



Film & Scale Remover

Revision: 2020-09-06

Version: 01.0

1. IDENTIFICATION

Product name: Film & Scale Remover
Product Code: 100841847
SDS #: MS0800344
Recommended use:

- Heavy duty non-fuming acidic descaler
- Professional cleaning/maintenance product for food & beverage industries
- This product is intended to be diluted prior to use

Uses advised against: Uses other than those identified are not recommended

Manufacturer, importer, supplier:
 US Headquarters
 Diversey
 8215 Forest Point Blvd.
 Charlotte, NC 28273-5509
 Phone: 1-888-352-2249
 SDS Internet Address: <https://sds.diversey.com>

Canadian Headquarters
 Sealed Air - Canada
 3755 Laird Road Units 8-11
 Mississauga, Ontario L5L 0B3
 Phone: 1-800-668-7171

Emergency telephone number: 1-800-851-7145; 1-651-917-6133 (Int'l)

2. HAZARDS IDENTIFICATION

Classification for the undiluted product

Acute oral toxicity	Category 4
Acute dermal toxicity	Category 3
Skin corrosion/irritation	Category 1B
Serious eye damage/eye irritation	Category 1
Metal Corrosion:	Category 1



Signal word: Danger.

Hazard Statements

TOXIC IN CONTACT WITH SKIN. CAUSES SEVERE SKIN BURNS AND SERIOUS EYE DAMAGE. HARMFUL IF SWALLOWED. MAY BE CORROSIVE TO METALS.

Precautionary Statements

Causes burns/ serious damage to mouth, throat and stomach. Keep container tightly closed. Keep only in original container. Do not breathe spray. Avoid contact with eyes, skin and clothing. Wash affected areas thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves and protective clothing. Wear chemical-splash goggles, chemical-resistant gloves and protective footwear. IF SWALLOWED: Rinse mouth. DO NOT induce vomiting unless directed to do so by medical personnel. Drink a cupful of milk or water. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water for at least 15 minutes. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes. Immediately call a Poison Center (1-800-851-7145) or physician. Take off contaminated clothing. Absorb spillage to prevent material damage. Store locked up. Store in corrosive-resistant container with a resistant inner liner. Dispose of in accordance with all federal, state and local applicable regulations. SUPPLEMENTAL INFORMATION: Mix only with water. DO NOT MIX WITH AMMONIA, BLEACH OR OTHER CHLORINATED COMPOUNDS. Can react to release hazardous gases. May vigorously react with strong alkaline products resulting in spattering and excessive heat.

Health hazards not otherwise classified (HHNOC) - Not applicable
Physical hazards not otherwise classified (PHNOC) - Not applicable

Classification for the diluted product @ 10%

Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 2A



Signal word: Warning.

Hazard and Precautionary Statements

CAUSES SKIN AND SERIOUS EYE IRRITATION.

Avoid contact with eyes, skin and clothing. Wash affected areas thoroughly after handling. May cause irritation to mouth, throat and stomach. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice or attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes. Dispose of in accordance with all federal, state and local applicable regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Classified Ingredients

Ingredient(s)	CAS #	Weight %
Hydroxyacetic acid	79-14-1	10 - 30%
Citric acid	77-92-9	7 - 13%
Ammonium bifluoride	1341-49-7	5 - 10%
Alcohol ethoxylate	68002-97-1	1 - 5%
Ammonium fluoride	12125-01-8	> 0.1 - < 1%

4. FIRST AID MEASURES

Undiluted Product:

Eyes: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes.

Skin: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water for at least 15 minutes.

Inhalation: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Ingestion: IF SWALLOWED: Rinse mouth. DO NOT induce vomiting unless directed to do so by medical personnel. Drink a cupful of milk or water.

Most Important Symptoms/Effects: No information available.

Immediate medical attention and special treatment needed Not applicable.

Aggravated Medical Conditions: Individuals with chronic respiratory disorders such as asthma, chronic bronchitis, emphysema, etc., may be more susceptible to irritating effects.

Diluted Product:

Eyes: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes.

Skin: IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.

Inhalation: No specific first aid measures are required.

Ingestion: IF SWALLOWED: Rinse mouth. Drink a cupful of milk or water.

5. FIRE-FIGHTING MEASURES

Specific methods: No special methods required.

Suitable extinguishing media: The product is not flammable. Extinguish fire using agent suitable for surrounding fire.

Special protective equipment for firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Extinguishing media which must not be used for safety reasons: No information available.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Put on appropriate personal protective equipment (see Section 8.).
Environmental precautions and clean-up methods: Clean-up methods - large spillage. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Use a water rinse for final clean-up.

7. HANDLING AND STORAGE

Handling: Mix only with water. DO NOT MIX WITH AMMONIA, BLEACH, OR OTHER CHLORINATED COMPOUNDS. Can react to release hazardous gases. May vigorously react with strong alkaline products resulting in spattering and excessive heat.

Storage: Keep tightly closed in a dry, cool and well-ventilated place.

Aerosol Level (if applicable): Not applicable.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines: This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Undiluted Product:

Engineering measures to reduce exposure:

Good general ventilation should be sufficient to control airborne levels. Respiratory protection is not required if good ventilation is maintained.

Personal Protective Equipment

Eye protection: Chemical-splash goggles.
Hand protection: Chemical-resistant gloves.
Skin and body protection: Protective footwear. Chemical resistant apron. If major exposure is possible, wear suitable protective clothing and footwear.
Respiratory protection: In case of insufficient ventilation wear suitable respiratory equipment. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.
Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.

Diluted Product:

Engineering measures to reduce exposure:

Good general ventilation should be sufficient to control airborne levels.

Personal Protective Equipment

Eye protection: Chemical-splash goggles.
Hand protection: Chemical-resistant gloves.
Skin and body protection: No personal protective equipment required under normal use conditions.
Respiratory protection: No personal protective equipment required under normal use conditions.
Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Evaporation Rate: No information available

Odor threshold: No information available.

Melting point/range: Not determined

Autoignition temperature: No information available

Solubility in other solvents: No information available

Density: Specific gravity: 1.17 Kg/L

Bulk density: No information available

Flash point (°F): > 200 °F > 93.3 °C

Viscosity: No information available

VOC: 0 % *

Flammability (Solid or Gas): Not applicable

Sustained combustion: Not applicable

Explosion limits: - upper: Not determined - lower: Not determined
> 200 > 93.3

Color: Clear, Clear

Odor: Acidic

Boiling point/range: Not determined

Decomposition temperature: Not determined Not applicable

Solubility: Completely Soluble

Relative Density (relative to water): 1.17

Vapor density: No information available

Vapor pressure: No information available.

Partition coefficient (n-octanol/water): No information available

Elemental Phosphorus: 0.00 % by wt.

pH: 2.0

Corrosion to metals: Metal corrosive

VOC % by wt. at use dilution: 0

10. STABILITY AND REACTIVITY

Reactivity:	Not Applicable
Stability:	The product is stable
Possibility of hazardous reactions:	May vigorously react with strong alkaline products resulting in spattering and excessive heat.
Hazardous decomposition products:	Hydrogen fluoride. Thermal decomposition can lead to release of irritating gases and vapors.
Materials to avoid:	Bases. Strong oxidising agents. Do not mix with chlorinated products (such as bleach). Strong bases. Ammonia. Do not mix with any other product or chemical unless specified in the use directions.
Conditions to avoid:	No information available.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Eye contact, Skin contact, Inhalation, Ingestion

Delayed, immediate, or chronic effects and symptoms from short and long-term exposure

Skin contact: Corrosive. Causes severe burns. Symptoms may include burns, blisters, redness and pain (which may be delayed).

Eye contact: Corrosive. Causes serious eye damage. Symptoms may include pain, burning sensation, redness, watering, blurred vision or loss of vision.

Ingestion: Causes burns/ serious damage to mouth, throat and stomach. Symptoms may include stomach pain and nausea. Harmful if swallowed. Symptoms may include vomiting, nausea, and/or feeling of general unwellness.

Inhalation: May cause irritation and corrosive effects to nose, throat and respiratory tract. Symptoms may include coughing and difficulty breathing.

Sensitization: No known effects.

Target Organs (SE): None known

Target Organs (RE): None known

Numerical measures of toxicity

ATE - Oral (mg/kg): 1000

ATE - Inhalatory, mists (mg/l): >20

ATE - Inhalatory, vapors (mg/l): >50

12. ECOLOGICAL INFORMATION

Ecotoxicity: No information available.

Persistence and Degradability: No information available.

Bioaccumulation: No information available.

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products (undiluted product): The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation

Waste from residues / unused products (diluted product): This product, when diluted as stated on this SDS, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the waste solution meets RCRA criteria for hazardous waste. Dispose in compliance with all Federal, state, provincial, and local laws and regulations.

RCRA Hazard Class (undiluted product): D002 Corrosive Waste

RCRA Hazard Class (diluted product): Not Regulated

Contaminated Packaging: Do not re-use empty containers.

14. TRANSPORT INFORMATION

DOT (Ground) Bill of Lading Description: UN2817, AMMONIUM HYDROGENDIFLUORIDE SOLUTION, 8(6.1), III

IMDG (Ocean) Bill of Lading Description: UN2817, AMMONIUM HYDROGENDIFLUORIDE SOLUTION, 8(6.1), III

15. REGULATORY INFORMATION

International Inventories at CAS# Level

CERCLA/ SARA

Ingredient(s)	CAS #	Weight %	CERCLA/SARA RQ (lbs)	Section 302 TPQ (lbs)	Section 313
Ammonium bifluoride	1341-49-7	5 - 10%	100		X
Ammonium fluoride	12125-01-8	> 0.1 - < 1%	100		X

16. OTHER INFORMATION

NFPA (National Fire Protection Association)

Rating Scale: (Low Hazard) 0 - 4 (Extreme Hazard)

Health 3

Flammability 0

Instability 0

Special Hazards -

Diluted Product:

Revision: 2020-09-06

Version: 01.0

Reason for revision:

Not applicable

Prepared by:

North American Regulatory Affairs

Additional advice:

• Does not contain an added fragrance

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