



## Specifications

176

#3997

# WATER STAIN REMOVER

### Description:

Water Stain Remover is a unique solution to many stain problems on many surfaces. Use Water Stain Remover to remove rust, scale and hard water deposits from toilets, urinals, fabrics, laundry, carpets and metals. Water Stain Remover attacks rust chemically without attacking the surface.

### **REMOTES: TOILET RINGS - RUST STAINS - MINERAL DEPOSITS**

### Use Directions:

- \*\* Read and understand the material safety data sheet.
- \*\* Always wear water proof gloves. DO NOT use above eye level.
- \*\* Do Not mix with other chemicals.

### Toilets and Urinals:

1. Lower water in bowl by forcing water over trap with bowl mop or by pouring a bucket of water quickly into the toilet.
2. Saturate bowl mop and apply WSR to stained areas.
3. Rinse bowl by flushing at least twice.
4. Carefully rinse bowl mop and store mop away from children.

### Carpets and Fabrics:

1. Test carpet and fabric in an inconspicuous area for deleterious effects.
2. Apply WSR to a sponge and blot on strained area. Apply WSR with light spray on larger areas. After treatment launder or clean carpets in normal manner or rinse thoroughly with water.

### Glass:

Caution: WSR may etch mirrors, glass, ceramic tile and porcelain. User assumes all risk of damage to glass products.

### Specification Data:

Active Ingredient:	Ammmonium Bifluoride
pH:	3.5 - 5.0
Color:	Amber
Odor:	Pleasant
Specific Gravity:	1105
Stability:	1 Year Minimum
Density:	8.7 lbs/gal

**HEALTH HAZARDS (ACUTE AND CHRONIC)**

Repeated exposure to fluoride containing products may cause excessive calcification of the bones and certain ligaments. Stiffness and limitation of motion may result. The respiratory, circulatory, gastric, intestinal, and nervous system can be affected. Fluoride poisoning can be fatal.

**CARCINOGENICITY:** NTP? NO    **IARC MONOGRAPHS?** NO    **OSHA REGULATED?** NO  
The components of this product are not considered to be carcinogens by the National Toxicology Program the International Agency for Research on Cancer, or the Occupational Safety and Health Administration.

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE**

Exposures can aggravate asthma attacks.

**EMERGENCY AND FIRST AID PROCEDURES**

**INHALATION** - Remove to fresh air. Give artificial respiration if not breathing. Get immediate medical attention!  
**EYES** - Immediately flush eyes with lots of running water for 30 minutes holding eyelids open. GET MEDICAL ATTENTION!  
**SKIN** - Immediately flush with cold running water for at least 15 minutes paying attention to skin under the nails. Remove contaminated clothing. Get immediate medical attention no matter how minor burns may appear!  
**INGESTION** - Do not induce vomiting. If conscious, give lots of water. GET IMMEDIATE MEDICAL ATTENTION!

**SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE****STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED**

For small spills dilute with water, mop or wipe up and contain. For large spills, contain by diking with absorbant material and carefully neutralize with lime. Keep material out of sewers, storm drains, surface waters, & soil.

**WASTE DISPOSAL METHOD**

Comply with all applicable governmental regulations on spill reporting, handling and disposal of waste.

Dispose of contaminated product and materials used in clean up in a manner approved for this material. Consult appropriate Federal, State and Local regulatory agencies to ascertain proper disposal procedures and comply with them.

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING**

Store in a dry, well ventilated place away from incompatible materials. Keep container tightly closed when not in use. Store at temperatures above the solutions freezing point to remain liquid. Do not use pressure to empty container.

**OTHER PRECAUTIONS**

Containers, even those that have been emptied, will retain product residue and vapors. Always obey hazard warnings and handle empty containers as if they were full. When mixing with water, always add this product slowly to water and stir.

**SECTION VIII - CONTROL MEASURES****RESPIRATORY PROTECTION**

In the absence of adequate ventilation wear a NIOSH-APPROVED respirator appropriate for the vapor or mist concentration at the point of use.

**VENTILATION**

Use adequate mechanical,(general and/or local) ventilation to maintain exposure below PEL.

**PROTECTIVE GLOVES**

Wear resistant gloves such as polyethylene or rubber.

**EYE PROTECTION**

Chemical splash goggles or other OSHA permitted safety glasses. Wearing contact lenses is not recommended while using.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT**

Where gross eye and skin contact may occur use and wear appropriate protective clothing, including acid-resistant clothing, rubber boots with pants on the outside, and rubber gloves.

**WORK/HYGIENIC PRACTICES**

Wash hands before eating or using restrooms. Remove and wash contaminated clothing before reuse.

**SECTION IX - DISCLAIMER****DISCLAIMER**

Information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper

# MATERIAL SAFETY DATA SHEET

PRODUCT NAME: FT WATER STAIN REMOVER 6X1 CASE  
PRODUCT CODE: FFLCSRFXX-CT-WSR-1 MSDS CODE : MSLAMBIF

## SECTION I - MANUFACTURER IDENTIFICATION

MANUFACTURER'S NAME: FORMULA CORP.  
ADDRESS: 7901 SECOND AVENUE SOUTH, SEATTLE, WASHINGTON 98108  
EMERGENCY PHONE: (800)228-5635 EXTO59 INFORMATION PHONE: (206) 762-7000  
DATE REVISED : 10-23-92 NAME OF PREPARER : C. WERNER, CHEMIST  
REASON REVISED : NEW MSDS

## SECTION II - HAZARDOUS INGREDIENTS/BARA III INFORMATION

HAZARDOUS COMPONENTS	CAS NUMBER	OCCUPATIONAL EXPOSURE LIMITS			VAPOR PRESSURE @ Hg & TEMP	WEIGHT PERCENT
		DSHA PEL	ACGIH TLV	OTHER		

AMMONIUM HYDROGEN FLUORIDE 1341-49-7 25 PPM 35 PPM 2.5 (F) N/A 15  
\*\*\* No toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372 are present. \*\*\*  
This product may contain chemicals known to the state of California to cause cancer or birth defects or other reproductive harm.

## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

BUILDING POINT: 212°F SPECIFIC GRAVITY (H<sub>2</sub>O=1): 1.0  
VAPOR DENSITY: HEAVIER THAN AIR EVAPORATION RATE: SLOWER THAN ETHER  
SOLUBILITY IN WATER: Complete pH: 2.0-4.0 COLOR: WATER CLEAR  
APPEARANCE AND ODOR: Liquid, non-viscous, faint sweet odor.

## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: NONE METHOD USED: N/A  
FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: N/A UPPER: N/A  
EXTINQUISHING MEDIA: FOAM, CO<sub>2</sub>, DRY CHEMICAL, WATER FOG  
SPECIAL FIREFIGHTING PROCEDURES Fire fighters should wear self-contained breathing apparatus and full protective clothing. Use water spray to cool nearby containers and structures exposed to fire.  
UNUSUAL FIRE AND EXPLOSION HAZARDS Extinguish all nearby sources of ignition since flammable hydrogen gas may be liberated from contact with some metals.

## SECTION V - REACTIVITY DATA

### STABILITY: STABLE

### CONDITIONS TO AVOID

Excessive heat and contamination of any kind.

### INCOMPATIBILITY (MATERIALS TO AVOID)

Strong acids or alkalis etches glass

### HAZARDOUS DECOMPOSITION OR BYPRODUCTS

Thermal decomposition causes liberation of HF and NH<sub>3</sub>. Contact with bases causes liberation of NH<sub>3</sub> with acids, HF.

### HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

## SECTION VI - HEALTH HAZARD DATA

### INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Vapors and mists are corrosive to the nose, throat, and mucous membranes. Irritation, coughing, chest pain, and breathing difficulty may occur with brief exposure while prolonged exposure may result in more severe irritation.

### SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE

EYES-Vapors, liquid, and mists can irritate and burn the eyes. SKIN - Severe irritation of the skin and fluoride like burns, which may not be immediately evident.

### SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

May not be painful or show visible effects until hours after skin exposure during which time the product has penetrated the skin causing possible destruction of tissue and development of skin ulcers.

### INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Vapors, mists, and liquid are corrosive to the mouth and throat. Swallowing the liquid causes severe burning of the mouth, throat, and digestive tract accompanied by severe pain, vomiting, and collapse.