M A T E R I A L   S A F E T Y   D A T A   S H E E T

SECTION 1. - - - - - - - CHEMICAL IDENTIFICATION - - - - - - -
CATALOG #: F1018
NAME: FERRIC AMMONIUM SULFATE DEODECAHYDRATE
ACS REAGENT

SECTION 2. - - - - COMPOSITION/INFORMATION ON INGREDIENTS - - - - -
CAS #: 7783-83-7
MF: E4FENO852
SYNONYMS
IRON AMMONIUM SULFATE *

SECTION 3. - - - - HAZARDS IDENTIFICATION - - - - -
LABEL PRECAUTIONARY STATEMENTS
IRRITANT
IRRITATING TO EYES AND SKIN.
IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF
WATER AND SEEK MEDICAL ADVICE.
WEAR SUITABLE PROTECTIVE CLOTHING.

SECTION 4. - - - - FIRST-AID MEASURES - - - - -
IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH COPIOUS AMOUNTS
OF WATER FOR AT LEAST 15 MINUTES.
IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS
AMOUNTS OF WATER.
IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL
RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.
IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS.
CALL A PHYSICIAN.
WASH CONTAMINATED CLOTHING BEFORE REUSE.

SECTION 5. - - - - FIRE FIGHTING MEASURES - - - - -
EXTINGUISH MEDIA
NONCOMBUSTIBLE.
USE EXTINGUISHING MEDIA APPROPRIATE TO SURROUNDING FIRE CONDITIONS.

SPECIAL FIREFIGHTING PROCEDURES
WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO
PREVENT CONTACT WITH SKIN AND EYES.

UNUSUAL FIRE AND EXPLOSIONS HAZARDS
EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

SECTION 6. - - - - ACCIDENTAL RELEASE MEASURES - - - - - -
WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY
CONTINUED ON NEXT PAGE
MATERIAL SAFETY DATA SHEET

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NAME: FERRIC AMMONIUM SULFATE DODECAHYDRATE
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RUBBER GLOVES.
Sweep up, place in a bag and hold for waste disposal.
Avoid raising dust.
Ventilate area and wash spill site after material pickup is complete.

SECTION 7. - - - - - - - - HANDLING AND STORAGE- - - - - - - - -

REFER TO SECTION 8.

SECTION 8. - - - - EXPOSURE CONTROLS/PERSONAL PROTECTION-

- Wear appropriate NIOSH/MSHA-approved respirator, chemical-resistant gloves, safety goggles, other protective clothing.
- Safety shower and eye bath.
- Mechanical exhauster required.
- Do not breathe dust.
- Avoid contact with eyes, skin and clothing.
- Avoid prolonged or repeated exposure.
- Wash thoroughly after handling.
- Irritant.
- Keep tightly closed.
- Store in a cool dry place.

SECTION 9. - - - - - - PHYSICAL AND CHEMICAL PROPERTIES - - - - - - -

APPEARANCE AND ODOR
PALE-VIOLET CRYSTALS (ACS)

PHYSICAL PROPERTIES
MELTING POINT: 39 C TO 41 C
SPECIFIC GRAVITY: 1.710

SECTION 10. - - - - - - STABILITY AND REACTIVITY - - - - - - - -

INCOMPATIBILITIES
STRONG ACIDS

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS
SULFUR OXIDES
AMMONIA

SECTION 11. - - - - - - TOXICOLOGICAL INFORMATION - - - - - - -

ACUTE EFFECTS
May be harmful by inhalation, ingestion, or skin absorption.
Causes eye and skin irritation.
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

RTECS #: WS5900000
SULFURIC ACID, AMMONIUM IRON(3+) SALT (2:1:1), DODECAHYDRATE

CONTINUED ON NEXT PAGE
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ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES (RTECS) DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR COMPLETE INFORMATION.

SECTION 12. - - - - - - ECOLOGICAL INFORMATION - - - - - -

DATA NOT YET AVAILABLE.

SECTION 13. - - - - - - DISPOSAL CONSIDERATIONS - - - - - -

THE MATERIAL SHOULD BE DISSOLVED IN 1) WATER; 2) ACID SOLUTION OR 3) OXIDIZED TO A WATER-SOLUBLE STATE. PRECIPITATE THE MATERIAL AS THE SULFIDE, ADJUSTING THE PH OF THE SOLUTION TO 7 TO COMPLETE PRECIPITATION. FILTER THE INSOLUBLES AND DISPOSE OF THEM IN A HAZARDOUS- WASTE SITE. DESTROY ANY EXCESS SULFIDE WITH SODIUM HYPOCHLORITE. NEUTRALIZE THE SOLUTION BEFORE FLUSHING DOWN THE DRAIN. OBSERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS.

SECTION 14. - - - - - - TRANSPORT INFORMATION - - - - - -

CONTACT SIGMA CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION.

SECTION 15. - - - - - - REGULATORY INFORMATION - - - - - -

EUROPEAN INFORMATION
CAUTION: SUBSTANCE NOT YET FULLY TESTED.
IRRITANT
R 35/38
IRRITATING TO EYES AND SKIN.
S 26
IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE.
S 36
WEAR SUITABLE PROTECTIVE CLOTHING.

REVIEWS, STANDARDS, AND REGULATIONS

| OEL=NAK | MSHA STANDARD-AIR: TWA 1 MG(Fe)/M3 |
| DTLVs*: 3 138 71 |
| OEL-DENMARK: TWA 1 MG(Fe)/M3 JANUARY 1993 |
| OEL-FINLAND: TWA 1 MG(Fe)/M3 JANUARY 1993 |
| OEL-THE NETHERLANDS: TWA 1 MG(Fe)/M3 JANUARY 1993 |
| OEL-SWITZERLAND: TWA 1 MG(Fe)/M3 JANUARY 1993 |
| OEL-UNITED KINGDOM: TWA 1 MG(Fe)/M3; STEL 2 MG(Fe)/M3 JANUARY 1993 |
| NOES 1983: HZD X4911; NIS 1; TNE 29; NOS 1; TNE 99; TFE 79 |

SECTION 16. - - - - - - OTHER INFORMATION - - - - - -

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. SIGMA SHALL NOT BE

CONTINUED ON NEXT PAGE
CATEGORIES:

F1018
FERRIC AMMONIUM SULFATE DODECAHYDRATE

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