

SECTION 1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name: Magnesium Perchlorate, granular, 1 to 4mm, Premium OEA
Catalogue no: R42020
SDS reference no: R42000
Brand: OEA Labs
EC index no(s):
REACH no: The annual tonnage does not require registration.
CAS no(s): Mg(ClO4) [10034-81-8]

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Elemental analysis scientific instrumentation. Primary use for removal of water vapour from carrier gas analytical streams in nitrogen, carbon, sulphur and oxygen configured applications. Not for pharmaceutical, domestic or other uses.

1.3 Details of the supplier of the safety data sheet

Company name: OEA Laboratories Limited
 Unit C2 Florence Road Business Park
 Kelly Bray, Callington, Cornwall
 PL17 8EX, United Kingdom

Telephone: +44 (0)1579 384174
Fax: +44 (0)1579 384174
Email: sales@oealabs.com

1.4 Emergency telephone number

Telephone: +44 (0)1579 384174, +44 (0) 1579 350212, +44 (0) 7811 102906

SECTION 2. Hazards identification

2.1 Classification of the substance or mixture according to Regulation (EC) No 1272/2008

Oxidising liquids; Oxidising solids (Category 3), H272
 Skin corrosion/irritation (Category 2), H315
 Serious eye damage/eye irritation (Category 2A), H319
 Specific organ toxicity, single exposure; Respiratory tract irritation (Category 3), H335

2.2 Labelling elements according to Regulation (EC) No 1272/2008

Pictogram(s):   GHS03 GHS07 GHS07

Signal word: Warning

Hazard statement(s):

H272 May intensify fire; oxidiser.
 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.

Restricted to professional users.

2.2 Other hazards

None

SECTION 3. Composition/information of ingredients

3.1 Substances

Synonyms: Magnesium Perchlorate, Anydrone
Formula: Mg(ClO4)2
Molecular weight: 223.21 g/mol
Components:

Magnesium Perchlorate Concentration: ~100%

CAS No 10034-81-8, EC No 233-108-3, H272, Oxidising liquids; Oxidising solids, Category 3; H315, Skin corrosion/irritation, Category 2; H315, Skin corrosion/irritation, Category 2; H335, Specific organ toxicity, single exposure; Respiratory tract irritation, Category 3.

SECTION 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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5. Firefighting 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

Hydrogen chloride gas, Magnesium oxide.

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

Use water spray to cool unopened containers.

SECTION 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

6.4 Reference to other sections

For disposal see section 13.

SECTION 7. Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking. Keep away from heat and sources of ignition.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Handle and store under inert gas. Reacts violently with water - strongly hygroscopic. Storage class (TRGS 510): Strongly oxidizing hazardous materials.

7.3 Specific end uses

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated!

SECTION 8. Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters:

Magnesium Perchlorate

CAS No 10034-81-8, No occupational exposure limit values, , ;

8.2 Exposure controls

Appropriate engineering controls:

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment:

Eye/face protection:

Face shield and safety glasses 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 workplace.

Respiratory protection:

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to 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).

Environmental protection:

No data available.

SECTION 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form:	Hygroscopic lumps, flakes & powder
Colour:	White
Odour:	No data available.
Odour threshold:	No data available.
pH:	No data available.
Melting point:	251°C with decomposition
Boiling point:	No data available.
Flash point:	No data available.
Flammability solid/gas:	No data available.
Upper/lower flammability or explosive limits:	No data available.
Water solubility:	Soluble.
Autoignition temp:	No data available.
Decomp temperature:	No data available.
Explosive properties:	No data available.
Oxidising properties:	The substance or mixture is classified as oxidizing with the category 2.

9.2 Other safety information

No data available.

SECTION 10. Stability and reactivity

10.1 Reactivity

No data available.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

No data available.

10.5 Incompatible materials

Water, Strong reducing agents, Organic materials, Powdered metals, Strong acids

10.6 Hazardous decomposition products

No data available. In the event of fire: see section 5

SECTION 11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity:

LD50 Intraperitoneal - Mouse - 1,500 mg/kgs.

Skin corrosion/irritation:

No data available.

In the event of fire: see section 5

Serious eye damage/eye irritation:

No data available.

In the event of fire: see section 5

Respiratory or skin sensitisation:

No data available.

In the event of fire: see section 5

Germ cell mutagenicity:

No data available.

Carcinogenicity:

No component of this product present at levels greater than or equal 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:

Inhalation - May cause respiratory irritation

Specific target organ toxicity - repeated exposure:

No data available.

Aspiration hazard:

No data available.

Potential health effects - inhalation:

No data available.

Potential health effects - ingestion:

No data available.

Potential health effects - skin:

No data available.

Potential health effects - eyes:

No data available.

Signs and symptoms of exposure:

No data available.

Additional information:

RTECS: SC8925000. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12. Ecological information

12.1 Toxicity

Toxicity to fish: No data available.

Toxicity to daphnia and other aquatic invertebrates: No data available.

Toxicity to algae: No data available.

Toxicity to bacteria: 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 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

No data available.

SECTION 13. Disposal considerations

13.1 Waste treatment methods

Product:

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is

highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging:

Dispose of as unused product.

SECTION 14. Transport information

14.1 UN number

ADR/RID/IATA/IMDG: UN1475



14.2 UN proper shipping name

ADR/RID/IATA/IMDG: MAGNESIUM PERCHLORATE

14.3 Transport hazard class(es)

ADR/RID/IATA/IMDG: 5.1

14.4 Packaging group

ADR/RID/IATA/IMDG: II

14.5 Environmental hazards

ADR/RID/IATA/IMDG:

14.6 Special precautions for user

14.7 Shipping quantities

ADR LQ maximum: 1kg

ADR EQ code: E2

ADR EQ IP/pkg: 30gm pkg to 500gm

IATA LQ Plnstruction: Y544

IATA LQ IP/pkg: 0.5kg (glass, plastic) to 2.5kg

IATA EQ code: E2

IATA EQ IP/pkg: 30gm pkg to 500gm

De minimus:

SECTION 15. Regulatory information

This safety data sheet complies with the requirements of Regulation (EC) No 1907/2006

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

No data available.

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out.

SECTION 16 Other information

The above information is believed to be correct but does not purport to be all inclusive and shall be used as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. OEA Laboratories Limited shall not be held liable for any damage resulting from the handling or contact with the above product. See www.oelabs.com for terms and conditions of sale.