Material Safety Data Sheet

Revision Number: 001.0 **Issue date:** 03/23/2009

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: TURCO LIQUID SMUT-GO NC
Product type: Rust dissolver

IDH number: 597213

Region: United States

Company address:
Henkel Corporation
32100 Stephenson Highway
Madison Heights, MI 48071

Contact information:
Telephone: 248.583.9300
For Chemical Emergency: Call CHEMTREC at 800.424.9300
Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

HMIS:

Physical state: Liquid
Color: Dark brown
Odor: Acidic

HEALTH: *3
FLAMMABILITY: 0
PHYSICAL HAZARD: 0
Personal Protection: See MSDS Section 8

DANGER -- CORROSIVE!: CAUSES EYE, SKIN AND RESPIRATORY TRACT BURNS. POSSIBLE CANCER HAZARD.

Relevant routes of exposure: Skin, Inhalation, Eyes

Potential Health Effects

Inhalation: Mists, vapors or liquid may cause severe irritation or burns. Contains fluorides. Exposure to fluorides over years may cause fluorosis.

Skin contact: Corrosive to the skin. Contact with the skin or mucous membranes may cause severe irritation and burns. Liquid or vapor can cause fluoride-type irritation or burns which may not be immediately painful or visible.

Eye contact: This product is severely irritating to the eyes and may cause irreversible damage including burns and blindness.

Ingestion: This product may produce corrosive damage to the gastrointestinal tract if it is swallowed.

Existing conditions aggravated by exposure: Eye, skin and respiratory disorders.

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous components	CAS NUMBER	%
Ferric sulfate	10028-22-5	30 - 60
Nitric acid	7697-37-2	5 - 10
Sodium hydrogendifluoride	1333-83-1	1 - 5
Sulfuric acid	7664-93-9	0.1 - 1

4. FIRST AID MEASURES

Inhalation: If inhaled, immediately remove the affected person to fresh air. If not breathing, give artificial respiration. Get medical attention.

Skin contact:	Rinse with large amounts of running water. GET MEDICAL ATTENTION IMMEDIATELY! If iced 0.13% benzalkonium chloride (Zephiran) solution or 2.5% calcium gluconate gel are available, the rinsing may be limited to 5 minutes, with the soaks or gel applied as soon as the rinsing is stopped. If benzalkonium chloride or calcium gluconate gel is not available, rinsing must continue until medical treatment is provided.
Eye contact:	In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention.
Ingestion:	DO NOT induce vomiting unless directed to do so by medical personnel. Give one to two glasses of water or milk. Never give anything by mouth to a victim who is unconscious or is having convulsions.
Notes to physician:	Treatment of hypocalcemia associated with corrosive fluoride compounds exposure may be corrected by intravenous calcium gluconate or calcium chloride. Treatment of hypomagnesemia may be corrected by intravenous magnesium sulfate.

5. FIRE FIGHTING MEASURES

Flash point:	Not applicable
Autoignition temperature:	Not determined
Flammable/Explosive limits - lower:	Not determined
Flammable/Explosive limits - upper:	Not determined
Extinguishing media:	Use media appropriate for surrounding material.
Special firefighting procedures:	Fire fighters should wear full-face, self contained breathing apparatus and impervious protective clothing. Fire fighters should avoid inhaling any combustion products.
Unusual fire or explosion hazards:	This product is an aqueous mixture which will not burn.
Hazardous combustion products:	May liberate hydrogen fluoride.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions:	Prevent further leakage or spillage if safe to do so. Contain spill. Wear appropriate personal protective equipment. Do not allow product to enter sewer or waterways.
Clean-up methods:	Collect spilled material with an inert absorbent such as sand or vermiculite. Place in properly labeled closed container. Thoroughly wash the area with water after a spill or leak clean-up. Dispose of according to Federal, State and local governmental regulations.

7. HANDLING AND STORAGE

Handling:	Avoid contact with eyes, skin and clothing. Provide adequate ventilation. Avoid breathing vapors or mists of this product. Keep container closed. Wash thoroughly after handling. Do not reuse the empty container.
Storage:	Keep the container tightly closed and in a cool, well-ventilated place. Store between 40°F and 100°F. (5° and 38°C).

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous components	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Ferric sulfate	1 mg/m3 TWA (as Fe)	None	None	None
Nitric acid	2 ppm TWA 4 ppm STEL	2 ppm (5 mg/m3) TWA	None	None
Sodium hydrogendifluoride	2.5 mg/m3 TWA (as F)	2.5 mg/m3 TWA (as F) 2.5 mg/m3 TWA Dust.	None	None
Sulfuric acid	0.2 mg/m3 TWA Thoracic fraction	1 mg/m3 TWA	None	None

Engineering controls: Provide local and general exhaust ventilation to effectively remove and prevent buildup of any vapors or mists generated from the handling of this product.

Respiratory protection: If ventilation is not sufficient to effectively prevent buildup of aerosols, mists or vapors, appropriate NIOSH/MSHA respiratory protection must be provided.

Eye/face protection: Wear chemical goggles; face shield (if splashing is possible).

Skin protection: Chemical resistant, impermeable gloves. Use of impervious apron and boots are recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid
Color: Dark brown
Odor: Acidic
Odor threshold: Not available
pH: < 2
Vapor pressure: 20 mm hg
Boiling point/range: > 100 °C (> 212°F)
Melting point/ range: Not determined
Specific gravity: 1.30 - 1.34
Vapor density: Not determined
Flash point: Not applicable
Flammable/Explosive limits - lower: Not determined
Flammable/Explosive limits - upper: Not determined
Autoignition temperature: Not determined
Evaporation rate: Not determined
Solubility in water: Complete
Partition coefficient (n-octanol/water): Not determined
VOC content: Not available

10. STABILITY AND REACTIVITY

Stability: Stable at normal conditions.

Hazardous reactions: Will not occur.

Hazardous decomposition products: May liberate hydrogen fluoride.

Incompatible materials: Avoid contact with iron, aluminum, zinc, copper and strong bases.

Conditions to avoid: Heat. Contact with most metals produces highly flammable hydrogen gas.

11. TOXICOLOGICAL INFORMATION

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Ferric sulfate	No	No	No
Nitric acid	No	No	No
Sodium hydrogendifluoride	No	No	No
Sulfuric acid	Known carcinogen.	Group 1	No

Hazardous components	Health Effects/Target Organs
Ferric sulfate	Eyes, Gastrointestinal, Irritant, Liver, Lung, Metabolic, Vascular
Nitric acid	Irritant, Corrosive, Lung, Teeth
Sodium hydrogendifluoride	Blood, Cardiac, Central nervous system, Corrosive, Gastrointestinal, Irritant, Kidney, Metabolic, Muscle, Mutagen, Teeth, Less weight gain and food intake.
Sulfuric acid	Carcinogen, Corrosive, Irritant, Lung

12. ECOLOGICAL INFORMATION

Ecological information: No data available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number: This product, if discarded directly, would be a characteristic RCRA corrosive waste (D002).

14. TRANSPORT INFORMATION

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: Corrosive liquid, acidic, inorganic, n.o.s. (FERRIC SULPHATE, Nitric acid)
Hazard class or division: 8
Identification number: UN 3264
Packing group: II
DOT Reportable quantity: Ferric sulfate, Sodium bifluoride

International Air Transportation (ICAO/IATA)

Proper shipping name: Corrosive liquid, acidic, inorganic, n.o.s. (FERRIC SULPHATE, Nitric acid)
Hazard class or division: 8
Identification number: UN 3264
Packing group: II

Water Transportation (IMO/IMDG)

Proper shipping name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (FERRIC SULPHATE, Nitric acid)
Hazard class or division: 8
Identification number: UN 3264
Packing group: II

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
TSCA 12(b) Export Notification: None above reporting de minimus

CERCLA/SARA Section 302 EHS: Nitric acid (CAS# 7697-37-2).
CERCLA/SARA Section 311/312: Immediate Health, Delayed Health

CERCLA/SARA 313:	This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Nitric acid (CAS# 7697-37-2).
CERCLA Reportable quantity:	Ferric sulfate (CAS# 10028-22-5) 1,000 lbs. (454 kg) Sodium hydrogendifluoride (CAS# 1333-83-1) 100 lbs. (45.4 kg) Nitric acid (CAS# 7697-37-2) 1,000 lbs. (454 kg)
California Proposition 65:	This product contains a chemical known in the State of California to cause cancer.

Canada Regulatory Information

CEPA DSL/NDSL Status:	All components are listed on or are exempt from listing on the Canadian Domestic Substances List.
WHMIS hazard class:	D.2.A, D.2.B, E

16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: New Material Safety Data Sheet format.

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