



SAFETY DATA SHEET

Revision Date 13-February-2015

Version 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name F-2357-ES Slag Remover

UN/ID No UN1789
Product Code F-2357-ES

Recommended Use of the Chemical and Restrictions on Use

Recommended Use Slag Remover

Details of the Supplier of the Safety Data Sheet

Supplier Address

Delta Foremost Chemical Corporation
3915 Air Park St.
Memphis, Tennessee 38118

Emergency Telephone Number

Company Phone Number (901) 363-4340
Emergency Telephone INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Classification

Specific Target Organ Toxicity – Single Exposure	Category 3
Skin Corrosion/Irritation	Category 1 Sub-category B
Serious Eye Damage/Eye Irritation	Category 1
Corrosive to Metals	Category 1

Signal Word

DANGER

Hazard Statements

May cause respiratory irritation
Causes severe skin burns and eye damage
May be corrosive to metals



Appearance White Liquid

Physical State Liquid

Odor Pungent, Acidic

Precautionary Statements - Prevention

Use only outdoors or in a well-ventilated area
 Do not breathe dust/fume/gas/mist/vapors/spray
 Wash face, hands and any exposed skin thoroughly after handling
 Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 Immediately call a POISON CENTER or doctor/physician
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 Wash contaminated clothing before reuse
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 Immediately call a POISON CENTER or doctor/physician
 IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other Hazards

Harmful to aquatic life with long lasting effects
 Harmful to aquatic life

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Hydrochloric Acid	7647-01-0	Proprietary

Product contains a proprietary mixture of ingredients.

4. FIRST AID MEASURES

First Aid Measures

General Advice	Provide this SDS to medical personnel for treatment.
Eye Contact	Flush with plenty of water for at least 15 minutes. See physician immediately.
Skin Contact	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If irritation persists, seek medical attention.
Inhalation	Remove to fresh air. Seek immediate medical attention/advice.
Ingestion	Do NOT induce vomiting. Drink promptly a large quantity of milk, egg whites, gelatin solution; or if they are not available, drink large quantities of water. Avoid alcohol.

Most Important Symptoms and Effects, both Acute and Delayed

Symptoms	Burning and/or irritation to eyes and skin. Irritation and corrosive burns to mouth, throat, and stomach. May cause irritation to the mucous membranes and upper respiratory tract.
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Indication of any Immediate Medical Attention and Special Treatment Needed

Note to Physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Foam, carbon dioxide or dry chemical extinguisher, or water.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Product is not flammable.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions Wear protective clothing as described in Section 8 of this safety data sheet.

Environmental Precautions See Section 12 for additional ecological information.

Methods and Material for Containment and Cleaning Up

Methods for Containment Prevent further leakage or spillage if safe to do so. Contain and absorb with suitable absorbent for disposal.

Methods for Cleaning Up Soak up with inert absorbent material. Reclaim spilled material into approved container for proper disposal. Remaining material may be neutralized. For waste disposal, see section 13 of the SDS. Neutralize with a lime or soda ash and flush area with large amounts of water.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Advice on Safe Handling Use personal protection recommended in Section 8. Wash face, hands, and any exposed skin thoroughly after handling. Do not breathe vapors or spray mist. Use only in well-ventilated areas. Do not eat, drink or smoke when using this product.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions Keep container tightly closed and store in a cool, dry and well-ventilated place. Store locked up.

Incompatible Materials Bases, Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Hydrochloric Acid 7647-01-0	STEL: 2 ppm	TWA: 5 ppm STEL: 7 mg/m ³	TWA: 5 ppm STEL: 7 mg/m ³

Appropriate Engineering Controls

Engineering Controls Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the SDS.

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection Goggles or face shield.

Skin and Body Protection Wear protective Neoprene™ gloves, Rubber gloves.

Respiratory Protection Ensure adequate ventilation, especially in confined areas.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on Basic Physical and Chemical Properties**

Physical State	Liquid	Odor	Pungent, Acidic
Appearance	White Liquid	Odor Threshold	Not determined
Color	White		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	1.0 – 2.0	
Melting Point/Freezing Point	Not available	
Boiling Point/Boiling Range	100 °C / 212 °F	
Flash Point	Not available	
Evaporation Rate	Not available	
Flammability (Solid, Gas)	Not determined	
Upper Flammability Limits	Not available	
Lower Flammability Limit	Not available	
Vapor Pressure	Same as water	
Vapor Density	Same as water	
Specific Gravity	1.150	(1=Water)
Water Solubility	Soluble in water	
Solubility in Other Solvents	Not determined	
Partition Coefficient	Not determined	
Autoignition Temperature	Not determined	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	

10. STABILITY AND REACTIVITY**Reactivity**

Not reactive under normal conditions. Will react with incompatible materials.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid

Keep out of reach of children.

Incompatible Materials

Bases, Strong oxidizing agents.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure**Product Information**

Eye Contact	Causes severe eye damage.
Skin Contact	Causes severe skin burns.
Inhalation	May cause irritation to the mucous membranes and upper respiratory tract.
Ingestion	Can cause irritation and corrosive burns to mouth, throat, and stomach.

Information on Physical, Chemical and Toxicological Effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure

Carcinogenicity This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Numerical Measures of Toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Hydrochloric Acid 7647-01-0	-	282: 96 h Gambusia affinis mg/L LC50	-	-

Persistence and Degradability

Not determined

Bioaccumulation

Not determined

Mobility**Other Adverse Effects**

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated Packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations.

Chemical Name	California Hazardous Waste Status
Hydrochloric Acid 7647-01-0	Corrosive Toxic Reactive

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

UN/ID No	UN1789
Proper Shipping Name	Corrosive liquid, acidic, inorganic, n.o.s. (Hydrochloric acid solution)
Hazard Class	8
Packing Group	II

IATA

UN/ID No	UN1789
Proper Shipping Name	Corrosive liquid, acidic, inorganic, n.o.s. (Hydrochloric acid solution)
Hazard Class	8
Packing Group	II

IMDG

UN/ID No	UN1789
Proper Shipping Name	Corrosive liquid, acidic, inorganic, n.o.s. (Hydrochloric acid solution)
Hazard Class	8
Packing Group	II

15. REGULATORY INFORMATION

International Inventories

Not Determined

Legend:

- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*
- ENCS - Japan Existing and New Chemical Substances*
- IECSC - China Inventory of Existing Chemical Substances*
- KECL - Korean Existing and Evaluated Chemical Substances*
- PICCS - Philippines Inventory of Chemicals and Chemical Substances*

US Federal Regulations

CERCLA

SARA 313

The following components are subject to reporting levels established by SARA Title III, Section 313:
Hydrochloric Acid, CAS No. 7647-01-0

CWA (Clean Water Act)

US State Regulations

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Hydrochloric Acid 7647-01-0	X	X	X

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards	Flammability	Instability	Special Hazards
	3	0	0	Not determined
<u>HMIS</u>	Health Hazards	Flammability	Physical Hazards	Personal Protection
	3	0	0	Not determined

Revision Date 13-February-2015
Revision Note New format

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet