

Tuesday, August 21, 2007

MSDS - Material Safety Data Sheet

I. Basic Information:

Manufacturer: U.N.X. INCORPORATED
Address: 707 ARLINGTON BLVD.
City, ST Zip: GREENVILLE, NC 27858
Country: USA

Contact: AMENDT; WILSON
Information Telephone Number: 252-756-8616
Emergency Contact: CHEMTEL
Emergency Telephone Number: 800-255-3924
Emergency Restrictions:

Product Name: UC 8601
MSDS No.: 1203

Issue Date: 08/17/2007
Supersedes Date: Not Available

II. Hazards Identification:

EMERGENCY OVERVIEW

INHALATION, CAN IRRITATE NOSE, THROAT, AND LUNGS. SKIN CONTACT, CAN CAUSE TISSUE DESTRUCTION, WITH LONG TERM EXPOSURE. INGESTION, SEVERE INTERNAL IRRITATION AND DAMAGE CAN RESULT IF TAKEN BY MOUTH.

OSHA Regulatory Status

While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product.

Potential Health Effects

Route(s) of Entry:

SKIN, EYES, INHALATION

Health Hazards (Acute and Chronic):

INORGANIC FLUORIDES ARE HIGHLY IRRITATING AND TOXIC. LARGE DOSES CAN CAUSE NAUSEA, VOMITING, DIARRHEA, AND ABDOMINAL BURNING. CIRCULATORY, RESPIRATORY, NERVOUS COMPLAINTS, AND SKIN RASHES MAY OCCUR. LIQUID VAPOR MAY CAUSE SEVERE IRRITATION AND BURNS WHICH WILL NOT BE IMMEDIATELY APPARENT. IT ALSO CAUSES SEVERE IRRITATION TO THE LUNGS, NOSE AND THROAT. IF SWALLOWED, IT CAN CAUSE SEVERE DAMAGE TO THROAT AND STOMACH.

Signs and Symptoms:

INHALATION, CAN IRRITATE NOSE, THROAT, AND LUNGS. SKIN CONTACT, CAN CAUSE TISSUE DESTRUCTION, WITH LONG TERM EXPOSURE. INGESTION, SEVERE INTERNAL IRRITATION AND DAMAGE CAN RESULT IF TAKEN BY MOUTH.

Medical Conditions Generally Aggravated by Exposure:

NONE KNOWN

Other Health Warnings:

SCLEROSIS OR CHANGES OF BONES AND LIGAMENTS CAN BE SEEN BY X-RAY. ENZYME SYSTEM EFFECTS AND PULMONARY FIBROSIS ARE REPORTED. COMMON FINDINGS ARE EYE, SKIN, AND MUCOUS MEMBRANE IRRITATION, LOSS OF WEIGHT, ANOREXIA, ANEMIA, CACHEXIA, AND DENTAL EFFECTS.

Potential Environmental Effects

NONE KNOWN

III. Composition/Information on Ingredients:

Chemical Name	CAS No.	% Range	Trade Secret
Ammonium bifluoride	1341497	10-20	
Water	7732185	80-90	

IV. First Aid Measures:

Emergency and First Aid Procedures:

FOR EYES, FLUSH WITH WARM WATER FOR AT LEAST 15 MINUTES. CONTACT PHYSICIAN. CONTINUE TO FLUSH WITH WATER UNTIL MEDICAL ATTENTION IS RECEIVED. IF INGESTED, DRINK LARGE VOLUMES OF WATER FOLLOWED BY MILK. THEN ADMINISTER MILK OF MAGNESIA (APPROXIMATELY 2 TABLESPOONS). IF VOMITING OCCURS SPONTANEOUSLY, ADMINISTER FLUID REPEATEDLY. GIVE MILK OR BEATEN EGGS. EVERY ONE TO TWO HOURS.

Note to Physicians:

EYES, FLUSH WITH WATER.
INGESTION, DRINK LARGE VOLUMES OF WATER FOLLOWED BY MILK.

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V. Fire Fighting Measures:

Suitable Extinguishing Media:

DRY CHEMICAL, WATERFOG, CO2, FOAM

Unsuitable Extinguishing Media:

NONE KNOWN

Products of Combustion:

HIGHLY TOXIC AND CORROSIVE FUMES OF FLUORIDES ARE EMITTED; WILL REACT WITH WATER OR STEAM TO PRODUCE TOXIC AND CORROSIVE FUMES

Protection of Firefighters:

USE NIOSH/MSHA APPROVED SELF CONTAINED BREATHING APPARATUS WHERE PRODUCT IS INVOLVED IN FIRE.

VI. Accidental Release Measures:

Personal Precautions:

RUBBER GLOVES SHOULD BE WORN.
SAFETY GOGGLES SHOULD BE WORN.

Environmental Precautions:

NONE KNOWN

Methods for Containment:

DIKE; APPROVED PLASTIC CONTAINERS

Methods for Cleanup:

FOR SMALL SPILL, NEUTRALIZE WITH SODA ASH AND LARGE VOLUMES OF WATER THEN FLUSH DOWN DRAIN. FOR LARGE SPILL: DIKE, COLLECT, AND ADD TO LARGE VOLUME OF COOL WATER WITH CONSTANT STIRRING. THEN SLOWLY NEUTRALIZE (pH 7.0) WITH LIMESTONE OR SODA ASH.

Other Information:

Not Available

VII. Handling and Storage:

Handling Precautions:

KEEP CONTAINER CLOSED.

Storage Precautions:

STORE IN DRY COOL PLACE.

VIII. Exposure Controls/Personal Protection:

Chemical Name	OSHA PEL	ACGIH TLV	Other Limits
Water	Not Available	Not Available	Not Available
Ammonium bifluoride	Not Available	Not Available	Not Available

Engineering Controls:

AVOID BREATHING MIST. IF EXPOSURE IS LIKELY, USE FILTER OR PROTECTIVE RESPIRATOR. MECHANICAL VENTILATION IS ACCEPTABLE.

Personal Protective Equipment:

RUBBER GLOVES SHOULD BE WORN.
SAFETY GOGGLES SHOULD BE WORN.
OTHER PROTECTIVE MEASURES: HAVE AN EYE BATH AND SAFETY SHOWER CLOSE BY. IF POTENTIAL FOR SKIN CONTACT, WEAR PROTECTIVE GLOVES AND HAVE A HAND WASH AREA NEAR BY (ie. SOAP SOLUTION).
WORK/HYGIENIC PRACTICES: WASH HANDS, CHANGE OUT OF CLOTHES AS SOON AS POSSIBLE, WASH CLOTHES. SHOWER OR BATHE AS SOON AS POSSIBLE.

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IX. Physical and Chemical Properties:

Bolling Point: 103°C	Melting Point: NO DATA
Boiling Range: NO DATA	Freezing Point: 0°C
Solubility In Water: EXCELLENT	Evaporation Rate (Butyl Acetate = 1): NO DATA
Flash Point: N/A	Flash Point Method: -
Odor Threshold: NO DATA	Appearance and Odor: CLEAR LIQUID, SLIGHT ACIDIC ODOR
Vapor Density (AIR = 1): NO DATA	Vapor Pressure (mm Hg.): 14
pH Range: 2.1 - 4	Partition Coefficient: NO DATA
Decomposition Temp: NO DATA	Auto-Ignition Temp: NO DATA
Lower Explosive Limit: -	Upper Explosive Limit: -
Specific Gravity (H2O = 1): 1.06	
Other Information: THIS PRODUCT CONTAINS NO PHOSPHATES.	

X. Stability and Reactivity:

Stability:

VERY STABLE

Conditions to Avoid:

DANGEROUS WHEN HEATED TO DECOMPOSITION. WILL REACT WITH STEAM TO PRODUCE TOXIC AND CORROSIVE FUMES. MAY GENERATE HYDROGEN WHEN IN CONTACT WITH SOME METALS.

Incompatible Materials:

CONTACT WITH METALS, STONEWARE, STRONG ACIDS AND ALKALI, EXPLOSIVES, TOXICANTS, READILY OXIDIZABLE MATERIALS, ALKALI METALS, COMBUSTIBLE SOLIDS, AND ORGANIC PEROXIDES.

Hazardous Decomposition Products:

EXTREME TEMPERATURE SUCH AS A FIRE CAUSE FORMATION OF HIGHLY TOXIC FUMES OF FLUORIDES SUCH AS SILICA FLUORIDES AND HYDROGEN FLUORIDE. HYDROGEN GAS MAY BE FORMED AT TEMPS ABOVE 227°F.

Possibility of Hazardous Reactions:

HAZARDOUS POLYMERIZATION WILL NOT OCCUR.

XI. Toxicological Information:

CONTACT U.N.X. INCORPORATED

XII. Ecological Information:

CONTACT U.N.X. INCORPORATED

XIII. Disposal Considerations:

FOR SMALL SPILL, NEUTRALIZE WITH SODA ASH AND LARGE VOLUMES OF WATER THEN FLUSH DOWN DRAIN. FOR LARGE SPILL: DIKE, COLLECT, AND ADD TO LARGE VOLUME OF COOL WATER WITH CONSTANT STIRRING. THEN SLOWLY NEUTRALIZE (pH 7.0) WITH LIMESTONE OR SODA ASH. DISPOSE OF AS FLUOSILICATE WASTE CONTACT APPROPRIATE AUTHORITY. CLEAN AND NEUTRALIZE ALL AREAS OF CONTACT.

XIV. Transport Information:

Shipping Name: AMMONIUM HYDROGENDIFLUORIDE SOLUTION

DOT Hazard Class: 8

UN/NA#: UN2817

DOT Subsidiary Hazard Class: Not Available

Packing Group: II

Transportation Information:

UN 2817

DOT HAZARD CLASS: 8

LABEL: CORROSIVE

PG: II

PROPER SHIPPING NAME: AMMONIUM HYDROGENDIFLUORIDE SOLUTION

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XV. Regulatory Information:

UNLESS OTHERWISE NOTED, NO COMPONENTS ARE SARA TITLE 3 SECTION 313 40 CFR LISTED MATERIALS.
THE INGREDIENTS OF THIS PRODUCT ARE LISTED ON THE TSCA INVENTORY.
THIS PRODUCT IS NOT MADE WITH VOC'S THAT COULD CAUSE DAMAGE TO THE OZONE LAYER.

XVI. Other Information:

Chemical State:



Liquid



Gas



Solid

Chemical Type:



Pure



Mixture

Hazard Category:



Acute



Chronic



Fire



Pressure



Reactive

NFPA



Additional Manufacturer Warnings:

Not Available

Additional Product Information:

RUST REMOVING SOUR

2	Health
0	Flammability
1	Physical Hazard
D	Pers. Protection