Rust Stain Remover
Safety Data Sheet

Section 1. Identification

Product Name: Rust Stain Remover

Supplier Name: **Whink Products Company**
Address: **PO Box 230**
1901 15th Ave.
Eldora, IA 50627
Telephone number: **641-939-2353**

Emergency phone number: Medical Emergency: 1-800-222-1222; Chemtrec: 800-424-9300

Recommended use: Rust Remover
Restrictions on use: Use only as directed

Date of Preparation: October 5, 2016

Section 2. Hazard(s) Identification

Note: This product is a consumer product and is labeled in accordance with the US Consumer Product Safety Commission regulations which take precedence over OSHA Hazard Communication labeling. The actual container label will not include the label elements below. The labeling below applies to industrial/professional products.

Classification:

Physical	Health
Not Hazardous	Acute Toxicity (oral) Category 4 Acute Toxicity (dermal) Category 3 Eye Damage Category 1 Skin Corrosion Category 1B

Danger!

Hazard statement(s)
Causes severe skin burns and eye damage.
Toxic in contact with skin.
Harmful if swallowed.
May be harmful if inhaled.

Storage
Store locked up.

Disposal
Dispose of contents and container in accordance with local and national regulations.

Prevention
Do not breathe vapors or mists.Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves, protective clothing, eye protection and face protection.

Response
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.. Immediately call a POISON CENTER or doctor.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor.
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.

Section 3. Composition / Information on Ingredients

Chemical name	CAS No.	Percent
Hydrofluoric Acid	7664-39-3	1-2.3%

The specific identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

Section 4. First-Aid Measures

Inhalation: Immediately remove victim to fresh air. If breathing has stopped give artificial respiration. Mouth to mouth is not recommended. If breathing is difficult have qualified personnel administer oxygen. Get immediate medical attention.
Skin contact: Immediately wash with large amounts of water for at least 15 minutes. Get immediate medical attention. Remove contaminated clothing and wash it before reuse.
Eye contact: Immediately flush eye with water for at least 15 minutes while lifting the upper and lower lids. Remove contact lenses if present and easy to do after the first 5 minutes then continue flushing. Get immediate medical attention.
Ingestion: If conscious, rinse mouth with water then give milk, chewable calcium carbonate tablets or milk of magnesia. Do not induce vomiting. Never give anything by mouth to a person who is unconscious or convulsing. Get immediate medical attention.

Most important symptoms/effects, acute and delayed: Causes severe burns to the eye, skin and mucous membranes. Burns may not be immediately painful or visible. Can be absorbed through the skin in toxic amounts. Inhalation may cause respiratory irritation or burns with coughing or labored breathing. Symptoms may be delayed. May be fatal if inhaled or swallowed or by widespread skin contact. Prolonged or repeated exposure may cause mottling of teeth, damage to bones and fluorosis with symptoms including brittle bones, weight loss, anemia, calcified ligaments and joint stiffness.

Indication of immediate medical attention and special treatment, if necessary: Medical treatment is recommended for all incidents of contact or exposure.

Notes to Physician: Contact your Poison Center for the latest advice on treatment. For eye contact: Carefully evaluate for eye damage, exposure to dilute solutions may result in delayed symptoms of ocular damage. For skin contact: Decontamination of the contact area is of primary importance. Symptoms may be delayed for several hours. Specific treatment is controversial with no single treatment clearly superior. Topical calcium gluconate gel or magnesium oxide paste has been successful. Calcium gluconate infiltration may be considered in some cases. Systemic absorption may occur and may require treatment with parenteral calcium salts. For ingestion: Administer fluoride binding substance. Monitor and treat hypocalcemia and hypomagnesemia as needed. Observe and evaluate patient for oral and GI burns. For inhalation: Monitor for respiratory distress. Respiratory symptoms may be delayed up to 24 hours.

Section 5. Fire-Fighting Measures

Suitable (and unsuitable) extinguishing media: This material is not combustible. Use any media that is suitable for the surrounding fire.

Specific hazards arising from the chemical: Contact with certain metals may evolve flammable hydrogen gas. Emits toxic fumes under fire conditions.

Special protective equipment and precautions for fire-fighters: Firefighters should wear full emergency equipment and NIOSH approved positive pressure self-contained breathing apparatus. Cool fire exposure containers with water.

Section 6. Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures: Wear appropriate protective clothing and equipment to prevent eye and skin contact. Ventilate the area. Evacuate spill area. Only trained individuals should attempt to clean up spills**.**

Environmental precautions: Avoid release to the environment. Report spill as required by local and federal regulations.

Methods and materials for containment and cleaning up: Dike spill and prevent spill from entering sewers and waterways. If possible, carefully neutralize with soda ash or lime. Collect into appropriate containers for disposal with an inert absorbent. Wash spill area with solution of soda ash. Do not use metal or glass containers.

Section 7. Handling and Storage

Precautions for safe handling: Prevent eye and skin contact. Do not breathe vapors or mists. Use only with adequate ventilation and appropriate protective clothing. Immediately remove contaminated clothing and other items. Wash thoroughly after handling. Empty containers retain product residues. Follow all SDS precautions in handling empty containers.

Conditions for safe storage, including any incompatibilities: Protect containers from physical damage. Store in a cool, well-ventilated area. Keep in original containers.

Section 8. Exposure Controls / Personal Protection

Exposure guidelines:

Hydrofluoric Acid (as hydrogen fluoride)	3 ppm TWA OSHA PEL 0.5 ppm TWA, 2 ppm Ceiling skin ACGIH TLV

Appropriate engineering controls: Use in a well-ventilated area. For operations where exposures limits are exceeded increased mechanical ventilation such as local exhaust may be required.

Personal Protective Equipment:
Respiratory protection: None required for normal use. For large jobs where the recommended exposure limit may be exceeded an approved respirator may be required. Selection of respiratory protection depends on the contaminant type, form and concentration. Select in accordance with OSHA 1910.134 and good Industrial Hygiene practice.
Skin protection: PVC, neoprene or other impervious gloves are recommended to prevent skin contact.
Eye protection: Wear chemical safety goggles and faceshield to prevent eye and face contact.
Other: Impervious apron, boots and other clothing are recommended if needed to prevent contact or if splashing is possible. A safety shower and an eye wash facility should be available in the immediate work area.

Section 9. Physical and Chemical Properties

Appearance (physical state, color, etc.): Colorless liquid
Odor: Sharp acrid odor.

Odor threshold: 0.5-3 ppm (hydrogen fluoride)	**pH:** <1
Melting point/freezing point: Not available	**Initial boiling point and boiling range:** 100℃ / 212℉
Flash point: Not flammable	**Evaporation rate:** Not available
Flammability (solid, gas): Not applicable	
Flammable limits: LEL: Not applicable	**UEL:** Not applicable
Vapor pressure: Not available	**Vapor density:** Not available
Relative density: ~1.0	**Solubility(ies):** Complete in water

Partition coefficient: n-octanol/water: Not available	**Auto-ignition temperature:** Not applicable
Decomposition temperature: Not available	**VOC:** 0 g/L

Section 10. Stability and Reactivity

Reactivity: Not reactive under normal conditions of use.
Chemical stability: Stable
Possibility of hazardous reactions: Reacts with metals to generate flammable hydrogen gas. Reacts with bases generating heat.
Conditions to avoid: Avoid excessive heat.
Incompatible materials: Avoid alkalis and metals. Reactive with many other chemicals. Never mix with other chemicals or cleaning agents.
Hazardous decomposition products: Thermal decomposition may yield toxic fluoride fumes. Reacts with metals to generate flammable hydrogen gas. Reacts with silica to produce silicon tetrafluoride, a hazardous, colorless gas.

Section 11. Toxicological Information

Acute effects of exposure: Hydrofluoric is hazardous, even at low concentration. Medical treatment is recommended for all incidents of contact or exposure.
Inhalation: Mist and vapors may cause respiratory irritation or burns with coughing and labored breathing. May cause fluoride poisoning with effects similar to those listed under "ingestion". Symptoms may be delayed. May be fatal if inhaled in large amounts
Skin Contact: Contact may cause severe irritation or burns to the skin. Burns may not be immediately painful or visible. May be absorbed through the skin resulting in potentially fatal hypocalcemia.
Eye Contact: Contact may cause severe irritation or burns with redness, pain and swelling. Permanent damage and blindness may occur.
Ingestion: Swallowing may cause gastrointestinal irritation or burns, nausea, vomiting and abdominal pain. May cause fluoride poisoning with symptoms including weakness, tremors, shallow breathing, spasms of the hands and feet, convulsions and coma. May cause central nervous system, kidney and cardiovascular (heart rhythm) effects. Respiratory paralysis may cause death. Swallowing large amounts may cause potentially fatal hypocalcemia and hypomagnesia.
Chronic Effects: Prolonged or repeated exposure may cause mottling of teeth, damage to bones and fluorosis with symptoms including brittle bones, weight loss, anemia, calcified ligaments and joint stiffness.
Sensitization: None of the components are sensitizing to animals or humans.
Germ Cell Mutagenicity: None of the components have been shown to cause germ cell mutagenicity.
Reproductive Toxicity: None of the components have been shown to cause reproductive or developmental toxicity.
Carcinogenicity: None of the components of this product are listed as carcinogens or suspected carcinogens by IARC, NTP, ACGIH or OSHA.
Acute toxicity values: Acute Toxicity Estimates (ATE) calculated: Oral 1351 mg/kg, Dermal 217 mg/kg, Inhalation 27,777 ppm as gas or 22.8 mg/L as vapor.
Hydrofluoric Acid: Oral rat LD50: 31 mg/kg (read across from sodium fluoride), LC50 inhalation 1276 ppm/1 hr. LD50 dermal no data available – point estimate for category 1 is 5 mg/kg.
Denatonium Benzoate: Oral rat LD50 584 mg/kg

Section 12. Ecological Information

This product may be harmful to aquatic organisms due to change in pH of water where released.

Ecotoxicity values:
Hydrofluoric acid: LC50 fish 41-340 mg/L/96 hr, NOEC fish 4 mg/L/21 d.; EC50 daphnia magna 97-270 mg/l/48 hr, NOEC 3.7 mg/L/21 d.; EbC50 algae 43-122 mg/L/96 hr.

Persistence and degradability: Biodegradation is not applicable to inorganic substances such as hydrofluoric acid.
Bioaccumulative potential: Hydrofluoric acid is not Bioaccumulative based on BCF of <55 in various organisms.
Mobility in soil: If the pH is > 6.5 soil can bind fluorides tightly. High calcium content will immobilize fluorides, which can be damaging to plants when present in acid soils.
Other adverse effects: None known.

Section 13. Disposal Considerations

Waste Disposal Recommendations: EPA Hazardous Waste Code: U134; Hydrofluoric acid (C,T), Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations Container remains hazardous when empty if not thoroughly rinsed. Continue to observe all precautions.

Section 14. Transport Information

	UN Number	Proper shipping name	Hazard Class	Packing Group	Environmental Hazard
DOT	UN1790	Hydrofluoric acid solution	8 (6.1)	II	None
IMDG	UN1790	Hydrofluoric acid solution	8 (6.1)	II	None

This product may be shipped as a Limited Quantity in inner packages of 1 L and package limit of 30 kg when shipped by ground.

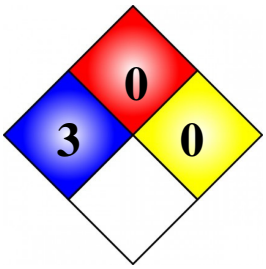
Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable – product is transported only in packaged form.
Special precautions: None known

Section 15. Regulatory Information

Safety, health, and environmental regulations specific for the product in question.
CERCLA Hazardous Substances (Section 103)/RQ: The RQ of this product based on the RQ of hydrogen fluoride is 4000 lbs. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.
Section 302 Extremely Hazardous Substances (TPQ): Hydrofluoric Acid (100 lbs)
SARA Hazard Category (311/312): Acute health
EPA SARA 313: This product contains the following chemicals regulated under SARA Title III, section 313:
Hydrofluoric Acid 7664-39-3 1-2.3%
California Proposition 65: This product the following chemicals known to the State of California to cause cancer or reproductive toxicity: None
EPA TSCA Inventory: All of the components of this product are listed on the TSCA inventory.

Section 16. Other Information

NFPA RATING: Health = 3 Fire = 0 Instability = 0
HMIS RATING: Health = 3 Fire = 0 Physical Hazard = 0



SDS Revision History: Changed medical emergency phone number.
Date of preparation: October 5, 2016
Date of Previous Edition: July 20, 2014

Disclaimer
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