



# Safety Data Sheet

EXTRACTION ZONE

## OptiShield Rust Evac

### 1 PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:** OptiShield Rust Evac  
**Common Name:** Rust Removing Spotter  
**SDS Number:** 129983-SDS  
**Product Code:** 129983  
**Revision Date:** 8/20/2025  
**Version:** 1  
**Product Use:** Use only as directed  
**Instructions:** Professional Use Only  
**Supplier Details:** EXTRACTION ZONE  
PO Box 262  
Strasburg, CO 80136  
**Contact:** Customer Service  
**Phone:** 720.374.2375  
**Web:** www.extractionzone.com  
**Emergency:** Infotrac 1-800-535-5053 (North America) 1-352-323-3500 (International)

### 2 HAZARDS IDENTIFICATION

#### Classification of the Substance or Mixture

##### GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):

Health, Acute toxicity, 3 Oral  
Health, Skin corrosion/irritation, 1 B

#### GHS Label Elements, Including Precautionary Statements

**GHS Signal Word:** DANGER

**GHS Hazard Pictograms:**



#### GHS Hazard Statements:

H301 - Toxic if swallowed  
H314 - Causes severe skin burns and eye damage

#### GHS Precautionary Statements:

P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection.  
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 or doctor/ physician.  
P260 - Do not breathe dust/fume/gas/mist/vapours/spray.  
P262 - Do not get in eyes, on skin, or on clothing.  
P264 - Wash ... thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].  
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P362 - Take off contaminated clothing.  
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.

### 3 COMPOSITION/INFORMATION OF INGREDIENTS

This material is considered hazardous by the OSHA Hazardous Communication Standard (29 CFR 1910.1200)



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### Chemical Ingredients

| CAS#      | %      | Chemical Name       |
|-----------|--------|---------------------|
| 1341-49-7 | 10-20% | Ammonium bifluoride |

\* The exact percentage (concentration) of composition has been withheld as a trade secret.

## 4 FIRST AID MEASURES

- Inhalation:** If symptoms develop, move victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, obtain medical attention.
- Skin Contact:** Get medical attention if needed. Promptly flush skin with water until all chemical is removed. If irritation persists get medical attention. Remove contaminated clothing immediately.
- Eye Contact:** Do not rub affected area. Immediately flush eyes with large amounts of water for at least 15 minutes keeping eyes wide open and lifting eyelids occasionally to facilitate irrigation. After initial flush remove contacts, if present, and continue to flush for 15 minutes. Seek immediate medical attention.
- Ingestion:** Do not induce vomiting unless directed by a physician. Seek immediate medical attention. Rinse mouth with water. Drink large quantities of water if person is conscious and alert. Never give water to an unconscious person.

### NOTES TO PHYSICIAN:

HF-Antidote Gel is recommended as treatment for injuries from hydrofluoric acid.

If skin irritation occurs: Immediately apply calcium gluconate gel 2.5% and massage into the affected area using rubber gloves. Continue to massage while repeatedly applying gel for 15-minutes after pain is relieved

## 5 FIRE FIGHTING MEASURES

- Flash Point:** Not flammable
- Use extinguishing measures that are appropriate to local circumstances and surrounding environment. Wear self contained breathing apparatus and other protective clothing.

## 6 ACCIDENTAL RELEASE MEASURES

Evacuate personnel from area. Use personal protective equipment as required. Avoid contact with eyes, skin and clothing.

Use personal protective equipment. Ventilate area and wash spill site after material pickup is complete.

## 7 HANDLING AND STORAGE

- Handling Precautions:** Use local and general ventilation. Use only in well-ventilated areas.
- Advice on general occupational hygiene  
Wash hands after use. Do not to eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.
- Storage Requirements:** Keep in a cool ventilated area. Keep container tightly closed. Keep out of reach of children

## 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

- Engineering Controls:** Ammonium bifluoride cas#:(1341-49-7) [1020] : No data.



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### Personal Protective Equipment:

HMIS PP, J | Splash Goggles, Gloves, Apron, Dust and Vapor Resp  
Ammonium bifluoride cas#:(1341-49-7) [1020]

Personal protective equipment

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Full contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested: Dermatrill (KCL 740 / Aldrich Z677272, Size M) Splash contact data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Eye protection: Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection: Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

### Ammonium bifluoride cas#:(1341-49-7) [1020]

#### Components with workplace control parameters

TWA 2.5 mg/m3 USA. Occupational Exposure Limits (OSHA) - Table Z- 1  
Limits for Air Contaminants

TWA 2.5 mg/m3 USA. Occupational Exposure Limits (OSHA) - Table Z2

TWA 2.5 mg/m3 USA. OSHA - TABLE Z-1 Limits for Air Contaminants -  
1910.1000

TWA 2.5 mg/m3 USA. ACGIH Threshold Limit Values (TLV)

TWA 2.5 mg/m3 USA. Occupational Exposure Limits (OSHA) - Table Z- 1  
Limits for Air Contaminants

#### CAS number varies with compound

TWA 2.5 mg/m3 USA. Occupational Exposure Limits (OSHA) - Table Z2  
Z37.28- 1969

TWA 2.5 mg/m3 USA. ACGIH Threshold Limit Values (TLV)  
Bone damage Fluorosis Substances for which there is a Biological Exposure Index or Indices (see  
BEI section) Not classifiable as a human carcinogen varies

TWA 2.5 mg/m3 USA. OSHA - TABLE Z-1 Limits for Air Contaminants -  
1910.1000



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### 9 PHYSICAL AND CHEMICAL PROPERTIES

|                               |                               |                              |                          |
|-------------------------------|-------------------------------|------------------------------|--------------------------|
| <b>Appearance:</b>            | Clear Colorless Liquid        | <b>Odor:</b>                 | Mild                     |
| <b>Physical State:</b>        | Liquid                        | <b>Solubility:</b>           | Completely Soluble       |
| <b>Odor Threshold:</b>        | No data available             | <b>Percent Volatile:</b>     | 0%                       |
| <b>Spec Grav./Density:</b>    | 1.043 +/- .005                | <b>Freezing/Melting Pt.:</b> | 32C (0F)                 |
| <b>Viscosity:</b>             | No data available             | <b>Flash Point:</b>          | No Flash - Non-Flammable |
| <b>Boiling Point:</b>         | Approximately 100° C / 212° F | <b>Vapor Density:</b>        | No data available        |
| <b>Flammability:</b>          | Not Flammable                 | <b>Auto-ignition Temp:</b>   | No data available        |
| <b>Partition Coefficient:</b> | No data available             | <b>UFL / LFL:</b>            | No data available        |
| <b>Vapor Pressure:</b>        | No data available             |                              |                          |
| <b>pH:</b>                    | 5.0 +/- .5                    |                              |                          |
| <b>Evap. Rate:</b>            | Similiar to water             |                              |                          |
| <b>Decomp Temp:</b>           | No data available             |                              |                          |

### 10 STABILITY AND REACTIVITY

|                                  |   |
|----------------------------------|---|
| <b>Reactivity:</b>               | No data available   |
| <b>Chemical Stability:</b>       | Product is stable under normal conditions.  |
| <b>Conditions to Avoid:</b>      | Avoid heat, sparks, flames and direct sunlight  |
| <b>Materials to Avoid:</b>       | Strong Bases, Strong Acids, Silicate containing materials (glass, cement...), Metals.   |
| <b>Hazardous Decomposition:</b>  | Thermal decomposition can lead to the release of irritating gases and vapors. Hydrogen Flouride and Ammonia fumes, nitrogen oxide |
| <b>Hazardous Polymerization:</b> | Not Known   |

### 11 TOXICOLOGICAL INFORMATION

Ammonium bifluoride cas#:(1341-49-7) [1020]

Information on toxicological effects

Acute toxicity:

Oral LD50 no data available

Inhalation LC50

Dermal LD50

Other information on acute toxicity

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitisation: no data available

Germ cell mutagenicity: no data available



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**Carcinogenicity:**

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Ammonium bifluoride)

NTP: No component 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 component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: no data available

Teratogenicity: no data available

Specific target organ toxicity - single exposure (Globally Harmonized System):  
no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System):  
no data available

Aspiration hazard: no data available

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

Signs and Symptoms of Exposure: Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache, Nausea

Synergistic effects: no data available

Additional Information:

RTECS: BQ9200000

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## ECOLOGICAL INFORMATION

Ammonium bifluoride cas#:(1341-49-7) [1020]

Information on ecological effects

Toxicity: no data available

Persistence and degradability: no data available

Bioaccumulative potential: no data available

Mobility in soil: no data available

PBT and vPvB assessment: no data available

Other adverse effects: no data available

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## DISPOSAL CONSIDERATIONS

Waste treatment methods

Product: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical



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incinerator equipped with an afterburner and scrubber.

Contaminated packaging: Dispose of as unused product.

### 14 TRANSPORT INFORMATION

UN2817, Ammonium hydrogendifluoride, solution, 8(6.1), PG III  
ERG = 154



### 15 REGULATORY INFORMATION

|   | Ammonium Bifluoride  |
|---|--|
| CAS #   | 1341-49-7  |
| Percent Range   | 10.0% - 20.0%  |
| TSCA  | Registered   |
| SARA 302/304  | Yes, RQ = 100 lbs  |
| SARA 311/312  | Yes, corrosive, acute/chronic health hazards   |
| SARA 313  | Not Applicable   |
| CERCLA  | Yes, RQ = 100 lbs  |
| Clean Water Act   | Do not discharge into waterways  |
| US State Regulations:<br>Workers Right-To-Know<br>and/or<br>Community Right-To-Know<br>and/or<br>Substance List | CA: Listed<br>NY: Listed<br>NJ: Listed<br>MA: Listed<br>PA: Listed<br>IL: Not Listed<br>FL: Not Listed |
| RCRA  | D002: Corrosive  |

This product does not contain chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

#### Regulatory Code Legend

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CERCLA = Superfund clean up substance  
 CSWS = Clean Water Act Hazardous substances  
 MASS = MA Massachusetts Hazardous Substances List  
 PA = PA Right-To-Know List of Hazardous Substances  
 RQ = Reportable Quantity



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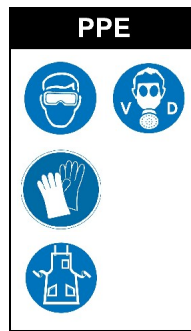
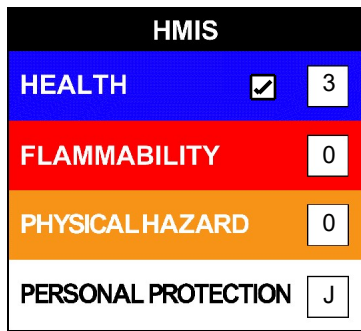
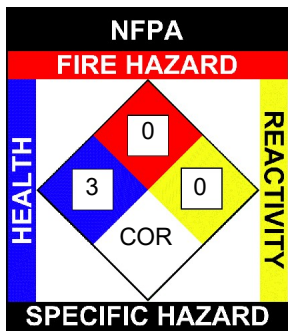
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RQ - Reportable Quantity  
TSCA = Toxic Substances Control Act  
TSCA ACTV = TSCA Active Chemicals

### 16 OTHER INFORMATION

**NFPA:** Health = 3, Fire = 0, Reactivity = 0, Specific Hazard = COR  
**HMIS III:** Health = 3(Chronic), Fire = 0, Physical Hazard = 0  
**HMIS PPE:** J - Splash Goggles, Gloves, Apron, Dust and Vapor Respirator



The information provided in this Safety Data Sheet is correct to the best of our knowledge at the date of its publication. The information given is designed only as a guide 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 other process, unless specified in the text.

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