

Safety Data Sheet Multi-Etch (Dry)

SDS Revision 08/12/2020

1. Identification

1.1. Product identifier

Product Identity Multi-Etch
Alternate Names Multi-Etch

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. Sol. 3;H272 May intensify fire; oxidizer.

Acute Tox. 4;H302 Harmful if swallowed.

Acute Tox. 4;H332 Harmful if inhaled.

Skin Irrit. 2;H315 Causes skin irritation.

Eye Irrit. 2;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 of breathing difficulties if inhaled.

STOT SE 3;H335 May cause respiratory irritation.

Aquatic Chronic 3;H412 Harmful to aquatic life with long lasting effects.

2.2. Label elements



Danger

H272 May intensify fire; oxidizer.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

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

H335 May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects.

[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.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves, eye protection, face protection.

[Response]:

P301+312 IF SWALLOWED: Call a POISON CENTER, doctor or physician if you feel unwell.

P302+352 IF ON SKIN: Wash with plenty of soap and water.

P304+312 IF INHALED: Call a poison center or doctor or physician if you feel unwell.

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).

P330 IF SWALLOWED: Rinse mouth.

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.

P341 If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

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]:

P403+233 Store in a well ventilated place. Keep container tightly closed.

P405 Store locked up.

[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 | 75 - 100 | 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 | 10 - 25 | 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.

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 vomitting. 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 Harmful if inhaled. May cause respiratory irritation. 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.

^{*}PBT/vPvB - PBT-substance or vPvB-substance.

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

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

Exposure

| CAS No. | Ingredient | 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.

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 White Solid
Odor Odorless
Odor threshold Not determined
pH Not Measured
Melting point / freezing point Decomposes
Initial boiling point and boiling range Not Measured

Flash Point

Evaporation rate (Ether = 1)

Flammability (solid, gas)

Not Measured

Not Applicable

Upper/lower flammability or explosive limits Lower Explosive Limit: Not Measured

Upper Explosive Limit: Not Measured

Vapor pressure (Pa)Not MeasuredVapor DensityNot Measured

Relative Density 1.98

Solubility in Water Partially (87%)

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 - | >2,000.00, Rat - | No data | 2.95, Rat - | No data |
| | Category: 4 | Category: 5 | available | Category: 4 | available |

| Sodium fluoride - (7681-49-4) | 223.00, Rat - | No data | No data | No data | No data |
|-------------------------------|---------------|-----------|-----------|-----------|-----------|
| , , , | Category: 3 | available | available | available | 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; | | | |
| | | | 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 | | | |
| 61 161 41 | | | | | | |

| Classification | Category | Hazard Description |
|-------------------------------|----------|--|
| Acute toxicity (oral) | 4 | Harmful if swallowed. |
| Acute toxicity (dermal) | | Not Applicable |
| Acute toxicity (inhalation) | 4 | Harmful if inhaled. |
| Skin corrosion/irritation | 2 | Causes skin irritation. |
| Serious eye damage/irritation | 2 | Causes serious eye irritation. |
| Respiratory sensitization | 1 | May cause allergy or asthma symptoms of 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 | 3 | May cause respiratory irritation. |
| STOT-repeated exposure | | Not Applicable |
| Aspiration hazard | | Not Applicable |

Section 12. Ecological information

12.1. Toxicity

Harmful to aquatic life with long lasting effects.

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 IMO / IMDG (Ocean ICAO/IATA

IMDG: Not Applicable

Air Class: Not Applicable

Transportation) Transportation)

14.1. UN number UN1444 UN1444 UN1444

14.2. UN proper shipping UN1444, Ammonium persulfate, Ammonium persulfate Ammonium persulfate

name 5.1, III

14.3. Transport hazard DOT Hazard Class: 5.1

class(es) Sub 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 All components of this material are either listed or exempt from listing on the TSCA

Control Act (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 08/05/2020

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.

End of Document