




# Material Safety Data Sheet

NFPA	HMIS	PPE	Transport Symbol						
	<table border="1"> <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								

Revision Date 04/03/2012

Revision Number 3

## 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

<b>General Advice</b>	Call 800.229.6036 or emergency medical service. Remove and isolate contaminated clothing and shoes.
<b>Eye Contact</b>	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.
<b>Skin Contact</b>	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!
<b>Inhalation</b>	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!
<b>Ingestion</b>	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

<b>Flammable Properties</b>	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.
<b>Flash Point</b>	Not Flammable.
<b>Suitable Extinguishing Media</b>	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

<b>Sensitivity to mechanical impact</b>	Not sensitive
<b>Sensitivity to static discharge</b>	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.

This Space Intentionally  
Left Blank

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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

## 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable under recommended storage conditions
<b>Incompatible Products</b>	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.
<b>Conditions to Avoid</b>	Moisture, humidity, heat, flame, ignition sources and incompatibles.
<b>Hazardous Decomposition Products</b>	Emits sulfur oxide gases under fire conditions and in contact with water.
<b>Hazardous Reactions</b>	Reacts violently with water, metals, alkalies, oxides, carbonates, sulfides, cyanides, glass, concrete and other silicones.
<b>Hazardous Polymerization</b>	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

<b>Eyes</b>	May cause severe conjunctiva irritation and corneal damage. May cause burns.
<b>Skin</b>	2% solution of hydrofluoric acid was corrosive to rabbit skin with 1 hour exposure, but not with 1 minute.
<b>Inhalation</b>	May cause irritation of respiratory tract and mucous membranes.
<b>Ingestion</b>	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 LD<sub>50</sub> (Rat) = Not Determined    Dermal LD<sub>50</sub> (Rabbit) = Not Determined    Inhalation LC<sub>50</sub> (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** Limited Quantity  
**Hazard Class** Limited Quantity  
**Description** Limited Quantity

### 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.

<b>14. TRANSPORT INFORMATION</b>
----------------------------------

<b>Hazard Class</b>	8, 6.1
<b>Packing Group</b>	II
<b>ERG Code</b>	8L
<b>Description</b>	UN 1790 Hydrofluoric Acid, with <math>\leq</math> 60% strength (Hydrofluoric Acid 3%), 8, 6.1, PG II

**IMDG/IMO**

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

**RID**

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

**ADR**

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

**ADN**

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

This Space Intentionally  
Left Blank

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**

<b>Acute Health Hazard</b>	Yes
<b>Chronic Health Hazard</b>	No
<b>Fire Hazard</b>	No
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	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

This Space Intentionally  
Left Blank

**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** 04/03/2012

**Revision Note** Third 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**

This Space Intentionally  
Left Blank