SDS 1120.82 Aluminium Powder

Date of Issue/re-issue: 06/12/20218 Expiry 01/01/2024

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Company Name **ECP Limited**

Address: 39 Woodside Ave, Northcote, Auckland , New Zealand

Emergency Tel: 0800 243 622 or .....0800 CHE M CA LL	**Tel** +64 9 480 4386	**FAX** +64 9 480 4385

Product	Aluminium powder				**Code**	1120.82
CAS#	**HSNO#**	**UN #**	**DG Class/es**	**Packing group #**	**Tracking?**	**Handlers Certificate?**
7429-90-5	HSR001473	1309	4.1	II	No	No

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 (CO_2)

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.

****END*******END*******END*******END*******END***