage of DfE approved surfactants and solubilizers

#### **Emerald ICP 1**

*Heavy Duty, Soap Based Parts Cleaning for All Substrates*

- Contains materials that pass DfE screening
- Effective, rapid soil removal
- No phosphates, borates, caustic, nitrite, or silicates
- Provides short term in-process corrosion resistance

#### **Emerald Super Soak Plus**

*Heavy Duty, High Solvency Cleaner for Soil Removal*

- Compatible with most substrates
- Contains materials that pass DfE screening
- Moderate to low foam
- Mixes with cold water




P.O. Box 790 • Waterbury, CT 06720-0790 • Tel: (203) 756-5521 • Fax: (203) 756-9017

P.O. Box 969 • Inman, SC 29349-0969 • Tel: (864) 472-9031 • Fax: (864) 472-2117

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## **Emerald: Safer Alternatives. Sustainable Solutions.**

### **Additional Products**

#### **Emerald Acid Clean #1**

*Acid Based Cleaning and Burnishing*

- Compatible with steel, stainless steel and copper based substrates
- Non-fuming and contains no mineral acids or halogens
- Removes light rust, scale and oxidation
- Contains materials that pass DfE screening

#### **Emerald PD S**

*Mildly Alkaline Cleaner to Remove Forming and Machining Lubricants*

- Low foaming and provides defoaming action on lubricants
- Developed for use in pressure spray machines
- Biodegradable surfactant system
- No caustic, nitrites, chelators or phosphates
- Free rinsing

#### **Emerald Safe Acid**

*Low pH Organic Salt*

- Excellent for cleaning and descaling
- Safer alternative to hydrochloric acid
- Non-corrosive to skin and steel
- No phosphates

#### **Emerald HD2**

*Industrial and Institutional Cleaning*

- Superior wetting, emulsification and dispersion
- Formulated with surfactants derived from renewable sources
- Cleans floors, machines and a variety of oils, fats and soils
- Non-flammable, water-soluble and free rinsing



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