

MATERIAL SAFETY DATA SHEET

Fe-Green

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identification

Product Name: Fe-Green
Synonyms: Surface Washing Agent
Chemical Family: Surfactants
CAS Number: Blend

Company Identification

Reef Services, LLC
7906 W. Hwy 80
Midland, TX 79706 USA
1-432-560-5600 (For product information)
1-800-535-5053 (For emergencies)



2. COMPOSITION/INFORMATION ON INGREDIENTS

100.0% Fe-Green

CONTAINING:

HAZARDOUS AND/OR REGULATED COMPONENTS

Chemical Name	Amount	CAS Number
GLACIAL ACETIC ACID	Confidential	64-19-7
ISOPROPANOL	Confidential	67-63-0

NON-HAZARDOUS COMPONENTS

Chemical Name	Amount	CAS Number
WATER	Confidential	7732-18-5

(See Section 8 for exposure guidelines)

(See Section 15 for regulatory information)

HAZARDS DISCLOSURE

This product contains hazardous materials as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200.

As defined under Sara 311 and 312, this product contains materials that are acute, chronic hazards.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

Harmful if swallowed. Causes skin and eye irritation.

HMIS Rating:

Health - 1

Flammability - 0
Reactivity - 0
Personal Protection Index - B

POTENTIAL HEALTH EFFECTS

EYE:

Causes eye irritation.

SKIN:

Causes skin irritation.

INHALATION:

High vapor concentrations are irritating to the eyes, nose, throat, and lungs.

INGESTION:

May be harmful if swallowed.

SIGNS AND SYMPTOMS OF EXPOSURE:

Eyes: tearing and burning sensation. Extremely high levels cause stupor, headache, nausea, dizziness.

CHRONIC EFFECTS:

Repeated or prolonged contact causes drying, brittleness, cracking and irritation.

REPRODUCTIVE HAZARDS:

None Known.

CARCINOGENICITY INFORMATION:

No known cancer hazards. Not listed by NTP, IARC, or OSHA as a carcinogen.

TARGET ORGAN:

Eyes, Skin, and Respiratory Tract.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

There is no evidence that this product aggravates an existing medical condition.

MISCELLANEOUS:

Poses little or no immediate hazard.

4. FIRST AID MEASURES

EYE CONTACT FIRST AID:

Flush eye with water for 15 minutes. Get medical attention if irritation develops or persists.

SKIN CONTACT FIRST AID:

Immediately wash skin with plenty of soap and water while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.

INHALATION FIRST AID:

Get medical attention if cough or other symptoms develop. If breathing is difficult, give oxygen.

INGESTION FIRST AID:

If swallowed, immediately give 2 glasses of water. Induce vomiting. Contact a physician.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

COC Flash Point: N/A
Autoignition Temperature: N/A

FLAMMABLE LIMITS IN AIR

LEL: N/A
UEL: N/A

FLAMMABLE PROPERTIES:

Not Combustible.

EXTINGUISHING MEDIA:

Water, carbon dioxide, foam or dry powder.

FIRE & EXPLOSION HAZARDS:

Material will not burn.

FIRE FIGHTING INSTRUCTIONS:

Containers can build up pressure if exposed to heat (fire).

6. ACCIDENTAL RELEASE MEASURES

SAFEGUARDS (PERSONNEL):

Wear appropriate personal protective equipment.

INITIAL CONTAINMENT:

Wash area to prevent slipping.

LARGE SPILLS PROCEDURE:

Wash area with soap and water.

SMALL SPILLS PROCEDURE:

Absorb spills with inert material.

7. HANDLING AND STORAGE

HANDLING (PERSONNEL):

Wash hands thoroughly after handling. Do not get in eyes, on skin or clothing.

HANDLING (PHYSICAL ASPECTS):

Avoid contact with strong oxidizing agents.

STORAGE PRECAUTIONS:

Store away from oxidizers or materials bearing a yellow 'DOT' label.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS:

No special ventilation requirements.

EYE / FACE PROTECTION REQUIREMENTS:

Wear safety glasses.

SKIN PROTECTION REQUIREMENTS:

When prolonged or frequently repeated contact could occur, use protective clothing impervious to this material.

RESPIRATORY PROTECTION REQUIREMENTS:

Under normal use conditions, with adequate ventilation, no special handling equipment is required.

EXPOSURE GUIDELINES:

GLACIAL ACETIC ACID

Recommended Exposure Limit: 10 ppm
Odor Threshold: 0.037-0.15 ppm
Immediate Lethal Dosage: 1000 ppm
OSHA PEL: 10 ppm, 25 mg/m³
OSHA TWA: 10 ppm, 25 mg/m³
ACGIH TWA: 10 ppm
OSHA STEL: 15 ppm

ISOPROPANOL

OSHA PEL: 400 ppm, 980 mg/m³
OSHA TWA: 400 ppm, 980 mg/m³
ACGIH TWA: 400 ppm
OSHA STEL: 500 ppm

9. PHYSICAL AND CHEMICAL PROPERTIES

FORM:	Liquid
COLOR:	Clear
ODOR:	Lemon
BOILING POINT:	ND F
VAPOR PRESSURE:	ND mm Hg
VAPOR DENSITY:	ND (Air = 1)
SOLUBILITY IN WATER:	Complete
SPECIFIC GRAVITY:	1.0050 (Water = 1)
BULK DENSITY:	8.382 pounds per gallon
MELTING/FREEZING POINT:	ND F
PH:	ND
% VOLATILES:	ND %

10. STABILITY AND REACTIVITY

STABILITY:

Stable.

POLYMERIZATION:

Hazardous polymerization will not occur.

INCOMPATIBILITY WITH OTHER MATERIALS:

Avoid contact with strong oxidizing agents.

DECOMPOSITION:

Product may decompose at temperatures above 270°C and release carbon dioxide.

CONDITIONS TO AVOID:

None Known.

11. TOXICOLOGICAL INFORMATION

GLACIAL ACETIC ACID

Test Code: LD50 Oral
Species: Rat

Results: 3310-3530 mg/kg

Test Code: LD50 Oral

Species: Mouse

Results: 4960 mg/kg

ISOPROPANOL

Test Code: Dermal LD50

Species: Rabbit

Results: 12.87 g/kg

Test Code: LD50 Dermal

Species: Rabbit

Results: 1060 mg/kg

Test Code: Inhalation - LC50

Species: Rat

Results: 19000 ppm 8 hours

Test Code: Oral LD50

Species: Rat

Results: 4.7 g/kg

12. ECOLOGICAL INFORMATION

GLACIAL ACETIC ACID

Test Code: Biological Oxygen Demand

Species: COD

Results: 1.03 G oxygen/G

Test Code: Acute Aquatic Toxicity

Species: Fathead Minnow

Results: >100 mg/L

ISOPROPANOL

Test Code: Biological Oxygen Demand

Species: COD

Results: 2.23 g oxygen/g

Test Code: Acute Aquatic Toxicity

Species: Daphnid

Results: >1,000 microliter/L 96 hr LC-50

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL:

Treat or dispose of waste material in accordance with all local, state/provincial, and national requirements.

14. TRANSPORTATION INFORMATION

PRODUCT LABEL:	Fe-Green
D.O.T. SHIPPING NAME:	Chemicals,nos,PGIII
TECHNICAL SHIPPING NAME:	N/A
D.O.T. HAZARD CLASS:	Non-Hazardous
UN NUMBER:	N/A

PRODUCT RQ (LBS): 555,556 pounds based on glacial acetic acid
D.O.T. LABEL: N/A
D.O.T. PLACARD: N/A
BULK CLASS: N/A
PACKAGE CLASS: N/A

15. REGULATORY INFORMATION

Canadian Disclosure List

ISOPROPANOL (67-63-0)

Title V

ISOPROPANOL (67-63-0)

MISCELLANEOUS INFORMATION:

This material or all of its components are listed on the Inventory of Existing Chemical Substances under the Toxic Substance Control Act (TSCA).

16. OTHER INFORMATION

REASON FOR ISSUE: Revision
PREPARED BY: Tom L. Roland
APPROVED BY: Tom L. Roland
TITLE: Director of Safety & Environmental
APPROVAL DATE: May 6, 2009
SUPERCEDES DATE: January 27, 2007
RTN NUMBER: 0000020 (Official Copy)

REVISION STATEMENT:

Formulation of product has changed. All sections have been updated to reflect this change.

ADDITIONAL INFORMATION:

The data in this Material Safety Data Sheet relates only to the specific material designated herein. It does not relate to use in combination with any other material or in any process.

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Reef Services, LLC. The data on this sheet are related only to the specific material designated herein. Reef Services, LLC assumes no legal responsibility for use or reliance upon these data.

END OF MSDS
