

Safety Data Sheet

Date of Issue: 01.10.2020

Date of Expiry: 01.10.2025

1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Company Name: Address: Telephone: Facsimile: Emergency phone number: : **ECP Limited** : PO Box 34125, Birkenhead, Auckland 0746 : +64 9 480 4386 : +64 9 480 4385 : 0800 243 622 (24 hours)

Product	Magnesium Turnings			Code 29828, 4460	
CAS#	HSNO#	UN #	DG Class/es	Packing group #	
7439-95-4	HSR002692	1869	4.1		

Recommended use

: Laboratory Investigations

2: Hazards identification

2.1 GHS Classification

Flammable Solids (Category A), H228

Spontaneously Combustible Substances: self-heating substances (Category B), H251 Substances and mixtures, which in contact with water, emit flammable gases (Category B), H261 For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements Pictogram



Signal word : Danger

Hazard statement(s)

H228	: Flammable solid.
H251	: Self-heating: may catch fire.
H261	: In contact with water releases flammable gases.

Precautionary statement(s)

Prevention

P210 : Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P223 : Keep away from any possible contact with water, because of violent reaction and possible flash fire.
P231 + P232 : Handle under inert gas. Protect from moisture.
P235 + P410 : Keep cool. Protect from sunlight.
P240 : Ground/bond container and receiving equipment.
P241 : Use explosion-proof electrical/ ventilating/ lighting equipment.
P280 : Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response

P335 + P334	: Brush off loose particles from skin. Immerse in cool water/ wrap in wet bandages.
P370 + P378	: In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Storage

P402 + P404	: Store in a dry place. Store in a closed container.
P407	: Maintain air gap between stacks/ pallets.
P410	: Protect from sunlight.
P413	: Store bulk masses greater than .? kg/ .? lbs at temperatures not exceeding .? °C/ .? °F.
P420	: Store away from other materials.
P422	: Store contents under inert gas.

Disposal P501

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2.3 Other hazards - none

Substance / Mixture : Substance

3.1 Substances

Formula	: Mg
Molecular weight	: 24.31 g/mol
CAS-No.	: 7439-95-4
EC-No.	: 231-104-6
Index-No.	: 012-002-00-9

No components need to be disclosed according to the applicable regulations.

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 Flush eyes with water as a precaution.

If swallowed

Do NOT induce vomiting. 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

5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Dry powder

5.2 Special hazards arising from the substance or mixture

Magnesium oxide

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. 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). Do not flush with water. Keep in suitable, closed containers for disposal. Contain spillage, pick up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal according to local regulations (see section 13).

6.4 Reference to other sections

For disposal see section 13.

7: Handling and storage

7.1 Precautions for safe handling

Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking. Take measures to prevent the build-up of electrostatic charge.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Never allow product to get in contact with water during storage. Store under inert gas. Air and moisture sensitive.

7.3 Specific end use(s)

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

8: Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

We are not aware of any national exposure limit.

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.

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.

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 or 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.

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

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a) Appearance Form	: Turnings
b) Odour	: No data available
c) Odour Threshold	: No data available
d) pH No data available	
e) Melting point/freezing point	
Melting point/range	: 648 °C - lit.
f) Initial boiling point	
and boiling range	: 1,090 °C - lit.
g) Flash point	: No data available
h) Evaporation rate	: No data available
i) Flammability (solid, gas)	: May form combustible dust concentrations in air.
j) Upper/lower flammability or	
explosive limits	: No data available
k) Vapour pressure	: 1 hPa at 621 °C
I) Vapour density	: No data available
m) Relative density	: 1.74 g/cm3 at 25 °C
n) Water solubility	: No data available
o) Partition coefficient	: No data available
n-octanol/water	
p) Auto-ignition temperature	: The substance or mixture is classified as self-heating with the category 1.
q) Decomposition temperature	: No data available
r) Viscosity	: No data available
s) Explosive properties	: No data available
t) Oxidizing properties	: No data available

9.2 Other safety information

No data available

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

Reacts violently with water.

10.4 Conditions to avoid

Heat, flames and sparks. Exposure to moisture

10.5 Incompatible materials

Acids, Strong oxidizing agents, Acid chlorides, Halogens

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Magnesium oxide Other decomposition products - No data available In the event of fire: see section 5

11: Toxicological information

11.1 Information on toxicological effects Acute toxicity

No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitisation No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: 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. 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 No data available

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard

No data available

Additional Information

burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, chills, Fever, fatigue, muscle pain, joint pain, rash, Anorexia. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Liver - Irregularities - Based on Human Evidence

12: Ecological information

12.1 Toxicity

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

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

No data available

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.

14: Transport Information Table

		ADR/RID – European packaging certification	IMDG International Maritime Dangerous Goods Code	IATA – DGR International Air Travel Association – Dangerous Goods Regulations	
14.1	UN Number	1869	1869	1869	
14.2	UN Proper Shipping name	MAGNESIUM	MAGNESIUM	Magnesium	
14.3	Transport Hazard Class	4.1	4.1	4.1	
14.4	Packaging group	III	III	111	
14.5	Environmental Hazards	No	No	No	
14.6	Special precautions for user	None			
14.7	Incompatible materials	Acids, Strong oxidizing agents, Acid chlorides, Halogens			

15: Regulatory information

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

National regulatory information

HSNO Group Standard Approval: HSR002692 - Laboratory Chemicals and Reagent Kits

(Class 4) Group Standard 2006 Tracking Required: not required Approved Handler Cert.: not required

Notification status

AICS : On the inventory, or in compliance with the inventory
DSL : All components of this product are on the Canadian DSL
ENCS : Not in compliance with the inventory - Magnesium (non pyrophoric)
ISHL : Not in compliance with the inventory - Magnesium (non pyrophoric)
KECI : On the inventory, or in compliance with the inventory
NZIOC : On the inventory, or in compliance with the inventory
PICCS : On the inventory, or in compliance with the inventory

16: Disclaimer

The information above is believed to be accurate and represents the best information currently available to us. However, the information is not a guarantee expressed or implied, with respect to such information, and we assume no liability resulting from its use. Anyone using the chemical described here should ensure that he or she has the appropriate training and has the expertise and any equipment required for safe handling. If clarification or further information is required, please contact ECP Ltd or refer to the official handler of dangerous goods within your own company. The user should also make their own investigations to determine the suitability of the product for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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