

REMEL INC -- FERRIC CHLORIDE 10% (PHENYLALANINE DEAMINASE REAGENT) --
6550-01-359-5094

===== Product Identification =====

Product ID:FERRIC CHLORIDE 10% (PHENYLALANINE DEAMINASE REAGENT)

MSDS Date:07/12/1995

FSC:6550

NIIN:01-359-5094

Status Code:A

MSDS Number: CLLGN

=== Responsible Party ===

Company Name:REMEL INC

Address:12076 SANTA FE DRIVE

Box:14428

City:SHAWNEE MISSION

State:KS

ZIP:66215-3519

Country:US

Info Phone Num:913-888-0939/800-255-6730

Emergency Phone Num:800-447-3641 800-447-3635

Resp. Party Other MSDS Num.:PRODUCT NO. 21-218

CAGE:7V410

=== Contractor Identification ===

Company Name:REGIONAL MEDIA LABORATORIES

Address:12076 SANTA FE DRIVE

Box:City:LENEXA

State:KS

ZIP:66215-3594

Country:US

Phone:800-447-3641 (TECH) 800-447-363

CAGE:UO481

Company Name:REMEL

Address:12076 SANTA FE DR

Box:14428

City:LENEXA

State:KS

ZIP:66215

Country:US

Phone:800-447-3641

CAGE:JO731

Company Name

:REMEL INC
Address:12076 SANTA FE DRIVE
Box:14428
City:SHAWNEE MISSION
State:KS
ZIP:66215-3519
Country:US
Phone:913-888-0939/800-255-6730
CAGE:7V410

=====
Composition/Information on Ingredients
=====

Ingred Name:FERRIC CHLORIDE
CAS:10025-77-1
RTECS #:NO5425000
Fraction by Wt: 12.0% %WT

Ingred Name:HYDROCHLORIC ACID
CAS:7647-01-0
RTECS #:MW4025000
Fraction by Wt: 25.0% ML
OSHA PEL:C7 MG/M3;C5 PPM
ACGIH STEL:C7.5 MG/M3;C5 PPM
EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS

Ingred N
ame:DISTILLED WATER
CAS:7732-18-5
RTECS #:ZC0110000
Fraction by Wt: 975.0%ML

=====
Hazards Identification
=====

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Health Hazards Acute and Chronic:DANGER. CORROSIVE, MAY CAUSE BURNS OR
IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. AVOID BREATHING
VAPOR AND EYE/SKIN CONTACT. TRAGET ORGAN EFFECTS: HYDROCHLORIC
ACID-RESPIRATORY FUNCTIONS, SKIN DE RMATITIS.TARGET ORGANS EFFECTS:
HYDROCHLORIC

ACID-RESPIRATORY FUNCTIONS, SKIN DERMATITS.

Explanation of Carcinogenicity:HYDROCHLORIC ACID-IARC; NOT CLASSIFIABLE AS HUMAN CARCINOGEN (GROUP 3). HUMAN AND ANIMAL EVIDENCE IS INADEQUATE.

Effects of Overexposure:DANGER. CORROSIVE, MAY CAUSE BURNS OR IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. AVOID BREATHING VAPOR AND EYE/SKIN CONTACT.TARGET ORGANS EFFECTS: HYDROCHLORIC ACID-RESPIRATORY FUNCTIONS, SKIN DE RMATITS.

Medical Cond Aggravated by Exposure:PERSONS WITH PRE-EXISTING EYE, SKIN

OR RESPIRATORY DISORDERS MAY BE MORE SUSCEPTIBLE TO THE EFFECTS OF THIS SUBSTANCE.

=====
===== First Aid Measures =====

First Aid:INHALATION: REMOVE VICTIM TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. CALL PHYSICIAN. EYE/SKIN CONTACT: FLUSH IMMEDIATELY WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. REMOVE CONTAMINATED CLOTHING. CALL PHYSICIAN. INGESTION: GIVE WATER. CALL PHYSICIAN IMMEDIATELY.

=====
===== Fire Fighting Measures =====

Extinguishing Media:USE EXTINGUISHING MEDIA APPROPRIATE TO SURROUNDING FIRE CONDITIONS.

Fire Fighting Procedures:WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE EQUIPMENT.

Unusual Fire/Explosion Hazard:GIVES OFF TOXIC FUMES OF HYDROGEN CHLORIDE.

=====
===== Accidental Release Measures =====

Spill Release Procedures:WEAR PROTECTIVE EQUIPMENT AS SPECIFIED . AVOID BREATHING VAPORS OR SKIN CONTACT.APPARATUS CONTAIN SPILL, NEUTRALIZE WITH SODA OR LIME, AND ABSORB WITH INERT MATERIAL. SCOOP UP AND PLACE IN APPROVED DO T CONTAINER. FLUSH AREA WITH EXCESS WATER.

Neutralizing Agent:SODA OR LIME

=====
===== Handling and Storage =====

Handling and Storage Precautions:STORE AT 2-8C. KEEP CONTAINER TIGHTLY CLOSED.

Other Precautions:DANGER CORROSIVE, MAY CAUSE BURNS OR IRRITATION TO SKIN,EYES OR RESPIRATORY TRACT.

=====
===== Exposure

Controls/Personal Protection =====

Respiratory Protection:SELF-CONTAINED BREATHING APPARATUS OR MASK WITH
ACTIVATED CARBON CARTRIDGES WHICH MEET NIOSH/MSHA APPROVAL.

Ventilation:MECHANICAL EXHAUST.

Protective Gloves:CHEMICAL RESISTANT GLOVES.

Eye Protection:CHEMICAL SAFETY GOGGLES.

Other Protective Equipment:FUME HOOD.

Supplemental Safety and Health

===== Physical/Chemical Properties =====

HCC:C1

Boiling Pt.=319.C, 606.2F

B.P. Text:230F(HCL)

Melt/Freez

e Pt.=282.C, 539.6F

M.P/F.P Text:-27C (HCL)

Vapor Pres:1MM@194C. 4 (HCL)

Vapor Density:2.804@110C

Spec Gravity:N/P(FCL), 1.19 (HCL)

Evaporation Rate & Reference:DATA N/P. / 1(HCL)

Solubility in Water:YES. / COMPLETE

Appearance and Odor:FERRIC CHLORIDE:BLACK/BROWN SOLID. HCL: CLEAR
PUNGENT ODOR

Percent Volatiles by Volume:100 WT(HCL)

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

COMMON METALS, CYANIDES, ALKALIS, AND STRONG
OXIDIZERS. FORMS EXPLOSIVE

MIXTURES WITH SODIUM AND POTASSIUM.

Stability Condition to Avoid:METALS, CYANIDES AND ALKALIS.

Hazardous Decomposition Products:HYDROGEN CHLORIDE GAS AND HYDROGEN
FORMED UPON CORROSION WITH METALS; VERY FLAMMABLE.

Conditions to Avoid Polymerization:WILL NOT OCCUR.

===== Disposal Considerations =====

Waste Disposal Methods:ENSURE COMPLIANCE WITH ALL LOCAL, STATE, AND
FEDERAL REGULATIONS OR CONTACT AN APPROVED AND LICENSED

DISPOSAL
AGENCY.

===== Other Information =====

Disclaimer (provided with this information by the compiling agencies):
This information is formulated for use by elements of the Department of Defense. The United States of America in no manner whatsoever, expressly or implied, warrants this information to be accurate and disclaims all liability for its use. Any person utilizing this document should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation.