



TECHNICAL ASSISTANCE CORPORATION

Safety Data Sheet
Revised Date: 9/17/2014

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product Name: Mar-tek EZ Kleen
 Product Code: VMCEZKLN
 Product Use: Safe use for calcareous and metal.
 Manufacturer: Mar-Tek Industries
 Address: 301 Industrial Drive, Forney Texas 75126
 Phone: (214) 350-9401
 Emergency Telephone No.: ChemTel Inc. (800) 255-3924 and +1(813) 248-0585

SECTION 2: Hazards Identification

Classification of substance or mixtures:

GHS Classification:

Acute toxicity, oral
 Skin corrosion
 Eye damage/irritation
 DANGER

Category 3
 Category 1B
 Category 1

Signal word:
 Pictogram



TECHNICAL ASSISTANCE CORPORATION

GHS Label elements, including precautionary and hazard statements:

Hazard statements: H301 Toxic if swallowed
 H314 Causes severe skin burns and eye damage.
 H318 Causes serious eye damage

Precautionary statements:

Prevention: P264 Wash hands /skin thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.
 P260 Do not breathe dusts or mists.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response: P301+310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 P321 Specific treatment (Refer section 4)
 P330 Rinse mouth.
 P301+330+331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 P303+361+353 IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
 P363 Wash contaminated clothing before use.
 P304+340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P310 Immediately call a POISON CENTER or doctor/physician.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
 P310 Immediately call a Poison Center or doctor/physician.
 Storage: P405 Store locked up.
 Disposal: P501 Dispose contents/container in accordance with local, regional, national and international regulations.

SECTION 3: Composition/Information on Ingredients

Chemical Name	Ammonium Fluoride
Common Names	Ammonium Hydrogen fluoride
CAS No.	1341-49-7
Content By Weight	20-40%

Other none hazardous components 60- 80%

SECTION 4: First aid measure

Descriptions of first aid measures:

If on eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.

If on skin (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

If swallowed: DO NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

Most Important Symptoms and Effects, both Acute and Delayed: May cause severe chemical burns with reddening and pain. May cause respiratory irritation. May cause gastrointestinal irritation, CNS depression, blindness, or death. May cause fluoride poisoning with symptoms including weakness, tremors, shallow breathing, spasms of the hands and feet, convulsions, and coma. May cause mottling of teeth, damage to bone and fluorosis.

SECTION 5: Fire-fighting measures

Extinguishing media:

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media: No date available

Special protective measure: Wear self contained, approved breathing apparatus and full protective clothing, including eye protection and boots.

Specific hazards arising from the chemical: Emit toxic fumes (nitrogen oxides, hydrogen fluoride gas, ammonia) under fire conditions. (See also Stability and Reactivity section).

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Personal precaution, protective equipment and emergency procedures: See section 8 for recommendation on the use of personal protective equipment.

Environmental precautions: Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.

Methods and materials for containment and cleaning up: Contain spilled liquid with sand or earth. Recover by pumping or with suitable absorbent. Dispose of all waste and clean up materials in accordance with regulations.

SECTION 7: Handling and storage

Precautions for safe handling: Refer section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Thoroughly wash hands/skin after using. Keep container closed when not in use.

Conditions for safe storage, including any incompatibilities: Store in cool, dry well ventilated area. Keep away from incompatible materials. (Refer section 10 for incompatibilities).

SECTION 8: Exposure controls/personal protection

Control parameters:

Engineering controls: Ventilation should be provided to control worker exposures. And prevent health risk.

Occupational exposure controls: Ventilation and appropriate grounding of containers.

Component	Exposure Limit	Basis	Entity
Ammonium Biflouride	2.5mg/m3	PEL	OSHA
	2.5mg/m3	TLV	ACGIH

Personal protective equipment:

Eyes: Wear chemical safety glasses and goggles with a face shield.

Inhalation: Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.

Skin: Wear nitrile gloves, rubber apron or full chemical suit and boots.

Other recommendations: Provide eye wash stations, quick drench showers and washing facilities accessible to areas of use and handling.

SECTION 9: Physical and chemical properties

Appearance

Physical state:	Liquid
Color:	Clear colorless liquid
Odor:	Characteristic
Odor threshold:	Not available
pH:	1-2
Melting point/freezing point:	Not available
Initial boiling point/boiling range:	Not available
Flash point:	Not considered to be a fire hazard
Evaporation rate:	Not available
Flammability (solid, gas)	Not flammable
Upper/Lower flammability or explosive limits	
Flammability limit-lower (%):	Not available
Flammability limit-upper (%):	Not available
Vapor pressure:	Not available
Vapor density:	Not available
Solubility (ies):	Infinite
Specific gravity:	1.1
Partition coefficient	
(n-octanol/water):	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available

SECTION 10: Stability and reactivity

Chemical stability: Stable

Possibility of hazardous reactions: Will not occur.

Condition to avoid: Heat and moisture.

Hazardous decomposition: Ammonia, hydrofluoric acid.

SECTION 11: Toxicological information

Information on likely route and sign and symptoms of exposure

Ingestion:	Ulceration, nausea, vomiting, diarrhea, abdominal pain
Inhalation:	Chest pain, dyspnea, muscle spasm, bronchopneumonia
Skin contact:	Burns
Eye contact:	Conjunctivitis, corneal burns, and blindness
Chronic toxicity	Damage to organs: Lungs, mucous membranes
Teratogenicity	Not available
Mutagenicity	Not available
Embryotoxicity	Not available
Specific target organ toxicity:	No data available
Acute toxicity	
Skin:	Not available
Eyes:	Not available
Respiratory:	Not available
Ingestion:	Oral: LD50-rat-130 mg/kg
Carcinogenicity:	No data available

SECTION 12: Ecological information

Ecotoxicity

Toxicity to fish: LC50 - Oncorhynchus gorboscha - 0.068 mg/L - 96h	
Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia magna - 10.5 mg/L- 96h	
Toxicity to algae: EC50 - various algae species- 43 mg/L - 96 h	
Toxicity to microorganisms: NOEC50 - activated sludge - 510 mg/L - 3h	
Persistence and degradability	Not available
Bio-accumulative potential	Not available
Mobility in soil	Not available
PBT and vPVB Assessment	Not available
Other adverse effects	Not available

SECTION 13: Disposal consideration

Waste disposal method: Dispose of in accordance with federal, state and local authorities.

Contaminated packaging: Dispose of container and unused content in accordance with federal, state and local requirements.

SECTION 14: Transportation information

US Department Of Transportation

Shipping Name:	Ammonium Hydrogen Fluoride Solution
Hazard Class:	8
UN Number:	UN12817
Packaging Group:	PGII
Label statement:	Corrosive



Marine pollutant: NO

SECTION 15: Regulatory information

TSCA inventory status	Substance is listed on the TSCA inventory
DSCL (EEC)	Substance is listed on the DSCL inventory
California proposition 65	Not listed
Massachusetts Right to Know Act	Not listed
New Jersey Right to Know Act	Listed
Pennsylvania Right to Know Act	Listed
Minnesota Right to Know Act	Listed
Florida Right to Know Act	Listed
SARA 302	Not listed
SARA 304	Not listed
SARA 311	Ammonium fluoride
SARA 312	Ammonium fluoride
SARA 313	Not listed
WHIMIS Canada	Class E, corrosive material.

SECTION 16: Other information

Revision Date: 9/17/2014
 Revision was made in sections: General revision

NFPA Ratings

Health	3
Flammability	0
Reactivity	0

HMIS Ratings

Health	3
Flammability	0
Reactivity	0

Disclaimer: Mar-Tek industries provide the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This documentation is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product.

-----END OF SDS-----