

1. Identification of the substances/ mixture and of the company/ undertaking

1.1 Product Identifiers

Product CodeGRM691Product NameZinc nitrate hexahydrate

1.2 Relevant identified uses of the substance or mixture and uses advised against Identified uses Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Produced by	HiMedia Laboratories Pvt. Ltd.
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1.4 Emergency Tel. No.

Emergency Tel.No. Please contact the regional HiMedia representation in your country

2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP] Oxidising liquids;Oxidising solids (Category 2) Oxidising liquids;Oxidising solids (Category 3) Acute toxicity,oral (Category 4) Skin corrosion/irritation (Category 2)

Serious eye damage/eye irritation (Category 2A) Specific target organ toxicity, single exposure; Respiratory tract irritation (Category 3)

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Contact with combustible material may cause fire. Harmful if swallowed. Irritating to eyes, respiratory system and skin.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008 [CLP]

Pictogram

Signal word



Hazard Statement(s)

- H272 May intensify fire; oxidizer
- H272 May intensify fire; oxidizer
- H302 Harmful if swallowed
- H315 Causes skin irritation
- H319 Causes serious eye irritation
- H335 May cause respiratory irritation

Precautionary Statement(s)

- P220 Keep/Store away from clothing/combustible materials.
- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

According to European Directive 67/548/EEC as amended.

Symbol(s)



R-Phrase(s)

R8Contact with combustible material may cause fire.
R22 Harmful if swallowed.
R36/37/38 Irritating to eyes, respiratory system and skin.

S-Phrase(s)

S17 Keep away from combustible material.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

2.3 Other hazards - None

3. Composition/Information on Ingredients

3.1 Substances

Molecular Formula	$\operatorname{Zn}(\operatorname{NO}_3)_2 \cdot 6 \operatorname{H}_2 O$
Molecular Weight.	297.49

Component		Concentration	
Zinc nitrate hexahydrate			
CAS-No.	10196-18-6		
EC-No.	231-943-8		

4. First Aid Measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. **In case of skin contact**

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. consult a physician.

4.2 Most important symptoms and effects, both acute and delayed No data available

4.3 Indication of immediate medical attention and special treatment needed No data available

5. Fire Fighting Measures

5.1 Extinguishing media Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture Zinc/zinc oxides

5.3 Precautions for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information

No data available

6 Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

6.4 **Reference to other sections**

For disposal see Section 13.

7 Handling and Storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Normal measures for preventive fire protection.

7.3 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended Storage Temperature : Store below 30°C

7.3 Specific end uses No data available

8 Exposure Controls/Personal Protection

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal protective equipment

Hygiene measure

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands face after working with the substance

Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (Without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

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.

Body protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific work place.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a fullface respirator with multi-purpose combination (US) or type ABEK(EN 14387) respirator cartridges as a backup to the engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Environment exposure controls

Do not empty into drains

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Colourless or white crystals or powder or chunks
Odour	No data available
Odour Threshold	No data available
Odour Threshold	No data available
pH	No data available
Melting/freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	No data available
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Water Solubility	No data available
Partition coefficient: n-octanol/Water	No data available
Autoignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

9.2 Other safety information

No data available

10 Stability and Reactivity

- **10.1 Reactivity** No data available
- **10.2 Chemical stability** No data available
- **10.3 Possibility of hazardous reactions** No data available
- **10.4** Conditions to avoid No data available
- **10.5 Incompatible materials** Strong oxidizing agents
- **10.6 Hazardous decomposition products** Other decomposition products - No data available

11 Toxicological Information

11.1 Information on toxicoligical effects Acute toxicity No data available Skin corrosion/irritation No data available Serious eye damage/eye irritation No data available Respiratory or skin sensitisation No data available Germ cell mutagenicity No data available Carcinogenicity IARC: No component of this product present at levels greater than oregual to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. **Reproductive toxicity** No data available Specific target organ toxicity- single exposure No data available Aspiration hazard No data available

Potential Health Effects Inhalation. Refer Section 2 Skin Refer Section 2 Eyes Refer Section 2 Ingestion Refer Section 2

Additional Information

RTECS : ZH4775000

12 Ecological Information

- 12.1 Toxicity
 - No data available
- **12.2 Persistence and degradability** No data available
- **12.3 Bioaccumulative potential** No data available
- **12.4 Mobility in soil** No data available
- **12.5 PBT and vPvB assessment** No data available
- **12.6 Other adverse effects** No data available

13 Disposal Considerations

13.1 Waste treatments methods

Product

Offer surplus and non-recyclable solutions to a licenced disposal company. Contact a licenced professional waste disposal service to dispose of this material.

13.2 Contaminated packaging Dispose of as unused product.

14 Transport Information

14.1 UN-No. ADR/RID: 1514 IMDG: 1514 IATA: 1514

14.2 UN proper shipping name

ADR/RID	: Zinc nitrate hexahydrate
IMDG	: Zinc nitrate hexahydrate
IATA	: Zinc nitrate hexahydrate

- **14.3** Transport hazard class(es)
ADR/RID: 5.1IMDG: 5.1IATA: 5.1
- 14.4Packaging group
ADR/RID: 2IMDG: 2IATA: 2
- 14.5Environmental hazards
ADR/RID: NoIMDG: Marine Pollutant: NoIATA: No
- 14.6 Special precautions for use

No data available

15 Regulatory Information

This safety datasheet complies with the requirements of Regulation(EC) No.1907/2006

15.1 Safety health and environment regulations/legislation specific for the substance or mixture

15.2 Chemical Safety Assessment No data available

16 Other Information Further information

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