



Safety Data Sheet

Date of Issue: 25.08.2020

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1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Company Name: : **ECP Limited**
Address: : PO Box 34125, Birkenhead, Auckland 0746
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Emergency phone number: : 0800 243 622 (24 hours)

Product	Aluminium powder			Code	1120
CAS#	HSNO#	UN #	DG Class/es	Packing group #	
7429-90-5	HSR001473	1309	4.1	II	

Recommended use : Laboratory Investigations

2: Hazards identification

2.1 GHS Classification

Spontaneously Combustible Substances: pyrophoric substances (Category A)
Substances and mixtures, which in contact with water, emit flammable gases (Category B)
Aquatic toxicity (Acute or Chronic) (Category A)

2.2 GHS Label elements, including precautionary statements



Pictogram Signal word **Danger**

Hazard statement(s)

H250 Catches fire spontaneously if exposed to air.
H261 In contact with water releases flammable gases.
H400 Very toxic to aquatic life.

Precautionary statement(s)

Prevention

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P222 Do not allow contact with air.
P223 Keep away from any possible contact with water, because of violent reaction and possible flash fire.
P231 Handle under inert gas.
P231 + P232 Handle under inert gas. Protect from moisture.
P273 Avoid release to the environment.
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.
P391 Collect spillage.

Storage

P402 + P404 Store in a dry place. Store in a closed container.

P422 Store contents under inert gas.

Disposal

P501 Dispose of contents/container to an approved waste disposal plant.

2.3 Other hazards

None

3: Composition/information on ingredients

3.1 Substances

Formula: Al

Molecular weight: 26.98 g/mol

Component	Concentration
CAS No.	7429-90-5
	<=100%

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

Cough, weight loss, anaemia, weakness, incoordination.

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

Special powder against metal fire

Dry sand

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

Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

Unsuitable extinguishing media

Water

Carbon dioxide (CO₂)

ABC powder

5.2 Special hazards arising from the substance or mixture

Aluminium 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.

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.

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. Do not flush with water. Keep in suitable, closed containers for disposal.

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.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Store in original container. Do not store near combustible materials. Keep in a cool place away from acids. Keep in a cool place away from bases. Keep in a cool place away from oxidizing agents. Store in cool place. Handle and store under inert gas.

7.3 Specific end use(s)

No data available

8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Component	CAS No.	Value	Control parameters	Basis
	7429-90-5	WES-TWA	10 mg/m ³	New Zealand. Workplace Exposure Standards for Atmospheric Contaminants

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

Safety glasses with side-shields.

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. Protective gloves against thermal risks.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Body Protection

Flame retardant antistatic protective clothing. 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.

9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance

Form: powder

Colour: silver

b) Odour

odourless

c) Odour Threshold

No data available

d) pH

No data available
e) Melting point/freezing point
Melting point/range: 660 °C
f) Initial boiling point and boiling range
2,467 °C
g) Flash point
Not applicable
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
No data available
l) Vapour density
No data available
m) Relative density
2.7 g/mL at 25 °C
n) Water solubility insoluble
o) Partition coefficient: n-octanol/water
No data available
p) Auto-ignition temperature
Not auto-flammable
q) Decomposition temperature
No data available
r) Viscosity
No data available

10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

No data available

10.3 Possibility of hazardous reactions

Risk of dust explosion. Reacts with water to generate Hydrogen gas.

Reacts with the following substances: Acids, Bases, Oxidizing agents, Halogens

10.4 Conditions to avoid

Humid air water

Heat, flames, and sparks.

Extremes of temperature and direct sunlight.

10.5 Incompatible materials

Acids, Bases, Halogens, Oxidizing agents

10.6 Hazardous decomposition products

Other decomposition products

No data available

11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - > 2,000 mg/kg

LC50 Inhalation - Rat - 4 h - > 888 mg/l

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.

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

Potential health effects

Inhalation

May be harmful if inhaled.

May cause respiratory tract irritation.

Ingestion

May be harmful if swallowed.

Skin

May be harmful if absorbed through skin. May cause skin irritation.

Eyes

May cause eye irritation.

Signs and Symptoms of Exposure

Cough, weight loss, anaemia, weakness, incoordination.

Additional Information

RTECS: BD0330000

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

No data available

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	1309	1309	1309
14.2	UN Proper Shipping name			
14.3	Transport Hazard Class	4.1	4.1	4.1
14.4	Packaging group	II	II	II
14.5	Environmental Hazards	No	No	No
14.6	Special precautions for user	No data available		

15: Regulatory information**15.1** Safety, health, and environmental regulations/legislation specific for the substance or mixture

National regulatory information

HSNO Approval Code: HSR001473

HSNO Group Standard Approval: HSR002692 - Laboratory Chemicals and Reagent Kits (Class 4) Group Standard 2006

Tracking Required: not required

Approved Handler Cert.: not required

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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