

MSDS - Material Safety Data Sheet**Product Name: Steel Restoration Reagent**

MSDS No.: NIS

I. Basic Information:

Manufacturer: Sirchie Finger Print Laboratories

Address: 100 Hunter Place

City, ST Zip: Youngsville, NC 27596

Emergency Contact: ChemTrec

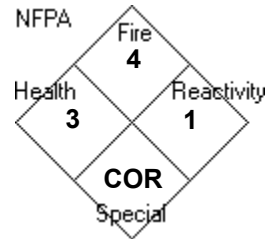
Emergency Telephone Number: 800-424-9300

Contact: Tech Support

Information Telephone Number: 919-554-2244

Last Update: 01/31/2011

Expiration Date:

Chemical State: Liquid Gas SolidChemical Type: Pure Mixture

3	Health
4	Flammability
1	Reactivity
H	Pers. Protection

II. Ingredients: Trade Secret (N/D = Not Disclosed)

CAS No.	Chemical Name	% Range	EHS		IARC		SARA 313		OSHA PEL	ACGIH TLV	Other Limits
			NTP		SUB Z						
64175	Ethanol	26							1,000 ppm	1,000 ppm	57 F
7647010	Hydrochloric acid	42							5 ppm	5 ppm	230 F
7732185	Water (Distilled)	32							None	None	212 F

III. Hazardous Identification:

Hazard Category:

 Acute Chronic Fire Pressure Reactive**Hazardous Identification Information:**

FLAMMABLE! Corrosive. May form explosive peroxides. May be fatal or cause blindness if ingested. Harmful if inhaled. May be absorbed through the skin. Causes respiratory and digestive tract burns. Causes skin and eye burns. May cause central nervous system depression. May cause liver and kidney damage. May cause adverse reproductive and fetal effects based on animal testing.

This material is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

IV. First Aid Measures:**Route(s) of Entry:**

Inhalation, ingestion, skin, eyes

Health Hazards (Acute and Chronic):

Acute: Severe eye burns, severe skin burns and ulceration, severe digestive tract burns, respiratory disturbances

Chronic: Dermatitis, skin defatting, erosion of the teeth, conjunctivitis, photosensitization

Signs and Symptoms:

Inhalation: Coughing, burns, breathing difficulty, headache, dizziness, drowsiness, unconsciousness, possible coma

Ingestion: Abdominal pain, vomiting, excitement, headache, dizziness, drowsiness, nausea, collapse, unconsciousness, coma, possible death due to respiratory failure

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Medical Conditions Generally Aggravated by Exposure:

Skin, eye, respiratory, kidney, liver, central nervous system diseases

Emergency and First Aid Procedures:

Inhalation: Remove to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen (To be administered by qualified medical personnel only!) Get medical attention.

Ingestion: DO NOT induce vomiting. If victim is conscious and alert, give 2-4 cups of milk or water. (Never give anything by mouth to an unconscious person!) Get medical attention immediately.

Skin: Flush skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing. Seek medical attention.

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Do not allow victim to rub or keep eyes closed. Get medical aid immediately.

Other Health Warnings:

V. Fire Fighting Measures:

Flash Point: 57 F

Lower Explosive Limit: 3.3

Upper Explosive Limit: 19

F.P. Method:

Fire Extinguishing Media: Water, dry chemical, chemical or alcohol-resistant foam

Special Fire Fighting Procedures:

Wear self-contained breathing apparatus and protective clothing. DO NOT use straight streams of water. Water may be ineffective, but may be used to cool fire-exposed containers. Cool containers with flooding quantities until well after fire is out.

Unusual Fire and Explosion:

Reacts with most metals to form flammable hydrogen gas. Containers may explode in heat of fire. May form explosive peroxides. Vapors from this product may travel some distance from original point to an ignition source and flash back. Vapors may be heavier than air. They may spread along the ground and collect in low or confined areas.

"Empty" containers may contain product residue and may be dangerous. Empty containers should be completely drained and bunged and then disposed of according to local, state, and federal regulations.

VI. Accidental Release Measures:

Steps to be Taken in Case Material is Released or Spilled:

Wear vapor respirator, safety goggles, and rubber gloves. Remove sources of ignition (i.e. open flames, sparks). Neutralize with dilute alkaline solutions of soda ash or lime. Soak up with inert absorbent material (dry sand, earth, or vermiculite recommended; do not use flammable substances such as sawdust). A vapor-suppressing foam may be used to reduce vapors. Dispose according to local, state, and federal regulations.

VII. Handling and Storage:

Precautions to be Taken:

Keep in tightly closed container. Keep cool and dry. Avoid direct sunlight. Avoid all ignition sources (heat, open flame, spark). Avoid incompatible materials. Electrically bond and ground all containers and equipment before transfer or use of material. Use only in well-ventilated areas. Avoid contact with skin, eyes, and clothing. Avoid ingestion and inhalation. Wash thoroughly after handling.

Other Precautions:

"Empty" containers may contain product residue and may be dangerous. Empty containers should be completely drained and bunged and then disposed of according to local, state, and federal regulations.

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VIII. Exposure Controls/Personal Protection:

Ventilation Requirements:

Use only in well-ventilated areas.

Personal Protective Equipment:

Safety goggles, gloves, vapor respirator, protective clothing

IX. Physical and Chemical Properties:

Boiling Point: 173.3 F

Melting Point: -90 C

Evaporation Rate (Butyl Acetate = 1): 2.0

Vapor Pressure (mm Hg.): 25

Specific Gravity (H₂O = 1):

Vapor Density (AIR = 1): 1.6

Solubility In Water: Soluble

Appearance and Odor: Green liquid; pungent odor

Other Information:

X. Stability and Reactivity:

Stability:

Stable under normal temperatures and pressures. May be sensitive to peroxide formation.

Incompatibility (Materials to Avoid):

Acids; azo, diazo, and hydrazines; isocyanates; metals; nitrides; peroxides; hydroperoxides; epoxides; oxidizing agents; reducing agents; water reactive substances; ignition sources (heat, open flame, spark); acetates; acetic anhydride; alcohols + hydrogen cyanide; 2-aminoethanol; hydroxides; carbides; phosphides; 1,1-difluoroethylene; ethylene diamine; ethyleneimine; fluorine; lithium silicide; magnesium boride; mercuric sulfate; oleum; potassium permanganate; b-propiolactone; propylene oxide; silver perchlorate + carbon tetrachloride; sodium; aldehydes; nitromethane; sodium hypobromite; potassium; acetylene

Decomposition/By Products:

Carbon monoxide and dioxide, peroxides, hydrogen chloride, hydrogen gas (flammable), chloride fumes

Hazardous Polymerization:

Has not been reported.

XI. Toxicological Information:

May be fatal or cause blindness if ingested. Harmful if inhaled. May be absorbed through the skin. Causes respiratory and digestive tract burns. Causes skin and eye burns. May cause central nervous system depression. May cause liver and kidney damage. May cause adverse reproductive and fetal effects based on animal testing.

XII. Ecological Information:

Prevent from entering sewers or waterways. May be toxic to some aquatic life.

XIII. Disposal Considerations:

Dispose according to local, state, and federal regulations.

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XIV. Transport Information:

Keep in tightly closed container. Keep cool and dry. Avoid direct sunlight. Avoid all ignition sources (heat, open flame, spark). Avoid incompatible materials. Electrically bond and ground all containers and equipment before transfer or use of material. Avoid contact with skin, eyes, and clothing. Avoid ingestion and inhalation. Wash thoroughly after handling.

IATA

Shipping name: Hydrochloric acid

Hazard class: 8

UN no.: 1789

Packing group: II

Corrosive!

XV. Regulatory Information:

All ingredients are listed on the TSCA inventory.

Hydrochloric acid and methanol are listed as hazardous air pollutants (HAPs) under the Clean Air Act.

Hydrochloric acid is listed as a Hazardous Substance under the Clean Water Act.

Hydrochloric acid is considered highly hazardous by OSHA.

This material is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

XVI. Other Information:

Using this product under normal, properly instructed procedures should not be hazardous.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, expressed or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes.