

EDDHA-FE-6**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY / UNDERTAKING**

Product Label Name: Ethylenediamine-N',N'-bis(2-hydroxyphenylacetic acid), Ferric sodium complex
EDDHA-FeNa
Chemical Formula: $C_{18}H_{16}O_6N_2NaFe$
Synonyms: Fe EDDHA
CAS #: 16455-61-1

Address: Agrowchem, Inc.
620 Cataraqui Woods Drive, Unit #2
Kingston, Ontario, K7P 1T8, Canada
Tel: 613-384-4957 Fax: 613-384-0662

Website: www.agrowchem.com
Email: info@agrowchem.com

2. COMPOSITION/INFORMATION ON INGREDIENTS

| CAS # | Common Name | % by Weight |
|------------|---|-------------|
| 16455-61-1 | Ethylenediamine-N', N'-bis(2-hydroxyphenylacetic acid), Ferric sodium complex EDDHA-FeNa | 98.00 |
| 7732-18-5 | Water | 2.00 |

3. HAZARDS IDENTIFICATIONRoute(s) of Entry:

Inhalation, Ingestion and Dermal.

Not considered a hazardous product. Irritating to skin and eye and respiratory tract. White Odorless Powder
Firefighters should wear full-face, self contained breathing apparatus and impervious protective clothing.
Product may feed combustion. Store away from heat.

Potential Health Effects: None know.

Signs & Symptoms Of Exposure: Irritation of skin and eyes, respiratory tract.

4. FIRST AID MEASURES

Ingestion: The mouth should be thoroughly washed out with water, if person is conscious, give large amounts of water. Do not induce vomiting. Get medical attention. Never give anything to eat or drink to someone who is unconscious, having convulsions, or unable to swallow.

Eyes: Flush eyes with large quantities of running water for a minimum of 15 minutes. If victim is wearing contact lenses, remove them. Hold eyelids apart during the flushing to ensure rinsing of entire surface of the eye and lids with water. Do not let victim rub eyes. Do not attempt to neutralize with chemical agents. Oils/ointments should not be used at this time. Get medical attention if eye irritation occurs.

Skin: Immediately wash with soap and water for a minimum of 15 minutes. Wash clothing before reuse and discard footwear which cannot be cleaned. Get immediate medical attention if irritation occurs.

Inhalation: Remove to fresh air, if breathing becomes difficult, oxygen may be given, preferably with a physician's advice. If not breathing, give artificial respiration, Get medical attention.

5. FIRE-FIGHTING MEASURES

N.F.P.A. Hazard Ratings: Health: NR Fire: NR Reactivity: NR special:
O=minimal 1=slight 2=moderate 3=serious 4=severe NIR=Not Rated
Flash point: NA Method Used:
Flammable Limits: NA LEL: NA UEL: NA
Auto ignition Temp: NA
Extinguisher Media:
water, foam, carbon dioxide

Special Fire Fighting Procedures: As in any fire, prevent human exposure to fire, smoke, fumes or products of combustion. Evacuate nonessential personnel from the fire area. Firefighters should wear full-face, self contained breathing apparatus and impervious protective clothing.

Unusual Fire And Explosion Hazards: In case of fire or explosion, do not breathe fumes, Nitrogen and sulfur oxides may develop.

Hazardous Combustion Products: In case of fire or explosion, do not breathe fumes. Nitrogen and sulfur oxides may develop.

Emergency Response Guidebook Information: None

6. ACCIDENTAL RELEASE MEASURES

Steps to be taken in case material is released or spilled:

Sweep spilled product and collect for reuse. Wash residue away. Do not contaminate drain. Soak up wash water with sand or absorbent material. Sweep up and dispose.

7. HANDLING AND STORAGE

Keep container well closed and store in a dry, well ventilated place away from sunlight. The product is hygroscopic and photosensitive. Avoid extremes of temperatures.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Skin Protection: Skin contact should be prevented through use of suitable protective clothing, PVC rubber gloves and footwear, selected with regard for use conditions and exposure potential. Consideration must be given both to durability as well as permeation resistance.

Respiratory Protection: When dust standards are exceeded, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the latest OSHA standard(29 CFR 1910.134) and/or ANSI Z88.2 recommendations. Always wear NIOSH approved particulate approved respirator.

Eye Protection: Eye/face protection requirements vary depending upon work environment conditions and material handling practices. Appropriate ANSI Z87 approve equipment should be used for the particular use intended for this material. Use chemical safety glasses with side shields or splash proof goggles and face shield to prevent eye/face contact. Emergency eye wash must be readily accessible to work area.

Other Protection: Product is easily removed with soap and water. Avoid prolonged or repeated breathing of dust and contact with skin. Remove contaminated clothing; launder before reuse. Cleanse skin thoroughly after contact, before meals and end of work period.

Ventilation Protection: Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures: local exhaust ventilation at the point of generation.

Exposure Limits: No specific recommendations.

Hygienic Practices: Minimize breathing dust. Avoid prolonged or repeated breathing of dust and contact with skin. Remove contaminated clothing; launder before reuse, cleans skin thoroughly after contact, before meals and end of work period.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: dark red-brown micro granules
Molecular Weight: 435.2
Boiling Point: N/Ap
Melting Point: Breaks down without melting
Specific Gravity: 0.7g/cm³
Vapor Pressure(mm/Hg): N/Ap
Vapor Density(air=1): N/Ap
Reactivity in water: None
Solubility in water: 30g/100ml(20 Deg. C)
pH value(1% solution): 7-9

10. STABILITY AND REACTIVITY

Stable under recommended storage and handling conditions.

Conditions To Avoid: None

Incompatible Materials: The liquid solution develops hydrogen upon contact with copper and aluminum.

Hazardous Decomposition Products: Toxic fumes of nitrogen and sulfur oxide at temperatures above the decomposition temperature.

Polymerization Conditions To Avoid: None

11. TOXICOLOGICAL INFORMATION

Eye Effects: No data found for product.

Skin Effects: No data found for product.

Dermal Toxicity: No data found for product.

Inhalation Effects: No data found for product.

Sensitization: No data found for product.

Ingestion Effects: No data found for product.

Carcinogenicity/Mutagenicity: Not listed as a carcinogen by NTP, IARC or OSHA. No information found on Mutagenicity.

Reproductive Effects: No data found for product.

Neurotoxicity: No data found for product.

Target Organs: No data found for product.

Additional Toxicological Information: No data found for product.

12. ECOLOGICAL INFORMATION

No experimental ecological data are available for product.

13. DISPOSAL CONSIDERATIONS

Product: According to local regulations.

Contaminated packaging: No specific recommendations.

14. TRANSPORT INFORMATION

| | |
|--------------------------------|--|
| <u>Product Shipping Name</u> : | Ethylenediamine-N',N'-bis(2-hydroxyphenylacetic acid), Ferric sodium complex |
| <u>Label Requirement</u> : | None |
| <u>Packing Group</u> : | N/A |
| <u>UN</u> : | None |
| <u>CAS #</u> : | 16455-61-1 |

15. REGULATORY INFORMATION

Product Label Name: Ethylenediamine-N',N'-bis(2-hydroxyphenylacetic acid), Ferric sodium complex
EDDHA-FeNa

16. OTHER INFORMATION

This information only concerns the above mentioned product and does not need to be valid if used with other product(s) or in any process. The information is to our best present knowledge correct and complete and is given in good faith but without warranty. It remains the user's own responsibility to make sure that the information is appropriate and complete for his special use of this product.