




Material Safety Data Sheet

NFPA	HMIS	PPE	Transport Symbol						
	<table><tr><td>Health Hazard</td><td>3</td></tr><tr><td>Fire Hazard</td><td>0</td></tr><tr><td>Reactivity</td><td>1</td></tr></table>	Health Hazard	3	Fire Hazard	0	Reactivity	1		
Health Hazard	3								
Fire Hazard	0								
Reactivity	1								

Issuing Date 10/06/2008

Revision Date 10/06/2008

Revision Number 2

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name

Rust Stain Remover

Recommended Use

Rust Remover

Supplier Address

Whink Products Company
PO Box 230

1901 15th Ave., Eldora, IA, 50627
United States of America

Phone: 641.939.2353

Fax: 641.939.2485

Emergency Phone: 800.229.6036

CHEMTREC: 800.424.9300

Company Emergency Phone Number 800.321.9065

2. HAZARDS IDENTIFICATION

Emergency Overview

Very toxic by inhalation, in contact with skin and if swallowed. Causes severe burns. Inhalation of vapors in high concentration may cause shortness of breath (lung edema). Ingestion causes burns of the upper digestive and respiratory tracts. Will penetrate skin and attack underlying tissues and bone.

Appearance Clear

Physical State Liquid

Odor Acrid

Potential Health Effects

Principle Routes of Exposure Eyes, Skin, Inhalation and Ingestion

Acute Toxicity

Eyes

Avoid contact with eyes. Risk of serious damage to eyes. May cause burns. Severely irritating to eyes. Seek Medical Attention.

Skin

Causes serious injury to skin, which may not be immediately painful or visible.

Inhalation

Causes respiratory irritation. Symptoms may be delayed for several hours.

Ingestion

Ingestion is toxic and can cause severe mouth, throat and stomach burns. Seek medical attention.

Environmental Hazard

See Section 12 for additional Ecological Information

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Water	7732-18-5	90 - 100
Hydrofluoric Acid (Hydrogen Fluoride)	7664-39-3	1.50 – 3.5
Denatonium Benzoate	3734-33-6	0.01 – 0.10

4. FIRST AID MEASURES

General Advice	Call 800.229.6036 or emergency medical service. Remove and isolate contaminated clothing and shoes.
Eye Contact	In case of contact with eyes, remove contacts if needed, immediately flush eyes with running water for at least 20 minutes. Get medical attention immediately.
Skin Contact	Avoid spreading material on unaffected skin. Wash off immediately with plenty of water for 15 minutes. Treat with Calcium Gluconate (2.5%) or with a over-the-counter anti-acid containing Calcium or Magnesium. Seek Medical Attention Immediately!
Inhalation	Move injured party to fresh air. Apply artificial respiration if injured party is not breathing. Administer oxygen if breathing is difficult. Get Medical Attention Immediately!
Ingestion	Do not induce vomiting. Rinse mouth. Drink large amounts of water. Several glasses of milk or several ounces of milk of magnesia may be given for soothing. Take Injured Party to a Doctor Immediately!

5. FIRE-FIGHTING MEASURES

Flammable Properties	Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. Produces Hydrogen Fluoride Gas or Hydrogen Gas upon heating. Containers may rupture due to gas build-up when heated. Reaction with certain metals generates flammable and potentially explosive hydrogen gas.
Flash Point	Not Flammable.
Suitable Extinguishing Media	Use water or suitable agent for fires. Do not use solid water streams. Acid reacts with water and can splatter acid onto personnel. Care should be exercised when water is used to dilute acid. Will react with water and generate heat and fumes.

Hazardous Combustion Products Hydrogen Gas and/or Hydrogen Fluoride Gas

Explosion Data

Sensitivity to mechanical impact	Not sensitive
Sensitivity to static discharge	Not sensitive

Protective Equipment and Precautions for Firefighters In the event of a fire wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode. Wear full protective clothing.

National Fire Protection Association (NFPA) Ratings: This information is intended solely for the use of individuals trained in the NFPA system.

Health Hazard 3 Flammability 0 Stability 1 Physical and Chemical Hazards W Other: Acid/ Toxic

6. ACCIDENTAL RELEASE MEASURES

Methods for Containment Always wear Personal Protective Equipment. Use sand, or pigs to dike area. Keep out of sewer

Methods for Cleaning Up Carefully neutralize with caustic soda, lime or other alkaline material. Put into approved disposal container.

Other Information Do not use metal or glass containers. Do not use metal tools for cleaning spills.

7. HANDLING AND STORAGE

Handling Always wear recommended Personal Protective Equipment. Do not breathe vapor or mist. Use only with adequate ventilation. Avoid contact with skin, eyes and clothing. Do not add water to product. Care should be taken when adding to water to prevent splattering and heat buildup.

Storage Store only in the original container. Store in cool, well-ventilated area. Do not store in metal containers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines This product does contain a hazardous material with occupational exposure limits established by the region specific regulatory bodies.

Engineering Measures Showers – quick-drench
Eyewash stations
Ventilation systems – sufficient to reduce vapor and acid mists below permissible TLV levels.

Personal Protective Equipment

Eye/Face Protection Tightly fitting safety goggles. Face-shield.

Skin and Body Protection Wear Chemical Resistant Gloves.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations

Hygiene Measures When using, do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Colorless	Odor	Acrid / Sharp Pungent
Odor Threshold	No information available	Physical State	Liquid
pH	As is < 1	Autoignition Temperature	No information available.
Flash Point	No information available.	Boiling Point/Range	212°F
Decomposition Temperature	No information available.	Explosion Limits	No information available.
Melting Point/Range	No information available.	Solubility	Water
Flammability Limits in Air	No information available.	Vapor Pressure	No data available.
Water Solubility	Complete (Weight%)	VOC Content	Not applicable.
Evaporation Rate	< 1 (Compared to: Ether)	Partition Coefficient (n-octanol/water)	No data available.
Vapor Density	No data available.		

10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage conditions
Incompatible Products	Glass, concrete and other silicone materials. Carbonates, sulfides and cyanides (yields toxic gases). Alkalies and oxides (cause violent exothermic reactions). Common metals (yield Hydrogen Gas, fire and explosive reactive hazard). Corrosive to many materials (includes leather and many organics). Water added to product yields heat and violent reaction.
Conditions to Avoid	Moisture, humidity, heat, flame, ignition sources and incompatibles.
Hazardous Decomposition Products	Emits sulfur oxide gases under fire conditions and in contact with water.
Hazardous Reactions	Reacts violently with water, metals, alkalies, oxides, carbonates, sulfides, cyanides, glass, concrete and other silicones.
Hazardous Polymerization	Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Signs and Symptoms of Overexposure Eye, Mouth, Nasal and Mucous Membrane irritation. Burning of the skin, mottling of teeth and bones.

Acute Effects	
Eyes	May cause severe conjunctiva irritation and corneal damage. May cause burns.
Skin	2% solution of hydrofluoric acid was corrosive to rabbit skin with 1 hour exposure, but not with 1 minute.
Inhalation	May cause irritation of respiratory tract and mucous membranes.
Ingestion	Harmful or fatal if swallowed. Ingestion may cause burns and irritation to gastrointestinal tract.

Target Organ Effects Bone and joints

Chronic Toxicity Prolonged exposure can cause bone and joint changes in humans (Fluorosis).

Carcinogenicity Contains no ingredient listed as a carcinogen.

Acute Toxicity Values Oral LD₅₀ (Rat) = Not Determined Dermal LD₅₀ (Rabbit) = Not Determined Inhalation LC₅₀ (Rat) = Not Determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements

Contaminated Packaging Dispose of in accordance with local regulations

California Hazardous Waste Codes 791

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Hydrofluoric Acid (Hydrogen Fluoride)	Corrosive

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name Consumer commodity
Hazard Class ORM-D
Description Consumer commodity, ORM-D

TDG

Proper Shipping Name Hydrofluoric Acid, with \leq 60% strength
Hazard Class 8, 6.1
UN-No UN1790
Packing Group II
Description UN 1790 Hydrofluoric Acid, with \leq 60% strength (Hydrofluoric Acid 3%), 8, 6.1, II

MEX

Proper Shipping Name Hydrofluoric Acid, with \leq 60% strength.
Hazard Class 8, 6.1
UN-No UN1790
Packing Group II
Description UN 1790 Hydrofluoric Acid, with \leq 60% strength (Hydrofluoric Acid 3%), 8, 6.1, PG II

ICAO

UN-No UN1790
Proper Shipping Name Hydrofluoric Acid, with \leq 60% strength.
Hazard Class 8, 6.1
Packing Group II
Description UN 1790 Hydrofluoric Acid, with \leq 60% strength (Hydrofluoric Acid 3%), 8, 6.1, PG II

IATA

UN-No UN1790
Proper Shipping Name Hydrofluoric Acid, with \leq 60% strength.

14. TRANSPORT INFORMATION

Hazard Class	8, 6.1
Packing Group	II
ERG Code	8L
Description	UN 1790 Hydrofluoric Acid, with <= 60% strength (Hydrofluoric Acid 3%), 8, 6.1, PG II

IMDG/IMO

Proper Shipping Name	Hydrofluoric Acid, with <= 60% strength.
Hazard Class	8, 6.1
Subsidiary Class	Toxic
UN-No	UN1790
Packing Group	II
EmS No.	8.03
Description	UN 1790 Hydrofluoric Acid, with <= 60% strength (Hydrofluoric Acid 3%), 8, 6.1, PG II

RID

Proper Shipping Name	Hydrofluoric Acid, with <= 60% strength.
Hazard Class	8, 6.1
UN-No	UN1790
Packing Group	II
Classification Code	2XE
Description	UN 1790 Hydrofluoric Acid, with <= 60% strength (Hydrofluoric Acid 3%), 8, 6.1, II, RID
ADR/RID-Labels	8, 6.1

ADR

Proper Shipping Name	Hydrofluoric Acid, with <= 60% strength.
Hazard Class	8, 6.1
UN-No	UN1790
Packing Group	II
Classification Code	2XE
Description	UN 1790 Hydrofluoric Acid, with <= 60% strength (Hydrofluoric Acid 3%), 8, 6.1, II

ADN

Proper Shipping Name	Hydrofluoric Acid, with <= 60% strength.
Hazard Class	8, 6.1
Packing Group	II
Classification Code	Unknown
Special Provisions	274
Description	UN 1790 Hydrofluoric Acid, with <= 60% strength (Hydrofluoric Acid 3%), 8, 6.1, II
Hazard Labels	8
Limited Quantity	Unknown

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15. REGULATORY INFORMATION

International Inventories

TSCA Hydrofluoric Acid, Aqueous is listed

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does contain chemicals (hydrogen fluoride), which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

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

15. REGULATORY INFORMATION Cont.

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990

CERCLA

This material, as supplied, does contain a substance regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). Hydrogen Fluoride (Hydrofluoric Acid) 100 lbs. There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

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U.S. State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Hydrofluoric Acid	NA	NA	NA	NA	NA

International Regulations

See Specific Country for Regulations required.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

E Corrosive material F Dangerously reactive material D1A Toxic materials

**16. OTHER INFORMATION**

Revision Date 10/06/2008

Revision Note Second Revision

Prepared By:

Manufacturer's Technical Services Department

Disclaimer

The information provided on this MSDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of MSDS

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