

Accellent Etch

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Accellent Etch

Synonyms/Generic Names: None

Product Number: 8036

Product Use: Industrial, Manufacturing or Laboratory use

Manufacturer: Columbus Chemical Industries, Inc.
N4335 Temkin Rd.
Columbus, WI. 53925

For More Information: 920-623-2140 (Monday-Friday 8:00-4:30)
www.columbuschemical.com

In Case of Emergency Call: CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

2. HAZARDS IDENTIFICATION

Hazard Not Otherwise Classified (HNOC): Contact with acids liberates very toxic gas.

Signal Words: Danger

Pictograms:



GHS Classification

Acute toxicity, Oral	Category 3
Skin irritation	Category 2
Serious eye damage	Category 1

GHS Label Elements, including precautionary statements:

Hazard Statements:

H301	Toxic if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.

Precautionary Statements:

P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician.

P302+P352	IF ON SKIN: Wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor/physician.
P330	Rinse mouth.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local regulations.

Potential Health Effects

Eyes	Causes eye burns.
Inhalation	May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
Skin	May be harmful if absorbed through skin. Causes skin burns.
Ingestion	May be fatal if swallowed.

NFPA Ratings

Health	3
Flammability	0
Reactivity	0
Specific hazard	Not Available

HMIS Ratings

Health	3
Fire	0
Reactivity	0

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight %	CAS #	EINECS# / ELINCS#	Formula	Molecular Weight
Sodium Fluoride	1-2	7681-49-4	231-667-8	NaF	41.99 g/mol
Sulfamic Acid	4-5	5329-14-6	226-218-8	NH ₂ SO ₃ H	97.09 g/mol
Hydrogen Peroxide	4-5	7722-84-1	231-765-0	H ₂ O ₂	34.01 g/mol
Water	Balance	7732-18-5	231-791-2	H ₂ O	18.00 g/mol

4. FIRST-AID MEASURES

Eyes	Rinse with plenty of water for at least 15 minutes and seek medical attention immediately. Cold water may be used. Keep the eyelids apart and away from the eyeballs during irrigation. Do not use oily drops or ointment or HF skin burn treatments on the eyes. Get medical attention immediately, preferably an eye specialist. Place ice pack on eyes until reaching emergency room.
Inhalation	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.
Skin	Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cold water may be used. Material is absorbed through the skin. Get medical attention immediately. While waiting for medical attention, it has been shown that flushing the affected area with water for one minute and then massaging HF Antidote Gel into the wound until there is a cessation of pain is a most effective first aid treatment. HF Antidote Gel contains Calcium Gluconate which combines with HF for insoluble Calcium Fluoride, thus preventing the extraction of calcium from the body tissue and bones. Another alternative first aid treatment, after thorough washing of the burned area, is to immerse the burned area in a solution of 0.2% iced aqueous Hyamine 1622 or

	0.13% iced aqueous Zephiran Chloride. If immersion is impractical, towels could be soaked with one of the above solutions and used as compresses for the burn area. Hyamine 1622 is a trade name for Tetracaine Benzethonium Chloride. Zephiran is a trade name for Benzalkonium Chloride.
Ingestion	Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention immediately.

5. FIREFIGHTING MEASURES

Suitable (and unsuitable) extinguishing media	Product is not flammable. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide on fires involving this product. Use appropriate media on adjacent fires. Use flooding quantities of water to cool unopened containers.
Special protective equipment and precautions for firefighters	Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.
Specific hazards arising from the chemical	Emits toxic fumes (carbon oxides, hydrogen fluoride, sulfur oxides, sodium oxides, and nitrogen oxides) under fire conditions. (See also Stability and Reactivity section).

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	See section 8 for recommendations 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	Evacuate and ventilate the area. Neutralize spill with appropriate media (vermiculite or other absorbent material), then place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste or cleanup materials in accordance with local regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of aerosols.

Conditions for safe storage, including any incompatibilities

Store in cool, dry well ventilated area. Keep away from incompatible materials (see section 10 for incompatibilities).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls:

Component	Exposure Limits	Basis	Entity
Hydrogen Peroxide	1.4 mg/m ³ 1 ppm	PEL	OSHA
	1.4 mg/m ³ 1 ppm	TLV	ACGIH
	1.4 mg/m ³	REL	NIOSH

	1 ppm		
Sodium Fluoride	2.5 mg/m ³	PEL	OSHA
	2.5 mg/m ³	REL	NIOSH

TWA: Time Weighted Average over 8 hours of work.

TLV: Threshold Limit Value over 8 hours of work.

REL: Recommended Exposure Limit

PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit during x minutes.

IDLH: Immediately Dangerous to Life or Health

CEIL: Ceiling

Personal Protection

Eyes	Wear chemical safety glasses with a face shield for splash protection.
Inhalation	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.
Skin	Wear neoprene or nitrile gloves, full body (synthetic) protective clothing appropriate to the risk of exposure.
Other	Not Available

Other Recommendations

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling. Have supplies and equipment for neutralization and running water available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	Clear, colorless liquid.
Odor	Odorless.
Odor threshold	Not Applicable
pH	2.5-3.1
Melting point/freezing point	Not Applicable
Initial boiling point and boiling range	Not Applicable
Flash point	Not Applicable
Evaporation rate	Not Applicable
Flammability (solid, gas)	Not Flammable
Upper/lower flammability or explosive limit	Not Explosive
Vapor pressure	Not Applicable
Vapor density	Not Applicable
Relative density	1.04 (water = 1)
Solubility (ies)	Completely soluble in water
Partition coefficient: n-octanol/water	Not Applicable
Auto-ignition temperature	Not Applicable
Decomposition temperature	Not Applicable

10. STABILITY AND REACTIVITY

Chemical Stability	Stable
Possibility of Hazardous Reactions	Will not occur.
Conditions to Avoid	Not Available
Incompatible Materials	Combustible materials, strong reducing agents, concentrated acids.
Hazardous Decomposition Products	Carbon oxides, hydrogen fluoride, sulfur oxides, sodium oxides, and nitrogen oxides

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Hydrogen Peroxide

Skin	LD50 Dermal – rat – 4060 mg/kg
Eyes	Not Available
Respiratory	LC50 Vapor – rat – 2000 mg/m – 4 hours
Ingestion	LD50 Oral – mouse – 2000 mg/kg

Sulfamic Acid

Skin	Skin – rabbit – severe skin irritation – 24 hours
Eyes	Eyes – rabbit – severe eye irritation – 24 hours
Respiratory	Not Available
Ingestion	LD50 Oral – mouse – 1312 mg/kg LD50 Oral – rat – 3160 – mg/kg LD50 Oral – guinea pig – 1050 mg/kg

Sodium Fluoride

Skin	Not Available
Eyes	Eyes – rabbit – eye irritation – 24 hours
Respiratory	Not Available
Ingestion	LD50 Oral – rat – 31 mg/kg LD50 Oral – mouse – 44 mg/kg LD50 Oral – rabbit – 200 mg/kg LD50 Oral – domestic animals – 100 mg/kg LD50 Oral – bird (wild) – 110 mg/kg TDL _o Oral – Human – 0.214 mg/kg TDL _o Oral – Human – 3.57 mg/kg TDL _o Oral – Human – Male – 1662 mg/kg TDL _o Oral – Human – Female – 7 mg/kg

Carcinogenicity

IARC	3 – Group 3: Not classifiable as to its carcinogenicity to humans (sodium fluoride). 3 – Group 3: Not classifiable as to its carcinogenicity to humans (hydrogen peroxide).
ACGIH	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP	No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Signs & Symptoms of Exposure

Skin	Redness, burning, itching and pain.
Eyes	Eye burns, pain, watering eyes.
Respiratory	Coughing, shortness of breath, burning, choking, coughing, wheezing, laryngitis, headache or nausea.
Ingestion	Causes irritation and pain, nausea, vomiting, burns of the gastrointestinal tract.

Chronic Toxicity	Not Available
Teratogenicity	Not Available
Mutagenicity	Not Available
Embryotoxicity	Not Available
Target Organ(s)	Kidneys, Heart, Bone, Nerves, Gastrointestinal tract, Lungs
Reproductive Toxicity	Not Available
Respiratory/Skin Sensitization	Not Available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Hydrogen Peroxide

Aquatic Vertebrate	Not Available
Aquatic Invertebrate	Not Available
Terrestrial	Not Available

Sulfamic Acid

Aquatic Vertebrate	Not Available
Aquatic Invertebrate	Not Available
Terrestrial	Not Available

Sodium Fluoride

Aquatic Vertebrate	Mortality NOEC – Cyprinodon variegates (sheepshead minnow) – 500 mg/l – 96 hours LC50 – Oncorhynchus mykiss (rainbow trout) – 200 mg/l – 96 hours
Aquatic Invertebrate	EC50 – Daphnia magna (water flea) – 98 mg/l – 48 hours.
Terrestrial	Not Available

Persistence and Degradability	Not Available
Bioaccumulative Potential	Not Available
Mobility in Soil	Not Available
PBT and vPvB Assessment	Not Available
Other Adverse Effects	Not Available

13. DISPOSAL CONSIDERATIONS

Waste Product or Residues	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product or residue.
Product Containers	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

14. TRANSPORTATION INFORMATION

US DOT	UN3289, Toxic liquid, corrosive, inorganic, n.o.s., (sodium fluoride and sulfamic acid), 6.1, (8), pg II
TDG	UN3289, TOXIC LIQUID, CORROSIVE, INORGANIC, N.O.S., (SODIUM FLUORIDE AND SULFAMIC ACID) 6.1, (8), pg II
IMDG	UN3289, TOXIC LIQUID, CORROSIVE, INORGANIC, N.O.S., (SODIUM FLUORIDE AND SULFAMIC ACID) 6.1, (8), pg II
Marine Pollutant	No
IATA/ICAO	UN3289, Toxic liquid, corrosive, inorganic, n.o.s., (sodium fluoride and sulfamic acid), 6.1, (8), pg II

15. REGULATORY INFORMATION

TSCA Inventory Status	All ingredients are listed on the TSCA Active inventory.
DSL / NDSL	All ingredients are listed on the DSL inventory.
California Proposition 65	Not Listed
Rhode Island: Hazardous Substance List	Listed: Sodium Fluoride
Massachusetts: Toxic or Hazardous Substance List, Right to Know	Listed: Sodium Fluoride, Hydrogen Peroxide
Pennsylvania: Hazardous Substance List	Listed: Sodium Fluoride
New Jersey: Right to Know Hazardous Substance List	Listed: Sodium Fluoride, Hydrogen Peroxide, Sulfamic Acid
SARA 302	Not Listed
SARA 304	Not Listed
SARA 311	Acute Health Hazard
SARA 312	Acute Health Hazard
SARA 313	Not Listed
WHMIS Canada	Class D2A: Poisonous and infectious material – Other effects – Very toxic. Class E: Corrosive material.

16. OTHER INFORMATION

Revision	Date
Original	07/06/2012
Revision 1	03/24/2014
Revision 2	02/15/2016
Revision 3	06/23/2022

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