

SAFETY DATA SHEET

North American Version

IXPER® 35M Magnesium Peroxide

1. PRODUCT AND COMPANY IDENTIFICATION

1.1. Identification of the substance or mixture

Product name : IXPER® 35M Magnesium Peroxide
Chemical Name : Magnesium peroxide
Synonyms : Magnesium dioxide, Magnesium bioxide
Molecular formula : MgO₂
Molecular Weight : 56.3 g/mol

1.2. Use of the Substance/Mixture

Recommended use : - Bleaching agent
- Vulcanizing agents
- Agriculture industry
- Soil and groundwater remediation
- Oil & gas industry

1.3. Company/Undertaking Identification

Address :

1.4. Emergency and contact telephone numbers

Emergency telephone : 1 (800) 424-9300 CHEMTREC® (USA & Canada)
01-800-00-214-00 (MEX. REPUBLIC)

Contact telephone number : US: +1-800-765-8292 (Product information)
(product information): US: +1-713-525-6500 (Product information)

2. HAZARDS IDENTIFICATION

2.1. 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

2.2. Potential Health Effects:

Inhalation

- Inhalation of dust may cause shortness of breath, tightness of the chest, a sore throat and cough.

Eye contact

- Severe eye irritation
- Symptoms: Redness, Lachrymation, Swelling of tissue.

Skin contact

- Irritation
- Itching
- Repeated exposure may cause skin dryness or cracking.

Ingestion

- Severe irritation
- Symptoms: Nausea, Abdominal pain, Vomiting, Diarrhoea.

Other toxicity effects

- See section 11: Toxicological Information

2.3. Environmental Effects:

- See section 12: Ecological Information

3. COMPOSITION/INFORMATION ON INGREDIENTS

Magnesium peroxide

CAS-No. : 1335-26-8
Concentration : appr. 35.0 %

Other inorganic Mg compounds

Concentration : appr. 60.0 %

4. FIRST AID MEASURES

4.1. Inhalation

- Move to fresh air.
- If symptoms persist, call a physician.

4.2. Eye contact

- Call a physician or poison control centre immediately.
- In case of eye contact, remove contact lens and 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).

4.3. Skin contact

- Remove and wash contaminated clothing before re-use.
- Wash off with soap and water.
- If symptoms persist, call a physician.

4.4. Ingestion

- Rinse mouth with water.
- Do NOT induce vomiting.
- Oxygen or artificial respiration if needed.
- If symptoms persist, call a physician or Poison Control Centre immediately.

5. FIRE-FIGHTING MEASURES

5.1. Suitable extinguishing media

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

5.2. Extinguishing media which shall not be used for safety reasons

- None.

5.3. Special exposure hazards in a fire

- Oxygen released in thermal decomposition may support combustion

5.4. Hazardous decomposition products

- Oxygen
- Hydrogen peroxide

5.5. Special protective equipment for fire-fighters

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

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions

6.2. Environmental precautions

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

6.3. Methods for cleaning up

- Sweep up and shovel into suitable containers for disposal.
- Do not mix waste streams during collection.
- Avoid dust formation.
- Keep in properly labelled containers.
- Keep in suitable, closed containers for disposal.
- Treat recovered material as described in the section "Disposal considerations".
- Never return spills in original containers for re-use.

7. HANDLING AND STORAGE

7.1. Handling

- Ensure adequate ventilation.
- Keep away from heat and sources of ignition.
- Keep away from Incompatible products.
- Use only clean and dry utensils.
- Never return unused material to storage receptacle.

7.2. Storage

- Keep only in the original container.
- Keep in a well-ventilated place.
- Keep in a dry place.
- Keep in properly labelled containers.
- Keep container closed.
- Avoid dust formation.
- Keep away from Incompatible products.

7.3. Packaging material

- Polyethylene
- Carton + Polyethylene
- Steel + Polyethylene

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Exposure Limit Values

Magnesium peroxide

- SAEL (Solvay Acceptable Exposure Limit) 2003
TWA = 3 mg/m³

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SAEL = Solvay Acceptable Exposure Limit, Time Weighted Average for 8 hour workdays. No Specific TLV STEL (Short Term Exposure Level) has been set. Excursions in exposure level may exceed 3 times the TLV TWA for no more than a total of 30 minutes during a workday and under no circumstances should they exceed 5 times the TLV TWA.

8.2. Engineering controls

- Provide appropriate exhaust ventilation at places where dust is formed.
- Apply technical measures to comply with the occupational exposure limits.

8.3. Personal protective equipment

8.3.1. Respiratory protection

- Respirator with a particle filter (EN 143)
- Recommended Filter type:: P2

8.3.2. Hand protection

- Wear suitable gloves.
- Suitable material: PVC, Neoprene, Natural Rubber

8.3.3. Eye protection

- Goggles

8.3.4. Skin and body protection

- Dust impervious protective suit

8.3.5. Hygiene measures

- When using do not eat, drink or smoke.
- Wash hands before breaks and at the end of workday.
- Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. General Information

Appearance	: powder
Colour	: white
Odour	: odourless

9.2. Important health safety and environmental information

pH	: 10.3 <i>Remarks: suspension</i> <i>Concentration: 10 g/l</i>
Boiling point/boiling range	: <i>Remarks: not applicable</i>
Flash point	: <i>Remarks: not applicable</i>
Flammability	: <i>Remarks: not applicable</i>
Explosive properties	: <u>Explosion danger.</u> <i>Remarks: Not explosive</i>
Oxidizing properties	: <i>Remarks: Non oxidizer</i>
Vapour pressure	: <i>Remarks: not applicable</i>

Bulk density	:	= 650 kg/m ³
Solubility	:	Water = 86 mg/l (Magnesium oxide) <i>Remarks:</i> hydrolyses <i>Temperature:</i> 18 °C (64 °F)
Partition coefficient: n-octanol/water	:	<i>Remarks:</i> not applicable
Viscosity	:	<i>Remarks:</i> not applicable
Vapour density	:	<i>Remarks:</i> not applicable

9.3. Other data

Melting point/range	:	<i>Remarks:</i> Decomposition
Decomposition temperature	:	> 350 °C (662 °F)

10. STABILITY AND REACTIVITY

10.1. Stability

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

10.2. Conditions to avoid

- To avoid thermal decomposition, do not overheat.
- Keep at temperature not exceeding: 350 °C (662 °F)

10.3. Materials to avoid

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

10.4. Hazardous decomposition products

- Oxygen, Hydrogen peroxide

11. TOXICOLOGICAL INFORMATION

Toxicological data

Acute oral toxicity

- *Remarks:* no data available

Acute inhalation toxicity

- , *Remarks:* no data available

Acute dermal irritation/corrosion

- *Remarks:* no data available

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)

Carcinogenicity

- *Remarks:* no data available

Reproductive toxicity

- no data available

Remarks

- no data available

12. ECOLOGICAL INFORMATION

12.1. 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)

12.2. Mobility

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

12.3. Persistence and degradability

Abiotic degradation

- Air
Result: not applicable
- Water/soil
Result: complexation/precipitation of inorganic materials
- Water
Result: hydrolyses

Biodegradation

- Remarks: The methods for determining biodegradability are not applicable to inorganic substances.

12.4. Bioaccumulative potential

- Remarks: not applicable

12.5. Other adverse effects

- no data available

12.6. Remarks

13. DISPOSAL CONSIDERATIONS

13.1. 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.

13.2. Packaging treatment

- Clean container with water.
- Empty containers should be taken to an approved waste handling site for recycling or disposal.
- Uncleaned empty packaging
- Dispose of as unused product.

- In accordance with local and national regulations.

13.3. RCRA Hazardous Waste

- Listed RCRA Hazardous Waste (40 CFR 302) - No
- Unlisted RCRA Hazardous Waste (40 CFR 302) - No

14. TRANSPORT INFORMATION

- Sea (IMO/IMDG)
- not regulated
- Air (ICAO/IATA)
- not regulated
- U.S. Dept of Transportation
- not regulated
- It is recommended that ERG Guide number 111 be used for all non-regulated material.
- Canadian Transportation of Dangerous Goods
- not regulated

15. REGULATORY INFORMATION

15.1. Inventory Information

Toxic Substance Control Act list (TSCA)	: -	In compliance with inventory.
Australian Inventory of Chemical Substances (AICS)	: -	In compliance with Inventory (Listed under CAS: 14452-57-4).
Canadian Non-Domestic Substances List (NDSL)	: -	In compliance with inventory.
Korea Existing Chemicals Inv. (KECI) (KECI (KR))	: -	In compliance with inventory.
EU list of existing chemical substances (EINECS)	: -	In compliance with inventory.
Japanese Existing and New Chemical Substances (MITI List) (ENCS)	: -	In compliance with Inventory (Listed under CAS: 14452-57-4).
Inventory of Existing Chemical Substances (China) (IECS)	: -	In compliance with inventory.
Philippine Inventory of Chemicals and Chemical Substances (PICCS)	: -	In compliance with Inventory (Listed under CAS: 14452-57-4).
New Zealand Inventory of Chemicals (NZIOC)	: -	In compliance with inventory.

15.2. Other regulations

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A)

- not regulated.

SARA Hazard Designation (SARA 311/312)

- Acute Health Hazard: Yes.

- Fire Hazard: Yes.

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

- not regulated.

US. EPA CERCLA Hazardous Substances (40 CFR 302)

- not regulated.

US. New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)

- yes.

US. Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

- not regulated.

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)

- not regulated.

15.3. Classification and labelling

EC Label

- The product is classified in accordance with Annex VI to Directive 67/548/EEC.

Symbol(s)	Xi	Irritant
R-phrase(s)	R36/37/38	Irritating to eyes, respiratory system and skin.
S-phrase(s)	S22	Do not breathe dust.
	S24/25	Avoid contact with skin and eyes.
	S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	S37/39	Wear suitable gloves and eye/face protection.

16. OTHER INFORMATION

Ratings :

NFPA (National Fire Protection Association)

Health = 0 Flammability = 1 Instability = 0 Special =None

HMIS (Hazardous Material Information System)

Health = 0 Fire = 1 Reactivity = 0 PPE : Supplied by User; dependent on local conditions

Further information

- New (MSDS)
- Distribute new edition to clients

Material Safety Data Sheets contain country specific regulatory information; therefore, the MSDS's provided are for use only by customers of the company mentioned in section 1 in North America. If you are located in a country other than Canada, Mexico or the United States, please contact the Solvay Group company in your country for MSDS information applicable to your location.

The previous information is based upon our current knowledge and experience of our product and is not exhaustive. It applies to the product as defined by the specifications. In case of combinations or mixtures, one must confirm that no

new hazards are likely to exist. In any case, the user is not exempt from observing all legal, administrative and regulatory procedures relating to the product, personal hygiene, and integrity of the work environment. (Unless noted to the contrary, the technical information applies only to pure product).

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