

Magnesium, powder 20~50mesh,
JUNSEI CHEMICAL CO., LTD.,70035jis_E-2,14/06/2019

Date of issue for the 1st edition : 09/10/2014

Date of revision : 14/06/2019

Safety Data Sheet

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

Product identifier:

Product name: Magnesium, powder 20~50mesh

Product code (SDS NO): 70035jis_E-2

Details of the supplier of the safety data sheet

Manufacturer/Supplier: JUNSEI CHEMICAL CO., LTD.

Address: 1-6, Ohmano-cho, Koshigaya-shi, Saitama 343-0844, Japan

Division: Quality Assurance Department

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2. Hazards identification

GHS classification and label elements of the product

Classification of the substance or mixture

PHYSICAL AND CHEMICAL HAZARDS

Substances and mixtures which, in contact with water, emit flammable gases: Category 2

HEALTH HAZARDS

Skin corrosion/irritation: Category 2

Serious eye damage/eye irritation: Category 2A

Specific target organ toxicity – single exposure: Category 3 (Respiratory tract irritation)

ENVIRONMENT HAZARDS

Hazardous to the aquatic environment (Long-term): Category 4

(Note) GHS classification without description: Not applicable/Out of classification/Not classifiable

Label elements



Signal word: Danger

HAZARD STATEMENT

In contact with water releases flammable gases

Causes skin irritation

Causes serious eye irritation

May cause respiratory irritation

May cause long lasting harmful effects to aquatic life

PRECAUTIONARY STATEMENT

Prevention

Avoid release to the environment.

Do not allow contact with water.

Handle under inert gas. Protect from moisture.

Avoid breathing dust/fume/gas/mist/vapors/spray.

Use only outdoors or in a well-ventilated area.

Wash contaminated parts thoroughly after handling.

Wear protective gloves and face protection.

Wear eye protection/face protection.

Response

In case of fire: Use appropriate media other than water for extinction.

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Call a POISON CENTER or doctor/physician if you feel unwell.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF ON SKIN: Wash with plenty of soap and water.

Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages.

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

Storage

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Store in a dry place. Store in a closed container.

Disposal

Dispose of contents/container in accordance with local/national regulation.

Specific Physical and Chemical hazards

May catch fire or form flammable gas in contact with water.

3. Composition/information on ingredients

Mixture/Substance selection:

Substance

Ingredient name: Magnesium

Content (%): 98.0 <

Chemical formula: Mg

CAS No.: 7439-95-4

MW: 24.3050 (AW)

ECNO: 231-104-6

4. First-aid measures

Descriptions of first-aid measures

General measures

Call a POISON CENTER or doctor/physician if you feel unwell.

IF INHALED

Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER or doctor/physician if you feel unwell.

IF ON SKIN (or hair)

Take off immediately all contaminated clothing. Rinse skin with water/shower.

Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages.

Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

If skin irritation occurs: Get medical advice/attention.

IF IN EYES

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

IF SWALLOWED

Rinse mouth.

Call a POISON CENTER or doctor/physician if you feel unwell.

Most important symptoms and effects, both acute and delayed

(Symptoms when inhalation or ingestion)

Cough. Sore throat. Shortness of breath. Burning sensation in the mouth.

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(Symptoms when skin and/or eye contact)

Redness. Pain of the eyes.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

In case of fire, use dry sand to extinguish.

Unsuitable extinguishing media

Water. Form. CO2.

Specific hazards arising from the substance or mixture

Containers may explode when heated.

Fire may produce irritating, corrosive and/or toxic gases.

Runoff from fire control or dilution water may cause pollution.

May re-ignite after fire is extinguished.

Advice for firefighters

Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

Burns with an intense flame. In order to prevent eye injury do not look directly at magnesium fires.

Special protective equipment and precautions for fire-fighters

Wear fire/flame resistant/retardant clothing.

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

Firefighters should wear self-contained breathing apparatus with full face piece operated positive pressure mode.

6. Accidental release measures

Personnel precautions, protective equipment and emergency procedures

Keep unauthorized personnel away.

In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.

Ventilate area until material pick up is complete.

Wear proper protective equipment.

PUBLIC SAFETY: Ventilate closed spaces before entering.

Do not touch or walk through spilled material.

EVACUATION : Spill: See the Table of Initial Isolation and Protective Action Distances for highlighted substances. For non-highlighted substances, increase, in the downwind direction, as necessary, the isolation distance shown under "PUBLIC SAFETY".

Environmental precautions

Avoid release to headsprings, rivers, lakes, ocean and groundwater.

Runoff may create fire or explosion hazard.

Methods and materials for containment and cleaning up

Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry.

Cover with DRY earth, DRY sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.

DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.

Dike for later disposal; do not apply water unless directed to do so.

Preventive measures for secondary accident

Collect spillage.

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Use water spray to reduce vapors or divert vapor cloud drift. Avoid allowing water runoff to contact spilled material.

DO NOT GET WATER on spilled substance or inside containers.

7. Handling and storage

Precautions for safe handling

Preventive measures

(Exposure Control for handling personnel)

Avoid breathing dust/fume/gas/mist/vapors/spray.

(Protective measures against fire and explosion)

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

Do not allow contact with water.

Exhaust/ventilator

Exhaust/ventilator should be available.

Safety treatments

Avoid contact with skin.

Avoid contact with eyes.

Avoid breathing dust, fume, gas, mist or vapor.

Safety Measures/Incompatibility

Use only outdoors or in a well-ventilated area.

Wear protective gloves, protective clothing or face protection.

Wear protective gloves and face protection.

Wear eye protection/face protection.

Use personal protective equipment as required.

Handle under inert gas. Protect from moisture.

When using do not eat, drink or smoke.

Conditions for safe storage, including any incompatibilities

Recommendation for storage

Store in a well-ventilated place. Keep container tightly closed.

Keep cool. Protect from sunlight.

Store locked up.

Store in a dry place. Store in a closed container.

8. Exposure controls/personal protection

Control parameters

No control value data available in MHLW

Exposure controls

Appropriate engineering controls

Do not use in areas without adequate ventilation.

Eye wash station should be available.

Washing facilities should be available.

Individual protection measures

Respiratory protection

Wear respiratory protection.

Hand protection

Wear protective gloves.

Consult with your glove and/or personnel equipment manufacturer for selection of appropriate compatible materials.

Eye protection

Wear safety glasses with side-shields.

Wear eye/face protection.

Safety and Health measures

Wash contaminated parts thoroughly after handling.

Take off contaminated clothing and wash it before reuse.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical properties

Appearance: Powder

Color: Grey

Odor: None

pH data N.A.

Phase change temperature

Initial Boiling Point/Boiling point: 1100°C

Melting point/Freezing point: 649°C

Decomposition temperature data N.A.

Flash point data N.A.

Auto-ignition temperature: 473°C

Explosive properties: Flammability or explosive limit

Lower limit: (LEL) 0.03 kg/m³

Vapor pressure data N.A.

Vapor density data N.A.

Specific gravity/Density: 1.7g/cm³

Solubility

Solubility in water: Reaction

n-Octanol/water partition coefficient data N.A.

10. Stability and Reactivity

Reactivity

React with water.

Chemical stability

Stable under normal storage/handling conditions.

Highly flammable.

Possibility of hazardous reactions

May form explosive dust-air mixtures.

If dry, it can be charged electrostatically by swirling, pneumatic transport, pouring, etc.

The substance may ignite spontaneously on contact with air and moisture. This produces irritating or toxic fumes.

Reacts with oxidants and many other substances.

Reacts with moisture and acids. This produces flammable/explosive gas. This generates fire and explosion hazard.

Conditions to avoid

Contact with incompatible materials.

Open flames. Heat. Sparks. Moisture

Incompatible materials

Acids, Oxidizing agents, Water

Hazardous decomposition products

Hydrogen gas.

11. Toxicological Information

Information on toxicological effects

No Acute toxicity data available

Irritant properties

Skin corrosion/irritation

[GHS Cat. Japan, base data]

skin irritation (HSDB, Access on Jun 2005 et al.)

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Serious eye damage /irritation

[GHS Cat. Japan, base data]

eyes irritation (HSDB, Access on Jun 2005 et al.)

No Allergenic and sensitizing effects data available

No Mutagenic effects data available

No Carcinogenic effects data available

No reproductive toxicity data available

Delayed and immediate effects and also chronic effects from short- and long-term exposure

STOT

STOT-single exposure

[cat.3 (resp. irrit.)]

[GHS Cat. Japan, base data]

respiratory tract irritation (HSDB, Access on Jun 2005)

No Aspiration hazard data available

12. Ecological Information

Ecotoxicity

Aquatic toxicity

May cause long lasting harmful effects to aquatic life

Aquatic chronic toxicity component(s) data

[GHS Cat. Japan, base data]

Classified into Category 4, since it is metal and the behavior in the water is unknown,
though L(E) C50 <=100 mg/L .

Water solubility

Reaction (ICSC, 2011)

No Persistence and degradability data available

No Bioaccumulative potential data available

13. Disposal considerations

Waste treatment methods

Avoid release to the environment (– if this is not the intended use).

Dispose of contents/container in accordance with local/national regulation.

14. Transport Information

UN No, UN CLASS

UN No.: 1418

Proper Shipping Name : MAGNESIUM POWDER

Class or division : 4.3

Subsidiary hazard(s) : 4.2

Packing group : II

ERG GUIDE No.: 138

IMDG Code (International Maritime Dangerous Goods Regulations)

UN No.: 1418

Proper Shipping Name : MAGNESIUM POWDER

Class or division : 4.3

Subsidiary hazard(s) : 4.2

Packing group : II

IATA Dangerous Goods Regulations

UN No.: 1418

Proper Shipping Name : MAGNESIUM POWDER

Class or division : 4.3

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Subsidiary hazard(s) : 4.2

Hazard labels : Dang. when wet & Spont. comb.

Packing group : II

Environmental hazards

MARPOL Annex III – Prevention of pollution by harmful substances

Marine pollutants (yes/no) : no

15. Regulatory Information

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

Environmental hazards

US major regulations

TSCA

Magnesium

Other regulatory information

We are not able to check up the regulatory information with regard to the substances in your country or region, therefore, we request this matter would be filled by your responsibility.

Regulatory information with regard to this substance in your country or in your region should be examined by your own responsibility.

Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

Regulatory information in this section are limited to intentional ingredient(s), but does not contain information on non-intentional ingredients or impurities which are not informed by supplier(s).

16. Other information

GHS classification and labelling

Water-react. 2: H261 In contact with water releases flammable gases

Skin Irrit. 2: H315 Causes skin irritation

Eye Irrit. 2A: H319 Causes serious eye irritation

STOT SE 3: H335 May cause respiratory irritation

Aquatic Chronic 4: H413 May cause long lasting harmful effects to aquatic life

Reference Book

Globally Harmonized System of classification and labelling of chemicals, (5th ed., 2013), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN IMDG Code, 2018 Edition (Incorporating Amendment 39-18)

IATA Dangerous Goods Regulations (60th Edition) 2019

Classification, labelling and packaging of substances and mixtures (table3-1 ECNO6182012)

2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT)

2019 TLVs and BEIs. (ACGIH)

<http://monographs.iarc.fr/ENG/Classification/index.php>

Supplier's data/information

NITE Chemical Risk Information Platform (NITE-CHRIIP)

https://www.nite.go.jp/en/chem/chrip/chrip_search/systemTop

GHS Classification Guidance for Enterprises 2013 Revised Edition (Aug. 2013, METI)

General Disclaimer

This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The



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data does not signify any warranty with regard to the products' properties.

The GHS classification data given here is based on current Japan official data (NITE published in 2017).