

Material Safety Data Sheet

Iron Disulfide

Section 1 - Chemical Product And Company Identification

MSDS Name: Iron (II) Disulfide

Synonym:

Company: Gelon.com

SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS#	Chemical Name	%	EINECS#
12068-85-8	Iron (II) Disulfide	100.0	235-106-8

Hazard Symbols: F

Risk Phrases: 14 17

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Reacts violently with water. Spontaneously flammable in air. Water-reactive. The toxicological properties of this material have not been fully investigated.

Potential Health Effects

Eye: Dust may cause mechanical irritation.

Skin: No information regarding skin irritation and other potential effects was found.

Ingestion: The toxicological properties of this substance have not been fully investigated.

Inhalation: Inhalation of dust may cause respiratory tract irritation.

Chronic: No information found.

SECTION 4 - FIRST AID MEASURES

Eyes:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin:

Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion:

If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation:

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

SECTION 5 - FIRE FIGHTING MEASURES

General Information:

Evacuate area and fight fire from a safe distance. As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. May burn with invisible flame. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Water Reactive. Material will react with water and may release a flammable and/or toxic gas. Spontaneously ignitable in air. May ignite or explode on contact with steam or moist air.

Extinguishing Media:

Use dry sand or earth to smother fire. **DO NOT USE WATER!** Contact professional fire-fighters immediately.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Avoid generating dusty conditions. Isolate area and deny entry. Provide ventilation. Do not expose spill to water. Place under an inert atmosphere. Do not use combustible materials such as paper towels to clean up spill.

SECTION 7 - HANDLING and STORAGE

Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use only in a well-ventilated area. Do not allow water to get into the container because of violent reaction. Minimize dust generation and accumulation. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Avoid ingestion and inhalation. Handle under an inert atmosphere. Do not allow contact with water. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Keep from contact with moist air and steam.

Storage:

Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from water. Keep containers tightly closed. Do not expose to air. Store under an inert atmosphere.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Use explosion-proof ventilation equipment. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

CAS# 12068-85-8:

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Powder

Color: Not available.

Odor: Not available.

pH: Not available.

Vapor Pressure: Not available.

Viscosity: Not available.

Boiling Point: Not available.

Freezing/Melting Point: Not available.

Autoignition Temperature: Not available.

Flash Point: Not available.

Explosion Limits, lower: Not available.

Explosion Limits, upper: Not available.

Decomposition Temperature:

Solubility in water:
Specific Gravity/Density:
Molecular Formula: FeS₂
Molecular Weight: 119.967

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability:
Powder or liquid is pyrophoric. Stability unknown. Combines vigorously or explosively with water.
Conditions to Avoid:
Incompatible materials, ignition sources, dust generation, exposure to air, strong oxidants, exposure to moist air or water.
Incompatibilities with Other Materials:
Strong oxidizing agents, water.
Hazardous Decomposition Products:
Oxides of sulfur.
Hazardous Polymerization: Has not been reported.

SECTION 11 - TOXICOLOGICAL INFORMATION

RTECS#:
CAS# 12068-85-8 unlisted.
LD50/LC50:
Not available.
Carcinogenicity:
Iron (II) Disulfide -
Not listed by ACGIH, IARC, or NTP.

SECTION 12 - ECOLOGICAL INFORMATION

No

SECTION 13 - DISPOSAL CONSIDERATIONS

Products which are considered hazardous for supply are classified as Special Waste and the disposal of such chemicals is covered by regulations which may vary according to location. Contact a specialist disposal company or the local waste regulator for advice. Empty containers must be decontaminated before returning for recycling.

SECTION 14 - TRANSPORT INFORMATION

IATA
Not regulated as a hazardous material.
IMO
Not regulated as a hazardous material.
RID/ADR
Not regulated as a hazardous material.

SECTION 15 - REGULATORY INFORMATION

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: F

Risk Phrases:

R 14 Reacts violently with water.

R 17 Spontaneously flammable in air.

Safety Phrases:

S 16 Keep away from sources of ignition - No smoking.

S 28A After contact with skin, wash immediately with plenty of water.

S 37 Wear suitable gloves.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)

CAS# 12068-85-8: No information available.

Canada

CAS# 12068-85-8 is listed on Canada's NDSL List.

CAS# 12068-85-8 is not listed on Canada's Ingredient Disclosure List.

US FEDERAL

TSCA

CAS# 12068-85-8 is listed on the TSCA inventory.

SECTION 16 - ADDITIONAL INFORMATION

MSDS Creation Date: 5/08/1998 Revision #2 Date: 3/18/2003