

## AMMONIUM BIFLUORIDE RESTORATION CLEANER

### DESCRIPTION AND USE

- \* Restores glazed surfaces
- \* Concrete cleaner and brightener
- \* Removes rust

### ADVANTAGES

- \* Spray-on/Spray-off process increases productivity.
- \* Can be used on hard-faced bricks, aluminum siding, terra cotta, and concrete
- \* More effective than hydrofluoric acid at removing black mineral stains on glazed surfaces.
- \* Safer to people and plants than hydrofluoric acid.

### LIMITATIONS

- \* Precautions should be taken to avoid marking anodized aluminum and glass.

### TECHNICAL DATA

Appearance & Odor: White liquid, acrid odor

Physical State: Liquid

pH: 2.0

Vapor Pressure (mmHg): N/A

Vapor Density (air=1): N/A

Boiling Point: 210° F

Freezing/Melting Point: N/A

Specific Gravity (water =1): 1.09

Evaporation Rate: N/A

Solubility in Water: Complete

### PREPARATION

Protect anodized aluminum and foliage with polyethylene or other proven protective material. Avoid wind drift on surrounding surfaces such as auto and pedestrian traffic. Generally glass does not need to be covered if rinsed quickly. If glass has painted aluminum frames surrounding it, a test should be done.

### SURFACE & AIR TEMPERATURES

Excessively high or low temperatures will produce poor results and possible harm. Best cleaning results are obtained when air and surface temperatures are 40° F or above. Do not clean when temperatures are below freezing or will be overnight. If freezing conditions exist, allow adequate time for surface to thaw. If air temperatures exceed 90° F, flash cool the surface with water before applying product. Do not allow product to dry on a hot surface.

### PRE-TESTING

Always test prior to beginning full scale cleaning operations. Testing should confirm cleaning effectiveness on each type of surface and stain designated to be removed. Also test to determine the desired surface contact time and any potential for adverse reactions with adjacent materials. Allow test panels to dry thoroughly before evaluating final appearance and results.

### DILUTION

- 1:1 - 10:1 is the application range for restoration work
- Undiluted (straight) for oil spot removal on concrete surfaces
- 8:1 - 20:1 for lane cleaning or sidewalk cleaning without heavy oil stains.

There may be danger of burning surfaces if used repeatedly straight.

*Note: Dilutions will vary based on application and the particular type of surface.*

### SUITABLE SUBSTRATES

Glazed brick, concrete, aluminum siding, glazed and unglazed terra cotta, porous brick and vinyl siding

### APPLICATION INSTRUCTIONS

Before applying read "Protect" in Preparation section and "Precautionary Measures" under Safety information. Apply with a low-pressure applicator when cleaning porous hard brick. For best results, use two applications spaced 3-5 minutes apart. Do not let the product to dry on the surface. The first application penetrates and the second lifts the stain out. Glass generally does not need to be covered if rinsed quickly.

### COVERAGE RATES

Coverage rates will vary from 100 - 250 sq. ft. per gallon depending on the surface porosity, texture and severity of staining.

### PRECAUTIONARY MEASURES

Always wear goggles and rubber gloves when handling this product. Keep off of skin and clothing. If material comes in contact with clothing, wash before reuse. The product contains Hydrochloric Acid, Ammonium Bifluoride, and Oxalic Acid. Do not get in eyes, on skin or clothing. Avoid breathing fumes. Keep container closed when not in use. Use with adequate



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ventilation and in a well ventilated area. Wear boots, gloves, face shields and/or goggles to avoid splash to bare skin and eyes. Do not wear contact lenses when using product. Take precautions to avoid exposing building occupants to fumes. Dispose of empty containers according to federal, state and local requirements. Avoid drifting of material or rinse water onto autos and pedestrians by protecting or diverting such traffic. Do not dilute GSR with any product except water. Do not use for any other applications other than specified. Do not remove label. Read Material Safety Data Sheet for additional safety and health hazard information prior to use.

### SPILL OR LEAK PROCEDURES

Check with the state, local, or federal regulations for waste disposal methods in the area. Wear proper protective equipment while doing cleanup. For large spills, dike and contain for intended use. For small spills, use a chemical absorbent product and place in approved container for disposal.

### CONTAINER HANDLING/STORAGE

Store the product in a cool dry place away from alkali / base. Do not allow this product to freeze. Vent bung cap before opening. Keep container tightly closed when not in use. Wash thoroughly after handling. Empty containers retain residue and vapors and must be handled as if full. Completely rinse drum prior to disposal

### INSTRUCTIONS IN CASE OF CONTACT OR EXPOSURE

Eyes: Flood with water fifteen minutes. Seek immediate attention.

Skin: Wash off with soap and water, immediately. Call physician & seek medical attention.

Inhalation: Remove to fresh air. If irritation persists, call physician.

Ingestion: Drink lots of water. Seek immediate medical attention. Do not induce vomiting.

Physician Note: For skin contact, make a salve out of calcium gluconate at 2.5% and petroleum jelly at 97.5%.

### NOTICE

This product has been classified in accordance with the hazard criteria of the CFR.

### DISCLAIMER

The information herein is given in good faith, but no warranty, either expressed or implied, is made. Final determination of the suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot be sure or guarantee these are the only hazards which exist.

### CUSTOMER SERVICE

Factory personnel are available for assistance at 800-313-8505 and will send you additional information on products as necessary.

