

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  
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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

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===== 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.

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===== 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.

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===== 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.

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===== 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

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===== 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.

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===== 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 =====

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