



WEST BENGAL CHEMICAL INDUSTRIES LIMITED

145/1, Jessore Road, Lake Town,

Kolkata – 700 089, India.

Phone: +9133 4025 1700 Fax: +9133 2574 7410

Email: webcil@wbcil.com

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Section 1 - Chemical Product and Company Identification

1.1 MSDS Name: Ferrous Glycine Sulphate

1.2 Product Code: FGSNL22

1.3 Relevant identified uses of the substance or mixture and uses advised against:

Industrial uses

1.4 Company Identification:

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Section 2 – Hazards Identification

2.1 GHS, Globally Harmonized System Classification in accordance with 29 CFR 1910:

2.1.1 Hazard Classification

Skin irritation - Category 2

Eye irritation - Category 2

2.2 Signal Words:

Warning

2.3 Hazard statements:

H315: Causes skin irritation.

H319: Causes serious eye irritation.

2.4 Precautionary statements:

P261: Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P302+352: IF ON SKIN: Wash with soap and water.

P332+313: If skin irritation occurs: Get medical advice/attention.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.

P337+313: If eye irritation persists get medical advice/attention.

P501: Dispose of contents/container to authorized agents only.

2.5 Potential Acute and Chronic Health Effects:

2.5.1 Inhalation

May cause respiratory irritation

2.5.2 Ingestion

May cause gastrointestinal irritation



2.5.3 Skin Contact
May cause skin irritation

Section 2 – Hazards Identification

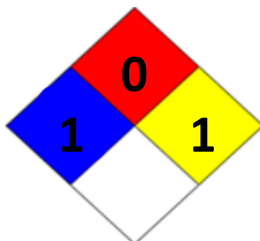
2.5.4 Eye Contact
May cause eye irritation

2.5.5 Chronic exposure
No known significant effects or critical hazards.

2.6 Pictogram:



2.7 NFPA SCALE



NFPA SCALE (0-4)

2.8 HMIS RATING

Health	1
Flammability	1
Physical Hazard	0
Personal protection	E

HMIS RATINGS (0-4)

Section 3 - Composition / Information on Ingredients



3.1 Ingredient Name: Ferrous Glycine Sulphate

Section 3 - Composition / Information on Ingredients

3.2 Synonym: Iron(ii) glycine sulfate, iron, bis(glycinato)-, sulfate (1:1), Iron(2+) sulphate, compound with glycine (1:2)

3.3 CAS No.: 17169-60-7

3.4 EC No.: 238-784-3

3.5 Molecular formula: $C_4H_{10}FeN_2O_8S$

3.6 Molecular weight: 302.04 g/mol

3.7 Purity: 100 %

Section 4 - First Aid Measures

4.1 Description of first aid measures:

4.1.1 Inhalation

Move exposed person to fresh air. If not breathing, seek immediate medical attention. If breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel and seek medical attention.

4.1.2 Ingestion

Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Seek medical attention.

4.1.3 Skin contact

Remove contaminated clothing and shoes and immediately flush skin with plenty of water for at least 15 minutes. Wash clothing before reuse.

4.1.4 Eye contact

Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes.

4.2 Most important symptoms and effects, both acute and delayed:

no data available

4.3 Indication of any immediate medical attention and special treatment needed:

no data available

Section 5 - Fire-Fighting Measures

5.1 Flammability of the Product:



Section 5 - Fire-Fighting Measures

Non-flammable.

5.2 Fire extinguishing media:

Use fire-extinguishing media appropriate to the surrounding fire.

5.3 Products of Combustion:

Carbon oxides, Nitrogen oxides, Sulfur oxides, Iron Oxides, etc.

5.4 Fire Extinguishing Media:

Use water spray, alcohol-resistant foam, dry chemicals, or carbon dioxide. Use means suitable for extinguishing surrounding fire. Avoid solid water jet as it may scatter the fire.

5.5 Hazardous combustion products:

Decomposition products may include oxides of carbon and iron.

5.6 Fire:

Not considered a fire hazard.

5.7 Explosion:

Not considered an explosion hazard.

5.8 Special information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full-face piece operated in the pressure demand or other positive pressure mode.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment, and emergency procedures:

Avoid breathing dust/fumes/gas/mist/vapors/spray. Use individual protective equipment (waterproof boots, suitable protective clothing, safety glasses, etc.).

6.2 Environmental precautions:

Do not let the product enter drains, soil, or water sources.

6.3 Methods and materials used for containment cleanup procedures and Storage:

Wear appropriate personal protective equipment as specified in Section 8. Clean up spills in a manner that does not disperse dust into the air. Reduce airborne dust and prevent scattering by moistening with water. Pick up spill for recovery or disposal and place in a closed container.

6.3.1 Small Spill

Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Use appropriate tools to put the spilled solid in a convenient waste disposal container.



6.3.2 Large Spill

Section 6 - Accidental Release Measures

Do not inhale dust, vapors, mist, or gas. Avoid dust formation. Contain spilled material. Cover with an inert, non-combustible absorbent material, (e.g., sand, earth, diatomaceous earth, vermiculite). Use a shovel to put the material into a convenient waste disposal container.

6.4 Disposal:

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

Section 7 - Handling and Storage

7.1 Handling:

Avoid contact with eyes. Avoid breathing dust. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use.

7.2 Storage:

Store in accordance with local regulations. Store in original container, protected from direct sunlight. Keep container tightly closed and sealed until ready for use.

Section 8 - Exposure Controls / Personal Protection

8.1 Engineering controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume, or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

8.2 Personal protection:

Safety glasses, Lab Coat, Dust respirator. Be sure to use an approved / certified respirator or equivalent, Gloves.

8.3 Personal protection in case of a large spill:



Section 8 - Exposure Controls / Personal Protection

Splash goggles, Full suit, Dust respirator, Boots, Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

8.4 Exposure limits: Consult local authorities for acceptable exposure limits.

8.4.1 Skin Protection: Wear fire/flammable resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

8.4.2 Eye Protection: Use chemical safety goggles and/or full-face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

8.5 Exposure limits: Consult local authorities for acceptable exposure limits.

Section 9 - Physical and Chemical Properties

Appearance:	: Light yellow to brown
Odor	: Odourless
Odor threshold	: No information found.
pH	: 3-5
Relative density	: No information found
Melting point/freezing point	: No information found.
Initial boiling point and boiling range	: 240.9°C at 760mmHg.
Flash point	: 99.5°C
Auto-ignition temperature	: No information found.
Decomposition temperature	: No information found.
Upper/lower flammability or explosive limits	: No information found.
Vapor pressure	: 0.0123mmHg at 25°C
Vapor density	: No information found.
Evaporation rate	: No information found.
Flammability (solid, gas)	: No information found.
Partition coefficient: n-octanol/water	: No information found.
Solubility	: It is soluble in water.
Viscosity	: No information found.



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Section 10 - Stability and Reactivity

10.1 Stability:

Section 10 - Stability and Reactivity

The product is stable at normal conditions.

10.2 Instability Temperature:

Not available

10.3 Conditions of Instability:

Incompatibles heat, light and moisture.

10.4 Incompatibility with Various Substances:

Strong oxidizing agents.

10.5 Hazardous Decomposition Products:

It emits toxic fumes, carbon oxides, nitrogen oxides and iron oxide when heated to decomposition.

10.6 Hazardous Polymerization:

Will not occur.

10.7 Corrosivity:

Non-corrosive in presence of glass.

10.8 Special Remarks on Reactivity:

Not available

Section 11 - Toxicological Information

11.1 Routes of Entry:

Inhalation, ingestion

11.2 Toxicity to Animals:

No information available.

11.3 Chronic Effects on Humans:

Not available

11.4 Other Toxic Effects on Humans:

Not available

11.5 Special Remarks on Toxicity to Animals:

Not available

11.6 Special Remarks on Chronic Effects on Humans:

Not available

11.7 Carcinogenicity:



No component of this product present at levels greater than or equal to 0.1% is identified as possible or confirmed human carcinogen by IARC, ACGIH, OSHA and NTP.

11.8 Teratogenic Effects:

No information found.

11.9 Mutagenic Effects:

No information found.

11.10 Developmental Toxicity:

Section 11 - Toxicological Information

No information found.

11.11 Reproductive Effects:

No information found.

11.12 STOT-single exposure:

no data available

11.13 STOT-repeated exposure:

no data available

11.14 Aspiration hazard:

no data available

11.15 Special Remarks on Other Toxic Effects on Humans:

Not available

Section 12 - Ecological Information

12.1 Ecotoxicity:

Not available

12.2 BOD 3 and COD:

Not available

12.3 Persistence and Degradability:

No information found.

12.4 Products of biodegradation:

Possibly hazardous short-term degradation products are not likely. However, long-term degradation products may arise.

12.5 Toxicity of the products of biodegradation:

The product itself and its products of degradation are not toxic.

12.6 Mobility:

No information found.

12.7 Bioaccumulation/ Accumulation:

No information found.

12.8 Results of PBT and vPvB assessment:

No information found for assessment.

12.9 Special remarks on the products of biodegradation:

Not available



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Section 13 - Disposal Considerations

It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

Section 14 - Transport Information

14.1 UN Number:

ADR/RID: no data available

IMDG: no data available

IATA: no data available

14.2 UN Proper Shipping Name:

ADR/RID: no data available

IMDG: no data available

IATA: no data available

14.3 Transport hazard class(es):

ADR/RID: no data available

IMDG: no data available

IATA: no data available

14.4 Packing group, if applicable:

ADR/RID: no data available

IMDG: no data available

IATA: no data available

14.5 Environmental hazards:

ADR/RID: No

IMDG: No

IATA: No

14.6 Special precautions for user: no data available

14.7 Transport in bulk according to IMO instruments: no data available



Section 15 - Regulatory Information

15.1 FEDERAL AND STATE REGULATION:

No information available.

15.2 WHMIS (Canada):

Not controlled under WHMIS (Canada).

15.3 DSCL (EEC):

This product is not classified according to the EU regulations.



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Section 15 - Regulatory Information

15.4 Other Regulations:

Not applicable.

No information available.

15.5 European Inventory of Existing Commercial Chemical Substances (EINECS):

Listed.

15.6 EC Inventory:

Listed.

15.7 United States Toxic Substances Control Act (TSCA) Inventory:

Not Listed.

15.8 China Catalog of Hazardous chemicals 2015:

Not Listed.

15.9 New Zealand Inventory of Chemicals (NZIoC):

Not Listed.

15.10 PICCS:

Not Listed.

15.11 Vietnam National Chemical Inventory:

Not Listed.

15.12 IECSC:

Not Listed.

15.13 Korea Existing Chemicals List (KECL):

Not Listed.

Section 16 - Other Information

Disclaimer: This material safety data sheet is provided as an information resource only. WEST BENGAL CHEMICAL INDUSTRIES LIMITED believes the information contained herein is accurate and compiled from reliable sources. It is the responsibility of the user to verify its validity. The buyer assumes all responsibility of using and handling the product in accordance with federal, state, and local regulations.

Abbreviations and acronyms

- CAS: Chemical Abstracts Service
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transportation Association
- TWA: Time Weighted Average
- STEL: Short term exposure limit
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%

References

- IPCS - The International Chemical Safety Cards (ICSC),
- website: <http://www.ilo.org/dyn/icsc/showcard.home>
- HSDB - Hazardous Substances Data Bank,



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Section 16 - Other Information

- website: <https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm>
- IARC - International Agency for Research on Cancer,
- website: <http://www.iarc.fr/>
- eChemPortal - The Global Portal to Information on Chemical Substances by OECD,
- website: http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en

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