

Magnesium Peroxide

1. Chemical Product and Supplier Identification

Product Name

☞ Magnesium Peroxide, 35% Min.

Synonyms

☞ Magnesium Dioxide, Magnesium Bioxide

Manufacturer

Shaoxing Biotech Chemical Co LTd

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MSDS Number

☞ JHMP-01-02

Effective Date

☞ Mar 15, 2014

2. Composition/Information on Ingredients

Ingredients	Chemical Formula	CAS No.	Percentage
Magnesium Peroxide	MgO ₂	1335-26-8	35~40
Magnesium Hydroxide	Mg(OH) ₂	1309-170-3	10~15
Magnesium Oxide	MgO	1309-48-4	45~55

3. Hazards Identification

Emergency Overview:

NFPA : H= 0 F= 1 I= 0 S= None

HMIS : H= 0 F= 1 R= 0 PPE = Supplied by User; dependent on local conditions

General Information

☞ Appearance : powder

☞ Colour : white

☞ Odour : odourless

Main effects

☞ - Irritating to eyes, respiratory system and skin.

☞ - Weak oxidizing properties

4. First-aid Measures

Inhalation

☞ Remove the subject from dusty environment and let him blow his nose.

☞ If symptoms persist, call a physician.

Eye contact

☞ Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

☞ In the case of difficulty of opening the lids, administer an analgesic eye wash (oxybuprocaine).

☞ Consult with an ophthalmologist immediately in all cases.

Skin contact

☞ Remove and wash contaminated clothing before re-use.

- ☞ Wash off with plenty of water.
- ☞ If symptoms persist, call a physician.

Ingestion

- ☞ If swallowed, rinse mouth with water (only if the person is conscious).
- ☞ Do NOT induce vomiting.

If victim is unconscious but breathing:

- ☞ Artificial respiration and/or oxygen may be necessary.

5. Fire Fighting Measure

Suitable extinguishing media

- ☞ Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- ☞ Water spray

Extinguishing media which shall not be used for safety reasons

- ☞ None.

Special exposure hazards in a fire

- ☞ Oxygen released in thermal decomposition may support combustion

Hazardous decomposition products

- ☞ Oxygen
- ☞ Hydrogen peroxide

Special protective equipment for fire-fighters

- ☞ In the event of fire, wear self-contained breathing apparatus.

Other information

- ☞ Keep product and empty container away from heat and sources of ignition.

6. Accidental Release Measures

Personal precautions

- ☞ Refer to protective measures listed in sections 7 and 8.
- ☞ Keep away from incompatible products
- ☞ Keep away from water.

Environmental precautions

- ☞ Should not be released into the environment.
- ☞ If the product contaminates rivers and lakes or drains inform respective authorities.

Methods for cleaning up

- ☞ Do not add chemical products.
- ☞ Pick up and arrange disposal without creating dust.
- ☞ All receiving equipment should be clean, vented, dry, labelled and made of material that is compatible with the product.
- ☞ Flush with plenty of water.
- ☞ Treat recovered material as described in the section "Disposal considerations".

7. Handling and Storage

Handling

- ☞ Use only in well-ventilated areas.
- ☞ Clean and dry piping circuits and equipment before any operations.

MATERIAL SAFETY DATA SHEET 安全技术说明书

- Never return unused material to storage receptacle.
- Containers and equipment used to handle the product should be used exclusively for that product.
- Keep away from heat and sources of ignition.

Storage

- Keep in a dry place.
- Keep in a cool, well-ventilated place.
- Keep away from direct sunlight.
- Keep away from heat.
- Keep away from Incompatible products.

Packaging material

- Polyethylene
- Carton + Polyethylene
- Steel + Polyethylene

Other information

- Avoid dust formation.
- Refer to protective measures listed in sections 7 and 8.

8. Exposure Controls/Personal Protection

Exposure Limit Values

- Magnesium peroxide TWA = 3 mg/m³

Engineering controls

- Ensure adequate ventilation.
- Refer to protective measures listed in sections 7 and 8.
- Apply technical measures to comply with the occupational exposure limits.

Personal protective equipment

Respiratory protection

- Use only respiratory protection that conforms to international/ national standards.
- Use NIOSH approved respiratory protection.
- Effective dust mask.

Hand protection

- Wear suitable gloves.
- Suitable material
- PVC
- Neoprene
- Rubber gloves
- Eye protection
- Dust proof goggles, if dusty.

Skin and body protection

- Protective suit

Hygiene measures

- Use only in an area equipped with a safety shower.
- Eye wash bottle with pure water
- Handle in accordance with good industrial hygiene and safety practice for diagnostics.

9. Physical and Chemical Properties

Appearance:	White or yellowish powder
Odor:	None
Bulk Density:	600~800 g/L
Solubility in water:	Slightly soluble
PH, 3% Suspension:	Approx.11
Boiling point/boiling range :	not applicable
Flash point :	not applicable
Flammability :	The product is not flammable.
Explosive properties :	Not explosive
Oxidizing properties :	Non oxidizer
Vapour pressure :	not applicable
Decomposition Temperature:	Self-accelerating decomposition with oxygen release starting from 350 °C

10. Stability and Reactivity

Stability

- ☞ Potential for exothermic hazard
- ☞ Stable under recommended storage conditions.

Conditions to avoid

- ☞ Avoid temperatures above 60°C, direct sunlight and contact with sources of heat.
- ☞ Keep at temperature not exceeding: 350 °C (662 °F)

Materials to avoid

- ☞ Acids, Heavy metal salts, Reducing agents, Flammable materials

Hazardous decomposition products

- ☞ Oxygen, Hydrogen peroxide

11. Toxicological Information

Toxicological data

Chronic toxicity

- ☞ Oral, Repeated exposure, Human experience, NOEL: 800 mg/kg, no observed effect, (Magnesium oxide)
- ☞ Inhalation, Repeated exposure, rat, NOEL: 3 mg/m³, no observed effect, (Magnesium oxide)
- ☞ Oral, Repeated exposure, cattle, Target Organs: gastro-intestinal system, NOEL: 1%, irritant effects, (Magnesium oxide)

Remarks

- ☞ Irritant effects linked to alkaline properties of the product

12. Ecological Information

Ecotoxicity effects

Acute toxicity

Crustaceans, Daphnia magna, EC50, 48 h, 190 mg/l (Magnesium)

Chronic toxicity

Fishes, Salmo gairdneri, LC50, 28 d, 1,355 mg/l (Magnesium)

Crustaceans, Daphnia magna, EC50, Reproduction Test, 21 d, 125 mg/l (Magnesium)

Crustaceans, Daphnia magna, LOEC, Reproduction Test, 21 d, 82 mg/l (Magnesium)

Mobility

Air:	not applicable
Water:	low solubility and mobility
Soil/sediments:	no data available

13. Disposal Considerations

Waste from residues / unused products

- ☞ Dilute with plenty of water.
- ☞ Dispose of wastes in an approved waste disposal facility.
- ☞ Can be landfilled, when in compliance with local regulations.
- ☞ In accordance with local and national regulations.

Packaging treatment

- ☞ Empty containers.
- ☞ Clean container with water.
- ☞ The empty and clean containers are to be reused in conformity with regulations.
- ☞ Can be landfilled or incinerated, when in compliance with local regulations.

14. Transport Information

- ☞ Sea (IMO/IMDG): not regulated
- ☞ Air (ICAO/IATA): not regulated

It is recommended that ERG Guide number 111 be used for all non-regulated material.

15. Regulatory Information

- ☞ SARA Section..... Yes
- ☞ SARA (313) Chemicals..... No
- ☞ EPA TSCA Inventory..... Appears
- ☞ Canadian WHMIS Classification..... C, D2B
- ☞ Canadian DSL..... Appears
- ☞ EINECS Inventory..... AppearsPeinvestigation, and verification.

16. Other Information

Disclaimer

- ☞ The data in this Material Safety Data Sheet is believed to be correct. However, since conditions of use are outside our control it should not taken as a warranty of representation for which Shaoxing Biotech Chemical Co., Ltd. Assumes legal responsibility. This information is provided solely for your consideration, investigation, and verification.