

MATERIAL SAFETY DATA SHEET

Manufacturer K & E Chemical Co., Inc. 3960 E. 93 rd St. Cleveland OH 44105 Phone Number (for Information) (216) 341-0500 Emergency Phone Number (216) 341-0500	Identity (Trade Name As Used On Label) Tile & Brick Preparer General Use* N/A MSDS Number* N/A Date Prepared 1/31/2005 Prepared By*
---	--

SECTION 1 - MATERIAL IDENTIFICATION AND INFORMATION

Components - Chemical Names & Common Names (Hazardous Components 1% or greater, Carcinogens 0.1% or greater)	%*	CAS No*	OSHA PEL	ACGIH TLV	Other Limits Recommended
Ammonium Bifluoride Solution-stabilized		N/A		(2.5 mo	/m3 as F)
Non-Hazardous Ingredients					
TOTAL	100				

SECTION 2 - PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point	215 F	Specific Gravity (Water = 1)	1.2-1.4
Vapor Pressure (mm Hg at Temperature)	NA	Melting Point	N/A
Vapor Density (Air = 1)	N/A	Evaporation Rate (_____ = 1)	NA
Solubility in Water	Complete	Water Reactive	No

Appearance and Odor **Cloudy solution, slight pungent odor.**

SECTION 3 - FIRE AND EXPLOSION HAZARD DATA

Flash Point and Method <input type="checkbox"/> Tagliabue <input type="checkbox"/> Setflash <input type="checkbox"/> Pensky-Martens <input checked="" type="checkbox"/> Not Applicable	Auto-Ignition Temperature N/A	Flammability Limits (%in Air by Volume) at NOT LELNA UELNA
Extinguisher Media	Not a fire or explosion hazard. Material may release small amounts of HF acid. Cool storage drums with water spray.	
Special Fire Fighting Procedures	None	
Unusual Fire and Explosion Hazards	None	

SECTION 4 - REACTIVITY HAZARD DATA

STATE (Under Normal Handling and Storage Conditions) <input checked="" type="checkbox"/> Stable <input type="checkbox"/> Unstable	Conditions to Avoid Strong acids. Strong bases. High heat.
	Incompatibility (Materials to Avoid) Strong acids. Strong bases.
HAZARDOUS POLYMERIZATION <input type="checkbox"/> May Occur <input checked="" type="checkbox"/> Will Not Occur	Conditions to Avoid None
Hazardous Decomposition Products	Strong acids liberate hydrofluoric acid. Strong bases liberate ammonia.

SECTION 5 - HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY	<input type="checkbox"/> Inhalation <input type="checkbox"/> Ingestion <input checked="" type="checkbox"/> Skin Absorption <input type="checkbox"/> Not Hazardous	CARCINOGEN LISTED IN	<input type="checkbox"/> NTP <input type="checkbox"/> IARC Monograph	<input type="checkbox"/> OSHA <input checked="" type="checkbox"/> Not Listed
HEALTH HAZARDS	Acute None Known			
	Chronic None Known			
Signs and Symptoms of Overexposure	Red Rash			
Medical Conditions Generally Aggravated by Exposure	Unknown			
EMERGENCY FIRST AID PROCEDURES Seek Medical Assistance for Further Treatment, Observation and Support if Necessary	Eye Contact Flush with water for at least 15 minutes. Get medical attention.			
	Skin Contact Flush with water for 15 minutes. Get medical attention if necessary.			
	Inhalation Exit area for fresh air.			
	Ingestion Give large quantities of water or milk. Get medical attention.			

SECTION 6 - CONTROL AND PROTECTIVE MEASURES

Required Ventilation (enclosed areas)	<input checked="" type="checkbox"/> Local Exhaust (collect vapors at source) <input type="checkbox"/> Other (Specify)	<input checked="" type="checkbox"/> Mechanical (general)
Protective Gloves (Type and Construction)	Rubber	Eye Protection Chemical goggles
Respiratory Protection	Ventilate enclosed areas.	
Other Protective Clothing and Equipment	Body protection as necessary to prevent skin contact.	
Hygienic Work Practices	None	

SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE/LEAK PROCEDURES

Steps to be Taken if Material is spilled or Released	Apply absorbant material and sweep up.
Waste Disposal Methods	As regards federal, state, and local regulations.
Precautions to be Taken in Handling and Storage	Keep product containers cool, dry, and away from ignition sources.
Other Precautions and/or Special Hazards	Use this product with adequate ventilation. Personnel should avoid inhalation of vapors.

* Optional