



“The success of Hubbard-Hall’s Emerald line of industrial cleaners has proven that safer, environmentally benign cleaners are a viable option in the industrial parts cleaning market.”

**Bob Farrell**  
Sr. VP / Technical Director  
Hubbard-Hall

## **Cleaning** the Hard to Clean

# 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.

This line was carefully designed to leverage eco-friendly chemistries while delivering exceptional cleaning results. With specific solutions for various substrates and unique properties to meet heightened environmental concerns, Hubbard-Hall’s Emerald line is ideal for businesses interested in reducing the environmental impact of their manufacturing processes.



## **Key Features**

- Available in a variety of formulations including acid-based, soap-based, alkaline and low pH dry salts
- Applicable produces for a variety of substrates including steel, stainless, copper, aluminum, Monel and nickel
- Controlled foam, low-foaming, non-fuming options available
- Made with DfE-approved surfactants and solubilizers
- Biodegradable



## 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 Precision Clean SLA

Acid-Based Cleaning and Burnishing

- Compatible with aluminum, 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 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 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
- A 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

## Our people. Your problem solvers.

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32% of Hubbard-Hall associates are in tech support, customer service or sales.

This means that you get answers fast while the rest of our team gets your order delivered on time and in spec.

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563 South Leonard Street, Waterbury, CT 06708  
Phone: (800) 648-3412 · [HubbardHall.com](http://HubbardHall.com)



**Cleaning**  
the Hard to Clean



**Finishing**  
the Hard to Finish



**Treating**  
the Hard to Treat