



Better Chemistry. **Better Business.**

Emerald HD

Product Code: 2052090
Revised Date: 12/01/2009

Emerald HD

DESCRIPTION

Emerald HD is a clear, heavy duty, mildly alkaline general-purpose maintenance cleaner intended for industrial and institutional cleaning tasks. The product is a water soluble, non-flammable free of petroleum and chlorinated solvents, caustics, borates, or phosphates.

Emerald HD is formulated with a biodegradable surfactant system derived from sustainable resources offering superior wetting, emulsification, and dispersion. Because of its unique formulation, Emerald HD will clean a variety of oils, fats, and particulate soils.

FEATURES AND BENEFITS

- Recognized by the Design for the Environment Program (DfE) for offering improved health and environmental characteristics
- High detergency
- Wetting agents are derived from sustainable sources
- Wetting agents are biodegradable
- Mild pH of less than 10.5
- Controlled foam
- Free rinsing
- Good soil penetration
- Emulsifies most oils.
- Good particulate soil removal characteristics
- VOC less than 5%
- Contains no chelating agents
- Effective at low operating temperatures
- Easily waste treated
- Contains no fragrances or dyes



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TYPICAL APPLICATIONS

- Floor cleaning in manufacturing plants
- Machinery cleaning; stamping, drawing, milling, etc.
- Glass cleaning
- General maintenance cleaning
- Transportation cleaning
- Steam cleaning

HOW AND WHERE TO USE

Emerald HD may be used as a spray on, wipe or brush-on cleaner, or as a soak cleaner. It is not recommended for use in helical spray or turbo washers, as foam levels may be excessive. **Emerald HD 2** or **Emerald IC P 1** should be considered when a lower foaming product is required for use in these industrial parts cleaning applications.

***Floor cleaning** in floor scrubbing machines dilute 1 part **Emerald HD** with 15 to 20 parts water.*

Light soils on painted surfaces, dilute 1 part **Emerald HD** with 10 to 19 parts water, spray or wipe on then rinse or wipe off with clean cloth. For heavier dirt, dilute 1 part to 5 parts of water.

Machinery cleaning, dilute 1 part **Emerald HD** with 1 to 4 parts for light oil and soils, spray or wipe on then rinse or wipe off with a clean cloth. For heavy oil and soil removal, dilute 1 to 1.

Soak tank cleaning of clean metal parts, tools, filters, etc. use at 10% to 20% by volume. Heating solution (up to 180F) will speed cleaning. Most metals are not harmed when using the dilutions recommended above. **Emerald HD** is not recommended for use on aluminum substrates at elevated temperatures.

Steam cleaning dilute 1 part **Emerald HD** with 50 to 99 parts water.

Glass cleaning, use at 0.5 to 1.0 % by volume (1 to 2 fluid ounces per gallon).



Product Bulletin

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Transportation cleaning, for heavy soils dilute one part **Emerald HD** with 20 parts water. For light soils dilute one part with 30 to 50 parts water.

Emerald HD is a heavy duty alkaline cleaner. Most surfaces can be safely cleaned with when used as directed. Rinsing or wiping off should be done as quickly as possible. When using on painted surfaces it is always advisable to keep contact times to a minimum.

CAUTION

Emerald HD is a mildly alkaline material so always wear goggles, rubber gloves and protective clothing when working with the product. It is important to read and understand the material safety data sheet prior to working with **Emerald HD**.

In case of skin or eye contact flush exposed areas immediately with clean, cold water. Contact a doctor in case of eye contact or injury.

DISPOSAL

Used solutions and rinse waters should be discharged to a permitted wastewater treatment system in accordance with all applicable local, state and federal environmental regulations.

WARRANTY

THE QUALITY OF THIS PRODUCT IS GUARANTEED ON SHIPMENT FROM OUR PLANT. IF THE USE RECOMMENDATIONS ARE FOLLOWED, DESIRED RESULTS WILL BE OBTAINED. SINCE THE USE OF OUR PRODUCTS IS BEYOND OUR CONTROL, NO GUARANTEE EXPRESSED OR IMPLIED IS MADE AS TO THE EFFECTS OF SUCH USE, OR THE RESULTS TO BE OBTAINED.