



# Safety Data Sheet

Issue Date: 22-Apr-2008

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Version 1

## 1. IDENTIFICATION

### Product Identifier

**Product Name** Patton Eliminator

### Other means of identification

**SDS #** PATTON-004

**UN/ID No** UN1790

### Recommended use of the chemical and restrictions on use

**Recommended Use** Truck wash pre-spray and aluminum brightener.

### Details of the supplier of the safety data sheet

#### **Manufacturer Address**

Patton Industrial Services  
1005 Aero Drive  
Shreveport, LA 71107

### Emergency Telephone Number

**Company Phone Number** 318-227-4000  
**Emergency Telephone (24 hr)** INFOTRAC 1-352-323-3500 (International)  
1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

**Appearance** Blue liquid

**Physical State** Liquid

**Odor** Acrid acid

### Classification

|                                   |                           |
|-----------------------------------|---------------------------|
| Acute toxicity - Oral             | Category 4                |
| Skin corrosion/irritation         | Category 1 Sub-category B |
| Serious eye damage/eye irritation | Category 1                |

### Signal Word

**Danger**

### Hazard Statements

Harmful if swallowed  
Causes severe skin burns and eye damage



**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Do not breathe dust/fume/gas/mist/vapors/spray  
 Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response**

Immediately call a poison center or doctor/physician  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 Immediately call a poison center or doctor/physician  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
 Wash contaminated clothing before reuse  
 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  
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
 Rinse mouth  
 Do not induce vomiting

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name       | CAS No    | Weight-% |
|---------------------|-----------|----------|
| Sulfuric Acid       | 7664-93-9 | <5       |
| Ammonium bifluoride | 1341-49-7 | <5       |
| Citric Acid         | 77-92-9   | <5       |

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

### 4. FIRST-AID MEASURES

**First Aid Measures**

|                       |   |
|-----------------------|---|
| <b>General Advice</b> | Immediately call a poison center or doctor/physician.   |
| <b>Eye Contact</b>    | Check for and remove contact lenses. Immediately flush eyes for 5 minutes in clear running water while holding eyelids open; irrigate open eyelids with 500 to 1,000 cc's of 1% Calcium Gluconate in saline solution; seek medical attention with emphasis on hydrofluoric acid exposure. |
| <b>Skin Contact</b>   | Remove contaminated clothing while flushing area with drenching shower for 5 minutes. Launder contaminated clothing before reuse; if irritation develops seek medical attention with emphasis on hydrofluoric acid exposure. Apply 2.5% Calcium Gluconate ointment to contacted area.     |
| <b>Inhalation</b>     | Remove affected person to fresh air; if breathing problems persist, get medical attention with emphasis on hydrofluoric acid exposure. If breathing is difficult, supply oxygen. If breathing has stopped, begin artificial respiration.  |
| <b>Ingestion</b>      | Drink high amounts of calcium based antacid in water followed by milk or milk of magnesia. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention with emphasis on hydrofluoric acid exposure.   |

**Most important symptoms and effects**

**Symptoms** Harmful if swallowed. Causes severe skin burns and eye damage.

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician** Treat symptomatically.

**5. FIRE-FIGHTING MEASURES****Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** Not determined.

**Specific Hazards Arising from the Chemical**

This product is corrosive. Contact with B: C extinguisher powder may produce large amounts of carbon dioxide. Material can generate explosive hydrogen gas on contact with certain metals.

**Hazardous Combustion Products** Smoke, fumes or vapors, and oxides of carbon. Fluorine vapors.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Keep containers cool with water spray to prevent container rupture due to steam buildup; CAUTION - material is corrosive.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

**Personal Precautions** CAUTION - material is corrosive.

**Environmental Precautions** See Section 12 for additional Ecological Information. Do not discharge into lakes, ponds, streams or public waters.

**Methods and material for containment and cleaning up**

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Clean-Up** Allow only trained hazard response personnel in the area. Confine and absorb into approved absorbent. Place material into approved containers for disposal. For spills in excess of allowable limits (RQ), notify the National Response Center (800) 424-8802; refer to CERCLA 40 CFR 302 for detailed instructions; refer to SARA Title III, Section 313, 40 CFR 372 for reporting requirements.

**7. HANDLING AND STORAGE****Precautions for safe handling**

**Advice on Safe Handling** CAUTION - material is corrosive. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathe dust/fume/gas/mist/vapors/spray. Wear protective gloves/protective clothing and eye/face protection.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Store locked up. Keep container closed when not in use. Protect container from physical damage. Protect from extreme temperatures.

**Packaging Materials** This product will attack glass, concrete, and certain metals.

**Incompatible Materials** Strong oxidizing agents. Strong alkalis. Most metals. Cyanides. Sulfides. Glass. Ceramics.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Guidelines**

| Chemical Name                    | ACGIH TLV                                       | OSHA PEL   | NIOSH IDLH   |
|----------------------------------|---|--|--|
| Ammonium bifluoride<br>1341-49-7 | TWA: 2.5 mg/m <sup>3</sup> F                    | TWA: 2.5 mg/m <sup>3</sup> F<br>TWA: 2.5 mg/m <sup>3</sup> dust<br>(vacated) TWA: 2.5 mg/m <sup>3</sup>  | TWA: 2.5 mg/m <sup>3</sup> F                           |
| Sulfuric Acid<br>7664-93-9       | TWA: 0.2 mg/m <sup>3</sup> thoracic<br>fraction | TWA: 1 mg/m <sup>3</sup><br>(vacated) TWA: 1 mg/m <sup>3</sup>   | IDLH: 15 mg/m <sup>3</sup><br>TWA: 1 mg/m <sup>3</sup> |
| Citric Acid<br>77-92-9           | -   | 15 mg / m3 (Total)   | -  |
| Glycerol<br>56-81-5              | -   | TWA: 15 mg/m <sup>3</sup> mist, total<br>particulate<br>TWA: 5 mg/m <sup>3</sup> mist, respirable<br>fraction<br>(vacated) TWA: 10 mg/m <sup>3</sup> mist,<br>total particulate<br>(vacated) TWA: 5 mg/m <sup>3</sup> mist,<br>respirable fraction | -  |

**Appropriate engineering controls**

**Engineering Controls** The use of local exhaust ventilation is recommended. Use corrosion-resistant ventilation equipment. Showers. Eyewash stations.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Chemical splash goggles.

**Skin and Body Protection** Protective gloves are required; Use Saranex, Barricade, Chemrel, Responder, or Butyl rubber gloves. Do not use nitrile rubber, polyvinyl alcohol, or polyvinyl chloride gloves. A chemical resistant butyl rubber apron or other approved chemical resistant equipment should be worn to prevent skin contact.

**Respiratory Protection** None required while threshold limits are kept below maximum allowable concentrations; if TWA exceeds limits, NIOSH approved respirator must be worn. A chemical cartridge respirator with acid cartridge is recommended. If concentration exceeds capacity of cartridge respirator, a self-contained breathing apparatus is advised. Refer to 29 CFR 1910.134 or European Standard EN 149 for complete regulations.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

|                       |             |                       |                |
|-----------------------|-------------|-----------------------|----------------|
| <b>Physical State</b> | Liquid      | <b>Odor</b>           | Acrid acid     |
| <b>Appearance</b>     | Blue liquid | <b>Odor Threshold</b> | Not determined |
| <b>Color</b>          | Blue        |                       |                |

| <u>Property</u>              | <u>Values</u>   | <u>Remarks • Method</u> |
|------------------------------|-----------------|-------------------------|
| pH                           | <1.0            |                         |
| Melting Point/Freezing Point | 0 °C / 32 °F    |                         |
| Boiling Point/Boiling Range  | 100 °C / 212 °F |                         |
| Flash Point                  | Non-flammable   |                         |
| Evaporation Rate             | <1              | (Water = 1)             |

| <u>Property</u>                     | <u>Values</u>         | <u>Remarks • Method</u> |
|-------------------------------------|-----------------------|-------------------------|
| <b>Flammability (Solid, Gas)</b>    | Liquid-Not applicable |                         |
| <b>Upper Flammability Limits</b>    | Not applicable        |                         |
| <b>Lower Flammability Limit</b>     | Not applicable        |                         |
| <b>Vapor Pressure</b>               | 17 mm Hg              | @ 20°C (68°F)           |
| <b>Vapor Density</b>                | >1                    | (Air=1)                 |
| <b>Specific Gravity</b>             | 1.005                 | (Water = 1)             |
| <b>Water Solubility</b>             | Completely soluble    |                         |
| <b>Solubility in other solvents</b> | Not determined        |                         |
| <b>Partition Coefficient</b>        | Not determined        |                         |
| <b>Auto-ignition Temperature</b>    | Not determined        |                         |
| <b>Decomposition Temperature</b>    | Not determined        |                         |
| <b>Kinematic Viscosity</b>          | Like that of water    |                         |
| <b>Dynamic Viscosity</b>            | Not determined        |                         |
| <b>Explosive Properties</b>         | Not determined        |                         |
| <b>Oxidizing Properties</b>         | Not determined        |                         |
| <b>VOC Content (%)</b>              | 99%                   |                         |
| <b>VOC Content</b>                  | None                  |                         |

**10. STABILITY AND REACTIVITY**

**Reactivity**

Not reactive under normal conditions.

**Chemical Stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Hazardous Polymerization**

Under normal conditions of storage and use, hazardous polymerization will not occur.

**Conditions to Avoid**

Incompatible Materials. Extreme temperatures. Contact with active metals.

**Incompatible Materials**

Strong oxidizing agents. Strong alkalis. Most metals. Cyanides. Sulfides. Glass. Ceramics.

**Hazardous Decomposition Products**

In case of a fire, oxides of carbon, hydrocarbons, fumes or vapors, fluorine and smoke may be produced.

**11. TOXICOLOGICAL INFORMATION**

**Information on likely routes of exposure**

**Product Information**

**Eye Contact** Causes severe eye damage.

**Skin Contact** Causes severe skin burns.

**Inhalation** Do not inhale.

**Ingestion** Harmful if swallowed.

**Component Information**

| <b>Chemical Name</b>             | <b>Oral LD50</b>    | <b>Dermal LD50</b> | <b>Inhalation LC50</b> |
|----------------------------------|---------------------|--------------------|------------------------|
| Ammonium bifluoride<br>1341-49-7 | = 130 mg/kg ( Rat ) | -                  | -                      |

| Chemical Name   | Oral LD50                                    | Dermal LD50          | Inhalation LC50                     |
|---|--|----------------------|-------------------------------------|
| Sulfuric Acid<br>7664-93-9                            | = 2140 mg/kg ( Rat )                         | -                    | = 510 mg/m <sup>3</sup> ( Rat ) 2 h |
| Citric Acid<br>77-92-9                                | = 3000 mg/kg ( Rat )                         | -                    | -                                   |
| Quaternary Cocoalkylamine<br>Ethoxylate<br>61791-10-4 | = 580 mg/kg ( Rat )                          | -                    | -                                   |
| Alcohols, C9-11 ethoxylated<br>68439-46-3             | = 1400 mg/kg ( Rat ) = 1378 mg/kg<br>( Rat ) | > 2 g/kg ( Rabbit )  | -                                   |
| Glycerol<br>56-81-5                                   | = 12600 mg/kg ( Rat )                        | > 10 g/kg ( Rabbit ) | > 570 mg/m <sup>3</sup> ( Rat ) 1 h |

### Information on physical, chemical and toxicological effects

#### Symptoms

Please see section 4 of this SDS for symptoms.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

#### Carcinogenicity

IARC has classified "strong inorganic acid mist containing sulfuric acid" as a Category 1 carcinogen, substance that is carcinogenic to humans. This classification does not apply to liquid forms of sulfuric acid. Inorganic mist is not generated under normal use of this product.

| Chemical Name                    | ACGIH | IARC    | NTP   | OSHA |
|----------------------------------|-------|---------|-------|------|
| Ammonium bifluoride<br>1341-49-7 |       | Group 3 |       |      |
| Sulfuric Acid<br>7664-93-9       | A2    | Group 1 | Known | X    |

#### Legend

*ACGIH (American Conference of Governmental Industrial Hygienists)*

*A2 - Suspected Human Carcinogen*

*IARC (International Agency for Research on Cancer)*

*Group 1 - Carcinogenic to Humans*

*Group 3 IARC components are "not classifiable as human carcinogens"*

*NTP (National Toxicology Program)*

*Known - Known Carcinogen*

*OSHA (Occupational Safety and Health Administration of the US Department of Labor)*

*X - Present*

### Numerical measures of toxicity

Not determined

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

### Component Information

| Chemical Name              | Algae/aquatic plants | Fish  | Toxicity to microorganisms | Crustacea                            |
|----------------------------|----------------------|---|----------------------------|--------------------------------------|
| Sulfuric Acid<br>7664-93-9 |                      | 500: 96 h Brachydanio rerio<br>mg/L LC50 static       |                            | 29: 24 h Daphnia magna<br>mg/L EC50  |
| Citric Acid<br>77-92-9     |                      | 1516: 96 h Lepomis<br>macrochirus mg/L LC50<br>static |                            | 120: 72 h Daphnia magna<br>mg/L EC50 |
| Glycerol<br>56-81-5        |                      | 51 - 57: 96 h Oncorhynchus<br>mykiss mL/L LC50 static |                            | 500: 24 h Daphnia magna<br>mg/L EC50 |

### Persistence/Degradability

Not determined.

**Bioaccumulation**

Not determined.

**Mobility**

| Chemical Name          | Partition Coefficient |
|------------------------|-----------------------|
| Citric Acid<br>77-92-9 | -1.72                 |
| Glycerol<br>56-81-5    | -1.76                 |

**Other Adverse Effects**

Not determined

**13. DISPOSAL CONSIDERATIONS**

**Waste Treatment Methods**

- Disposal of Wastes**                      Disposal should be in accordance with applicable regional, national and local laws and regulations.
  
- Contaminated Packaging**              Disposal should be in accordance with applicable regional, national and local laws and regulations.

**California Hazardous Waste Status**

| Chemical Name              | California Hazardous Waste Status |
|----------------------------|-----------------------------------|
| Sulfuric Acid<br>7664-93-9 | Toxic<br>Corrosive                |

**14. TRANSPORT INFORMATION**

**Note**    Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

**DOT**

- UN/ID No**                                      UN1790
- Proper Shipping Name**                  Hydrofluoric acid solution
- Hazard Class**                                8
- Subsidiary Hazard Class**                6.1
- Packing Group**                              II

**IATA**

- UN/ID No**                                      UN1790
- Proper Shipping Name**                  Hydrofluoric acid solution
- Hazard Class**                                8
- Subsidiary Hazard Class**                6.1
- Packing Group**                              II

**IMDG**

- UN/ID No**                                      UN1790
- Proper Shipping Name**                  Hydrofluoric acid solution
- Hazard Class**                                8
- Subsidiary Hazard Class**                6.1
- Packing Group**                              II

## 15. REGULATORY INFORMATION

### International Inventories

| Chemical Name       | TSCA    | DSL | NDSL | EINECS  | ELINCS | ENCS    | IECSC | KECL    | PICCS | AICS |
|---------------------|---------|-----|------|---------|--------|---------|-------|---------|-------|------|
| Sulfuric Acid       | Present | X   |      | Present |        | Present | X     | Present | X     | X    |
| Ammonium bifluoride | Present | X   |      | Present |        | Present | X     | Present | X     | X    |
| Citric Acid         | Present | X   |      | Present |        | Present | X     | Present | X     | X    |

#### Legend:

*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*

*DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*

*EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*

*ENCS - Japan Existing and New Chemical Substances*

*IECSC - China Inventory of Existing Chemical Substances*

*KECL - Korean Existing and Evaluated Chemical Substances*

*PICCS - Philippines Inventory of Chemicals and Chemical Substances*

*AICS - Australian Inventory of Chemical Substances*

### US Federal Regulations

#### CERCLA

| Chemical Name                    | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ)                  |
|----------------------------------|--------------------------|----------------|---|
| Sulfuric Acid<br>7664-93-9       | 1000 lb                  | 1000 lb        | RQ 1000 lb final RQ<br>RQ 454 kg final RQ |
| Ammonium bifluoride<br>1341-49-7 | 100 lb                   |                | RQ 100 lb final RQ<br>RQ 45.4 kg final RQ |

#### SARA 311/312 Hazard Categories

|                                   |     |
|-----------------------------------|-----|
| Acute Health Hazard               | Yes |
| Chronic Health Hazard             | No  |
| Fire Hazard                       | No  |
| Sudden Release of Pressure Hazard | No  |
| Reactive Hazard                   | No  |

#### SARA 313

| Chemical Name                   | CAS No    | Weight-% | SARA 313 - Threshold Values % |
|---------------------------------|-----------|----------|-------------------------------|
| Ammonium bifluoride - 1341-49-7 | 1341-49-7 | 3        | 1.0                           |
| Sulfuric Acid - 7664-93-9       | 7664-93-9 | 3        | 1.0                           |

#### CWA (Clean Water Act)

| Chemical Name       | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Sulfuric Acid       | 1000 lb                     |                        |                           | X                          |
| Ammonium bifluoride | 100 lb                      |                        |                           | X                          |

### US State Regulations

#### California Proposition 65

This product contains the following Proposition 65 chemicals.

| Chemical Name             | California Proposition 65 |
|---------------------------|---------------------------|
| Sulfuric Acid - 7664-93-9 | Carcinogen                |

**U.S. State Right-to-Know Regulations**

| Chemical Name                    | New Jersey | Massachusetts | Pennsylvania |
|----------------------------------|------------|---------------|--------------|
| Ammonium bifluoride<br>1341-49-7 | X          | X             | X            |
| Sulfuric Acid<br>7664-93-9       | X          | X             | X            |
| Glycerol<br>56-81-5              | X          | X             | X            |

**16. OTHER INFORMATION**

|             |                       |                     |                         |                            |
|-------------|-----------------------|---------------------|-------------------------|----------------------------|
| <b>NFPA</b> | <b>Health Hazards</b> | <b>Flammability</b> | <b>Instability</b>      | <b>Special Hazards</b>     |
|             | Not determined        | Not determined      | Not determined          | Not determined             |
| <b>HMIS</b> | <b>Health Hazards</b> | <b>Flammability</b> | <b>Physical Hazards</b> | <b>Personal Protection</b> |
|             | 3                     | 0                   | 1                       | C                          |

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**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**