



Safety Data Sheet Multi-Etch (Liquid)

SDS Revision
Date: 08/12/2020

1. Identification

1.1. Product identifier

Product Identity Multi-Etch (Liquid)

Alternate Names Multi-Etch (Liquid)

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use See Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet

Company Name Multi-Etch, LLC
PO Box 9
Clarkdale, AZ 86324

Emergency

Infotrac 1-800-535-5053 (24-hour)

Customer Service: Multi-Etch, LLC

2. Hazard(s) identification

2.1. Classification of the substance or mixture

Ox. Liq. 3;H272	May intensify fire; oxidizer.
Skin Irrit. 2;H315	Causes skin irritation.
Eye Dam. 2A;H319	Causes serious eye irritation.
Skin Sens. 1;H317	May cause an allergic skin reaction.
Resp. Sens. 1;H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.

2.2. Label elements



Danger

H272 May intensify fire; oxidizer.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H334 May cause allergic or asthmatic symptoms or breathing difficulties if inhaled.

[Prevention]:

- P210 Keep away from heat, sparks, open flames, and other ignition sources - No smoking.
- P220 Keep, Store away from clothing combustible materials.
- P221 Take any precaution to avoid mixing with combustibles.
- P261 Avoid breathing dust, fume, gas, mist, vapors, spray.
- P264 Wash thoroughly after handling.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P280 Wear protective gloves, eye protection, face protection.
- P285 In case of inadequate ventilation wear respiratory protection.

[Response]:

- P302+352 IF ON SKIN: Wash with plenty of soap and water.
- P304+341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.
- P321 Specific treatment (see information on this label).
- P332+313 IF SKIN IRRITATION OCCURS: Get medical advice or attention.
- P333 If skin irritation or a rash occurs:
- P337+313 If eye irritation persists: Get medical advice or attention.
- P342+311 If experiencing respiratory symptoms: Call a POISON CENTER, doctor or physician.
- P362 Take off contaminated clothing and wash before reuse.
- P363 Wash contaminated clothing before reuse.
- P370+378 In case of fire: Use extinguishing media listed in section 5 of SDS for extinction.

[Storage]:

No GHS storage statements

[Disposal]:

P501 Dispose of contents or container in accordance with local and national regulations.

3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Ammonium persulphate CAS Number: 0007727-54-0	5 - 10	Ox. Sol. 3;H272 Acute Tox. 4;H302 Eye Irrit. 2;H319 STOT SE 3;H335 Skin Irrit. 2;H315 Resp. Sens. 1;H334 Skin Sens. 1;H317	----
Sodium fluoride CAS Number: 0007681-49-4	1 - 5	Acute Tox. 3;H301 Eye Irrit. 2;H319 Skin Irrit. 2;H315	----

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

*PBT/vPvB - PBT-substance or vPvB-substance.

The full texts of the phrases are shown in Section 16.

Section 4. First aid measures

4.1. Description of first aid measures

General	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
Inhalation	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
Eyes	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
Skin	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
Ingestion	Drink 1-2 glasses of milk or water and rinse mouth well. Do not induce vomiting. Never give anything by mouth to an unconscious person. Obtain immediate medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Overview	Ingestion: Moderate oral toxicity. Eye Contact: May cause irritation. Inhalation: May cause difficulty in breathing for sensitive persons. Skin: May cause irritation. This product has moderate oral toxicity and is minimally irritating to the eyes. Flooding of exposed areas with water is suggested, but gastric lavage or emesis induction for ingestions must consider the possible aggravation of esophageal injury and the expected absence of systemic effects. Treatment is controlled removal of exposure followed by symptomatic and supportive care. Treat symptomatically. Check section 2.2 (GHS Label Elements) for further details.
Inhalation	May cause allergy or asthma symptoms of breathing difficulties if inhaled.
Eyes	Causes serious eye irritation.
Skin	May cause an allergic skin reaction. Causes skin irritation.

Section 5. Fire-fighting measures

5.1. Extinguishing media

Recommended extinguishing media; alcohol resistant foam, CO₂, powder, water spray.
Unsuitable extinguishing media: Do not use; water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: No hazardous decomposition data available.
Keep away from heat, sparks, open flames, and other ignition sources - No smoking.
Keep, Store away from clothing combustible materials.
Take any precaution to avoid mixing with combustibles.
Avoid breathing dust, fume, gas, mist, vapors, spray.

5.3. Advice for fire-fighters

As with all fires, wear positive pressure, self-contained breathing apparatus, (SCBA) with a full face piece and protective clothing. Persons without respiratory protection should leave area. Wear SCBA during clean-up immediately after fire. No smoking.

Do not use carbon dioxide or other gas filled fire extinguishers; they will have no effect on decomposing persulfates. Wear full protective clothing and self-contained breathing apparatus.

On decomposition releases oxygen which may intensify fire. Presence of water accelerates decomposition.

ERG Guide No. 140

Section 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Environmental Precautions: Disposal is to be performed in compliance with all Federal, State and Local regulations.

Steps To Be Taken in Case Quantities of Material are Released or Spilled: Put on safety glasses, or goggles and rubber gloves. Spilled material should be collected and put in approved DOT container and isolated for disposal. Isolated material should be monitored for signs of decomposition (fuming/ smoking). If spilled material is wet, dissolve with large quantity of water and dispose according to regulatory agencies procedures.

Section 7. Handling and storage

7.1. Precautions for safe handling

Handle containers carefully to prevent damage and spillage.

Check section 2.2 (GHS Label Elements) for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities

Incompatible materials: Acids, alkalis, halides, combustible materials, oxidizers. Keep away from glass.

Check section 2.2 (GHS Label Elements) for further details. - [Storage]:

7.3. Specific end use(s)

No data available.

Section 8. Exposure controls / personal protection

8.1. Control parameters

CAS No.	Ingredient	Exposure	
		Source	Value
0007681-49-4	Sodium fluoride	OSHA	TWA 2.5 mg/m3 [*Note: The REL also applies to other inorganic, solid fluorides (as F).]
		ACGIH	No Established Limit
		NIOSH	TWA 2.5 mg/m3 [*Note: The REL also applies to other inorganic, solid fluorides (as F).]

0007727-54-0	Ammonium persulphate	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit

8.2. Exposure controls

Respiratory	If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.
Eyes	Protective safety glasses recommended
Skin	Protective gloves recommended.
Engineering Controls	Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.
Other Work Practices	Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

Check section 2.2 (GHS Label Elements) for further details.

Section 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Clear, Colorless Liquid
Odor	Slight
Odor threshold	Not determined
pH	Not Measured
Melting point / freezing point	Decomposes
Initial boiling point and boiling range	Not Measured
Flash Point	Not Measured
Evaporation rate (Ether = 1)	Not Measured
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: Not Measured Upper Explosive Limit: Not Measured
Vapor pressure (Pa)	Not Measured
Vapor Density	Not Measured
Relative Density	1.98
Solubility in Water	Soluble
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature	Not Measured
Decomposition temperature	Not Measured
Viscosity (cSt)	Not Measured
VOC Content	0

9.2. Other information

No other relevant information.

Section 10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Heat, moisture and contamination.

10.5. Incompatible materials

Acids, alkalis, halides, combustible materials, oxidizers. Keep away from glass.

10.6. Hazardous decomposition products

No hazardous decomposition data available.

Section 11. Toxicological information

Acute toxicity

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Ammonium persulphate - (7727-54-0)	1,130.00, Rat - Category: 4	>2,000.00, Rat - Category: 5	No data available	2.95, Rat - Category: 4	No data available
Sodium fluoride - (7681-49-4)	223.00, Rat - Category: 3	No data available	No data available	No data available	No data available

Carcinogen Data

CAS No.	Ingredient	Source	Value
0007681-49-4	Sodium fluoride	OSHA	Regulated Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;
		ACGIH	No Established Limit
0007727-54-0	Ammonium persulphate	OSHA	Regulated Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		ACGIH	No Established Limit

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	2	Causes skin irritation.

Serious eye damage/irritation	2A	Causes serious eye irritation.
Respiratory sensitization	1	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin sensitization	1	May cause an allergic skin reaction.
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

Section 12. Ecological information

12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Ammonium persulphate - (7727-54-0)	76.30, Oncorhynchus mykiss	120.00, Daphnia magna	320.00 (72 hr), Phaeodactylum tricornutum
Sodium fluoride - (7681-49-4)	164.00, Salmo trutta	26.00, Daphnia magna	81.00 (96 hr), Skeletonema costatum

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

Section 13. Disposal considerations

13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

Section 14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1. UN number	UN1444	UN1444	UN1444
14.2. UN proper shipping name	UN1444, Ammonium persulfate, 5.1, III	Ammonium persulfate	Ammonium persulfate
14.3. Transport hazard class(es)	DOT Hazard Class: 5.1	IMDG: Not Applicable Sub Class: Not Applicable	Air Class: Not Applicable
14.4. Packing group	III	III	III
14.5. Environmental hazards			
IMDG	Marine Pollutant: No;		
14.6. Special precautions for user	Not Applicable		

Section 15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

**Toxic Substance
Control Act (TSCA)** All components of this material are either listed or exempt from listing on the TSCA Inventory.

EPCRA 302 Extremely Hazardous:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Carcinogens (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 Label Warning:

This product contains no chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Section 16. Other information

SDS Revision Date 08/12/2020

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H272 May intensify fire; oxidizer.

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H334 May cause allergic or asthmatic symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

The submission of this SDS may be required by law, but this is not an assertion that the substance is hazardous when used in accordance with proper safety practices and normal handling procedures. Data supplied is for use only in connection with occupational safety and health. The information contained herein has been compiled from sources considered by Multi-Etch, LLC to be dependable and is accurate to the best of the Company's knowledge. The information relates to the specific material designated herein, and does not relate to the use in combination with any other material or process. Multi-Etch, LLC makes no warranty, representation or guarantee as to the accuracy, sufficiency or completeness of the material set forth herein. It is the user's responsibility to determine the safety, toxicity and suitability of their own use, handling and disposal of the product. Multi-Etch, LLC assumes no responsibility for injury to the recipient or third persons, for any damage to any property resulting from misuse of the controlled products.

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