ENVIRONMENTAL MANUFACTURING SOLUTIONS

EMS Efflorescence Remover

SYNTHETIC ACID MASONRY CLEANER

- Stronger than Muriatic
- 100% Acid Free
- Non-D.O.T. Regulated
- Removes Concrete
- Non-Fuming
- Non-Corrosive
- Removes Efflorescence
- Eliminates Mineral Stains
- No Neutralizing Step
- Safe on Glass
- · Safe on Plants
- Safe on Skin

Until now, the only effective way to remove mortar smear, grout resi-due, cement and efflorescence from brick, walls and finished concrete has been to use harsh mineral acids. While these acids eat away the calcium deposits, they pose significant dangers to other parts of the building, the environment and to the person using the product.

Efflorescence Remover is the strongest masonry cleaner available and is also the safest. Independent tests confi rm that, formed with EMS' patented SynTech*, the world's only synthetic acid, dis-solves more calcium oxide and efflorescence than Muriatic (Hydrochloric) or phosphoric acids, the active ingredients in virtually every other masonry cleaner on the market. Still, with EMS' SynTech, all that potency comes with a triple zero HMIS score.

EMS Efflorescence Remover will safely and quickly clean pavers, block, brick, concrete, river rock, architectural concrete and retainer walls while dissolving all signs of efflorescence. Plus, it is color safe on even the lightest colors.

This non-fuming purely synthetic formula is non-D.O.T. regulated while exceeding OSHA & EPA compliance standards. In fact, it is so safe that it carries a USDA Authorization Code of A1, deeming it safe for use in and around food processing areas and equipment. It is 100% biodegradable, water soluble, non-toxic, non-butyl and non-flammable.

EMS Efflorescence Remover is 100% acid free, so no neutralizing step is required. This also means it will not etch glass, is non-corrosive and will not harm plants or turf. Simply dilute, apply, agitate and rinse.

The formula and its ingredients meet or exceed the EPA's Safer Choice program requirements for both the safety of the environment and the user.



Technical Data

BIODEGRADABLE: Yes/100%

FORM: Liquid

ODOR: Mild Detergent Odor COLD STABILITY: 19° F DETERGENCY: Strong

PHOSPHATES: None
WETTING ABILITY: Excellent

FLAMMABILITY: Non-Flammable BOILING POINT: 228° F SOLUBILITY IN WATER: 100%

VOCs: None

VOLATILE BY VOLUME: N/A CARCINOGENS: None SHELF LIFE: 1 Year

Dilution Specification

Please refer to the product label.

Dissolving Properties

Efflorescence Dissolving Properties with 2 Minute Exposure

Efflorescence Remover 100 Muriatic (Hydrochloric) 98.9

Test Conditions

16 ounces of 20% active solution 1 sq. ft. paver stone with heavy efflorescence 2 Minutes @ 70° F

Clearly, EMS ER outperforms other acids when it comes to dissolving efflorescence, including Muriatic (Hydrochloric) which is highly corrosive.

Separate tests also show that EMS ER also dissolved nearly 15% more calcium oxide than Muriatic (Hydrochloric) acid.

DOT STATEMENT

Non-D.O.T. Regulated/Non-D.O.T. Hazardous EXEMPT as per 49 CFR 173.154(d) (2) <6.25 mmpy

Toxicity Studies

Toxicity Limits: Test Procedure OECD 202, 48 hr. LC 50 and LD 50 (rat oral NON-TOXIC

Mutagenicity Limits: OECD Guidelines Sec. 471 Chemicals: NON-MUTAGENIC

Dermal Irritation & Corrosion

A modified Draize method was used as described in OECD Guidelines for the Te sting of Chemicals Sec. 404 and complies with the requirements of OECD Principles of GLP, Annex revised as of July 1992.

Efflorescence Remover is classified as a "Very Mild Skin Irritant".

Biodegradation & Aquatic Safety

Test Procedure: Hach Reactor Digestion method for Waste Water and Sea Water. Hach Reactor Digestion Method is a semi-micro adaptation of the Standard Methods.

Efflorescence Remover is 100% Biodegradable.

Classifications & Approvals

D.O.T., IMO, IATA, IMDG - Non-Regulated

TDG - Non-Regulated to and through Canada

SARA 313 311/312 - This product does not contain any ingredients that are subject to the reporting requirements.

California Prop 65 - This product does not contain any ingredients known to the state of California to cause cancer, birth defects or any other reproductive harm.

FDA - Recognized as Safe (GRAS

USDA Authorization A1, A2, A4, A8, C3

Additional Studies & Results: When tested, Efflorescence Remover showed no potential for the generation of Carbon Dioxide under NIOSH 7903, OSHA & ACGIH testing protocols governing workplace environments.