

MATERIAL SAFETY DATA SHEET

TITAN INDUSTRIAL CHEMICAL LLC GROVER, MO 63040 EMERGENCY# 877-273-9030

EFFECTIVE DATE: 3-2-08

PRODUCT CODE: 427

PRODUCT NAME: "EQUIPMENT CLEANER"

MSD: 427-1

HAZARDOUS INGREDIENTS (TYPICAL VALUES -- NOT SPECIFICATION)

HYDROGEN CHLORIDE (CAS NO. 007647-01-0) UN 1789 6.3%

Section 1

Boiling Point: 200 deg. F.

Vap. Press. (mmHg @ 25°C): UNK.

Vap. Density (Air = 1): >1

Appearance and Odor: CLEAR, LIGHT PURPLE LIQUID WITH WATER-LIKE VISCOSITY. MILD PUNGENT ODOR.

Section 2

Flash Point: NONE

Method Used:

Extinguishing Media: SELECT MEDIA SUITABLE FOR SURROUNDING FIRE. USE WATER SPRAY TO COOL FIRE EXPOSED CONTAINERS TO PREVENT RUPTURE.

Special Fire Fighting Equipment and Hazards: RELEASES HYDROGEN CHLORIDE GAS WHEN HEATED.

Section 3

Stability: STABLE

Incompatibility: ALKALIS, AMINES, STRONG OXIDANTS.

Hazardous Decomposition Products: HCL GAS WHEN HEATED.

Hazardous Polymerization: WILL NOT OCCUR.

Section 4

Action to be taken for Spills (Use Appropriate Safety Equipment): KEEP PEOPLE AWAY. IF NECESSARY TO ENTER SPILL AREA AND VENTILATION IS INADEQUATE WEAR SELF CONTAINED BREATHING APPARATUS. WEAR PROTECTIVE CLOTHING AND BOOTS. DIKE SPILL WITH SAND OR EARTH AND PUMP INTO SUITABLE STORAGE CONTAINER. FLUSH SPILL AREA WITH WATER AND NEUTRALIZE RESIDUE WITH LIME OR SODA ASH. KEEP OUT OF WATERSHEDS AND WATERWAYS.

Disposal Method: FOR SMALL AMOUNTS, DILUTE WITH WATER AND NEUTRALIZE WITH LIME OR SODA ASH AND FLUSH WITH WATER TO SEWER. CONSULT FEDERAL, STATE AND LOCAL REGULATIONS. HAZARDOUS WASTE NO. D002 (CORROSIVE). REPORTABLE QUANTITY OF HYDROCHLORIC ACID: 5000 POUNDS.

Section 5

Health Hazard Data -- Effect of Overexposure

Ingestion: CAUSES SEVERE BURNS OF THE MUCOUS MEMBRANES OF THE MOUTH, ESOPHAGUS AND STOMACH. MORE SEVERE REACTIONS MAY OCCUR DEPENDING ON AMOUNTS INGESTED. ORAL LD/50 (RAT): 700mg/kg.

Eye Contact: CAUSES SEVERE IRRITATION OF THE EYES AND SURROUNDING TISSUE. MAY CAUSE PROLONGED OR PERMANENT VISUAL IMPAIRMENT.

Skin Contact: MAY CAUSE SEVERE IRRITATION OR BURNS UNLESS WASHED OFF IMMEDIATELY. DERMAL LD/50: (RABBIT) >5010 mg/kg.

Skin Absorption: WILL NOT OCCUR.

Inhalation: EXCESSIVE VAPOR INHALATION MAY CAUSE SEVERE IRRITATION OF THE UPPER RESPIRATORY TRACT RESULTING IN COUGHING, BURNING OF THE THROAT, AND A CHOKING SENSATION. IF INHALED DEEPLY, EDEMA OF THE LUNGS MAY OCCUR. LC/50 (RAT): 3124 PPM/HOUR.

Section 6

First Aid

Eyes: IMMEDIATELY FLUSH WITH WATER FOR AT LEAST 15 MINUTES WHILE HOLDING UPPER AND LOWER LIDS OPEN. DO NOT USE CHEMICAL ANTIDOTES. SPEED IS ESSENTIAL. GET MEDICAL ATTENTION.

Skin: IMMEDIATELY FLUSH WITH WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES. DO NOT USE CHEMICAL ANTIDOTES. WASH CLOTHING BEFORE RE-USE. GET MEDICAL ATTENTION. SPEED IS ESSENTIAL.

Inhalation: MOVE PERSON TO FRESH AIR. IF BREATHING IS DIFFICULT ADMINISTER OXYGEN. IF BREATHING HAS STOPPED, ADMINISTER ARTIFICIAL RESPIRATION. GET MEDICAL ATTENTION.

Ingestion: DRINK LARGE AMOUNT OF WATER OR MILK. GIVE A NON-GASSING NEUTRALIZER SUCH AS MILK OF MAGNESIA. DO NOT GIVE CARBONATES, BICARBONATES OR CHALK. DO NOT INDUCE VOMITING. IF VOMITING OCCURS SPONTANEOUSLY, KEEP HEAD BELOW HIPS TO PREVENT ASPIRATION OF MATERIAL INTO LUNGS. CALL A PHYSICIAN IMMEDIATELY.

NOTE TO PHYSICIAN:

Eyes: Skin: Respiratory: MAY AGGRAVATE ASTHMA, BRONCHITIS, EMPHYSEMA, ETC.

Oral: CORROSIVE TO THE INTESTINAL TRACT. GASTRIC LAVAGE SHOULD BE USED WITH EXTREME CAUTION.

Systemic:

Section 7

Special Handling Information

Ventilation: PROVIDE GOOD LOCAL OR MECHANICAL VENTILATION.

Respiratory Protection: NONE REQUIRED FOR INTENDED USE OF PRODUCT. IF EXCESSIVE OR PROLONGED EXPOSURE IS EXPECTED USE NIOSH-APPROVED RESPIRATOR OR OTHER APPROVED DEVICE.

Protective Clothing: MINIMIZE SKIN EXPOSURE BY WEARING PROTECTIVE CLOTHING AND SHOES SUITABLE FOR EXPECTED EXPOSURE.

Eye Protection: CHEMICAL SPLASH GOGGLES AND FACE SHIELD SHOULD BE WORN WHEN HANDLING CONCENTRATE. DO NOT WEAR CONTACT LENSES.

Section 8

Special Precautions and Additional Information

Precautions to be Taken in Handling and Storage: STORE CONTAINERS IN COOL, OPEN OR WELL-VENTILATED AREA. KEEP OUT OF SUN. KEEP AWAY FROM OXIDIZING AGENTS AND STRONG ALKALIS.

Additional Information: EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUE. TREAT EMPTY CONTAINERS ACCORDING TO ALL PRECAUTIONS CONTAINED IN THIS DATA SHEET. HMIS 2-0-0-C

Section 9

Proper Shipping Name: LIQUID CLEANING COMPOUND (CONTAINING HYDROCHLORIC (MURIATIC) ACID

Hazard Class: CORROSIVE 8

Label Requirements: CORROSIVE

Emergency Response Guide No.: 60

ID No. NA1760

Section 10

RCRA Waste No.: D002, (HYDROCHLORIC ACID)

Reportable Quantity (CERCLA): 5000# HYDROCHLORIC ACID

NFPA: 2,0,0

Threshold Planning Quantity: N/A

SARA TITLE III, SEC. 313: 1% HYDROCHLORIC ACID

CONSULT TITAN INDUSTRIAL CHEMICALS, LLC. FOR FURTHER INFORMATION.

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