

SAFETY DATA SHEET

SDS No. 1003-71502

Revised date December 10, 2015 1/4 page

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : Moisture filter 10g
NAME OF MANUFACTURER : GL Sciences Inc.
ADDRESS : 22-1 Nishishinjuku 6-chome Shinjuku-ku Tokyo 163-1130, Japan
CHARGE SECTION : International Sales Section
TELEPHONE No. : +81-3-5323-6620
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PRODUCT No. : 1003-71502
SDS No. : 1003-71502
Research use only.

2. HAZARDS IDENTIFICATION

This product is packed with a moisture adsorbent in a glass tube with silica glass wool.
We show some data about these contents for the information supplement below.

<Moisture adsorbent (Magnesium perchlorate)>

GHS CLASSIFICATION : Oxidizing solids : Category 2
HAZARD SYMBOL :



SIGNAL WORD : Danger

HAZARD STATEMENTS :

H272 : May intensify fire; oxidizer

PRECAUTIONARY STATEMENTS :

P210 : Keep away from heat, hot surface, sparks, open flames and other ignition sources. No smoking.

P220 : Keep away from clothing and other combustible materials.

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

P370+P378 : In case of fire: Use appropriate medias to extinguish.

P501 : Dispose of contents/container in accordance with all applicable regulations.

<Silica quartz wool>

GHS CLASSIFICATION : Classification not possible

HAZARD SYMBOL : - - -

SIGNAL WORD : - - -

HAZARD STATEMENTS : - - -

PRECAUTIONARY STATEMENTS : - - -

HAZARD INFORMATION : May cause respiratory tract irritation if inhaled.
May cause eye, skin and mucous irritations if contact with.
May be harmful if ingested.
May induce damage to the lung through prolonged or repeated exposure.

MOST IMPORTANT HAZARDS : Irritation of eyes, skin, respiratory system.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL IDENTITY	CONTENT	CHEMICAL FORMULA	CAS No.	TSCA INVENTORY	EINECS No.	EC INDEX No.
Magnesium perchlorate	80 %	Mg(ClO ₄) ₂	10034-81-8	Listed	233-108-3	Not established
Silica quartz wool	> 99.9 %	SiO ₂	60676-86-0	Listed	262-373-8	Not established

4. FIRST AID MEASURES

- GENERAL ADVICE** : Wash off immediately with soap and plenty of water. In the case of respirable dust, use self-contained breathing apparatus and dust impervious protective suit. Use personal protective equipment.
- INHALATION** : Move victim to fresh air. If breathing is difficult, give oxygen. If irritation persists, consult a physician.
- SKIN CONTACT** : Remove contaminated clothes and shoes, rinse skin with plenty of water or shower. Use soap to help assure removal. If irritation persists, consult a physician.
- EYE CONTACT** : Do not rub your eyes to prevent an injury, remove any contact lenses at once. Flush eyes well with flooding large amounts of running water for at least 15 minutes. Assure adequate flushing by separating the eyelids with sterile fingers. If irritation persists, consult a physician. Never rub your eyes.
- INGESTION** : Rinse mouth, give plenty of water to dilute the substance. Do not induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician.
- MOST IMPORTANT SYMPTOMS AND EFFECTS** : Respirable dust may cause irritation of mucous/respiratory tract/skin/eyes. Chlorine gas or chlorine oxide may be generated by deteriorating magnesium perchlorate, it may cause strong respiratory tract irritation, dyspnea and lung edema. Muscular weakness.

5. FIRE FIGHTING MEASURES

- EXTINGUISHING MEDIA** : This material is not a combustible product, however, may accelerate combustion of other substances.
Use an appropriate extinguishing media for surrounding fire. Powder, foam (alcohol foam), carbon dioxide, water spray.
- DISABLED EXTINGUISHING MEDIA** : Straight stream.
- FIRE & EXPLOSION HAZARDS** : Toxic, irritating, fumes or smoke may be emitted. (I.e. halogen)
- SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS** : Firemen should wear normal protective equipment(full bunker gear) and positive-pressure self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

- PERSONAL PRECAUTIONS** : Remove ignition sources and ventilate the area. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid raising dust and avoid contact with skin and eyes.
- ENVIRONMENTAL PRECAUTIONS** : Prevent spills from entering sewers, watercourses or low areas.
- METHODS FOR CLEAN UP** : Do not touch spilled material without suitable protection. After material is completely picked up, wash the spill site with soap and water and ventilate the area. Pull all wastes in a plastic bag for disposal and seal it tightly. Remove, clean, or dispose contaminated clothing.

7. HANDLING AND STORAGE

- HANDLING** : In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. Handle this product with suitable protection.
After using this product, dispose of contents/container in accordance with all applicable regulations and appropriate ways.
- STORAGE** : Store away from sunlight, heat and all ignition sources in well-ventilated dry place. Keep container tightly closed.
- INCOMPATIBLE PRODUCTS** : Strong oxidizers, acids

8. EXPOSURE CONTROL/PERSONAL PROTECTION

- ENGINEERING MEASURES** : Use exhaust ventilation to keep airborne concentrations below exposure limits. Use only with adequate ventilation.
- VENTILATION** : Local Exhaust ; Necessary, Mechanical(General) ; Recommended
- CONTROL PARAMETERS**
- ACGIH TLVs : Not established
- OSHA PEL : Not established
- NIOSH REL : Not established

PERSONAL PROTECTION

RESPIRATORY PROTECTION	: Safety dust mask(Use respirators approved under appropriate government standards and follow all regulations.)
HAND PROTECTION	: Protective gloves
EYE PROTECTION	: Safety glasses(goggles)
SKIN PROTECTION	: Protective clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	: White
SHAPE	: Solid (mass, needle)
ODOR	: odorless
pH	: 8.2 (5% aquatic solution, 25°C)
BOILING POINT	: 251°C
MELTING POINT	: No data available
FLASH POINT	: No data available
EXPLOSIVE LIMITS	: No data available
VAPOR PRESSURE	: No data available
VAPOR DENSITY	: No data available
SPECIFIC GRAVITY	: 2.60 g/cm ³
SOLUBILITY IN	: Soluble in water (99.6g/100g, 25°C), slightly soluble in Ethanol, hardly soluble in Ether.
PARTITION COEFFICIENT ; n-octanol/water	: No data available
AUTOIGNITION TEMPERATURE	: No data available
AUTODECOMPOSITION TEMPERATURE	: 250°C

10. STABILITY AND REACTIVITY

REACTIVITY	: Stable under recommended storage conditions. Magnesium perchlorate is a deliquescent material.
CHEMICAL STABILITY	: When mixed with combustibles and metal powders, it may generate a explosive mixture.
CONDITION TO AVOID	: Sunlight, heat, moisture, keep with/near incompatible materials.
INCOMPATIBLE MATERIALS	: Mineral acids, ammonia, butyl fluoride, p-dimethyl sulfoxide, ethylene oxide, hydrocarbons, organic matter, trimethyl phosphite.
HAZARDOUS DECOMPOSITION PRODUCTS	: Hydro chloride

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY -int. -	: mouse: LD50=1500 mg/kg (Magnesium perchlorate)
SKIN CORROSION/IRRITATION	: No data available
EYE DAMAGE/EYE IRRITATION	: Lack of data (silica wool)
SENSITIZATION	: No data available
GERM CELL MUTAGENICITY	: No data available
CARCINOGENICITY	: Classification not possible in human carcinogenicity (IARC: Group 3) (Silica wool)
REPRODUCTIVE TOXICITY	: No data available
SPECIFIC TARGET ORGAN TOXICITY	: No data available
ASPIRATION TOXICITY	: No data available

12. ECOLOGICAL INFORMATION

ECOTOXICITY	: Magnesium perchlorate is harmful to aquatic organism
BIODEGRADABILITY	: No data available
BIOACCUMULATION POTENTIAL	: No data available
MOBILITY IN SOIL	: No data available
OTHER ADVERSE EFFECTS	: Not listed in Montreal Protocol list.

13. DISPOSAL INFORMATION

Dispose in a hazardous-waste site in accordance with all applicable regulations. Any disposal practice must be in compliance with country, local, state, and federal laws and regulations (contact country, local or state environment agency for specific rules).

14. TRANSPORT INFORMATION

IATA

UN NUMBER : 1475
UN PROPER SHIPPING NAME : Magnesium perchlorate
CLASS : Class 5.1, oxidizing substances
PACKING GROUP : II
ADR/RID : 1475, Oxidizing substances, 5.1, III
DOT : 1475, Oxidizing substances, 5.1, III
MARINE POLLUTANT : Not classified

15. REGULATORY INFORMATION

US REGULATIONS : Labeling according to EC Directives; See section 2
EU REGULATIONS : Labeling according to EC Directives; See section 2

16. OTHER INFORMATION

NOTICE:

The information contained in the SDS description is applicable exclusively to the chemical substance identified herein and for its intended use as an analytical reference standard or reagent and to the unit quantity intended for that purpose. The information does not relate to, and may not be appropriate for, any application or larger quantity of the substance described. Our products are intended for the use by individuals possessing sufficient technical skill and qualification on use the material potential hazardous chemical. Accordingly, no representation or warranty, express or implied, with respect to merchantability and fitness for a particular purpose is made with respect to the information contained herein.

Attention:

This product in terms of chemical identity and the unit amount provide is intended for use in chemical analysis and not for human consumption, nor any other purpose.