



Material Safety Data Sheet

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Production Name: Anti-Seize Lubricant **SuperChem861**

Date of Preparation: 2017-08-20

Date of Audit: 24, Oct. 2022

Company: AIGI Environmental Incorporation

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For Chemical Emergency:

Call: 800 828 9829

Recommended Applications: Anti-Seize Lubricant. Do not use at oxygen application.

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Regulation (EC) No. 1272/2008

According to Regulation (EC) No 1272/2008 on the classification, labelling and packaging of substances and mixtures, this product does not meet the classification criteria for any hazard category.

2.2 Label Elements:

Regulation (EC) No. 1272/2008

Special labelling of certain mixtures

EUH210 obtains MSDS as required.

2.3 Other hazards: None known

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substance: Mixture

Hazardous Ingredients¹

Ingredients	CAS	% Wt.	EC NO.	Index NO.	REACH NO.
Aluminum**	7429-90-5	5~10	231-072-3	013-002-00-1	01-2119529243-45

GHS Flammable solid, classification 1; Substances and mixtures that emit flammable gas when encountering water, classification 2; H228 H261

SECTION 4: FIRST AID MEASURES

Skin contact: Wash skin with soap and water. Contact physician if irritation persists.

Eye contact: Flush eyes for at least 15 minutes with large amounts of water. Contact physician if irritation persists.

Inhalation: Remove to fresh air. If not breathing, administer artificial respiration. Contact physician.

Ingestion: Do not induce vomiting. Contact physician immediately.

Most important symptoms and effects, both acute and delayed: Direct contact can cause severe eye irritation, possibly burns and skin irritation. High vapor concentrations may irritate eyes, respiratory tract and possibly cause dizziness and nausea.



SECTION 5: FIREFIGHTING MEASURES

Suitable extinguishing media: Carbon dioxide, dry chemical, foam or water fog

Unsuitable extinguishing media: High volume water jet

Special hazards: Pressure vessels will explode when heated

Special fire extinguishing measures: Cool exposed containers with water. Recommend Firefighters wear self-contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Evacuation area, fully ventilated, utilize exposure controls and personal protection as specified in Section 8.

Environmental protection: Prevent from entering sewers, drainage ditches, rivers and lakes.

Methods and material for containment and cleaning up: The methods of containment and removal of spilled chemicals and the disposal materials used: contain spill to a small area, keep away from ignition sources and prohibit smoking. The spill may cause the ground to slip, which shall be absorbed by sand, sawdust, clay or other inert materials and then place in a suitable container for disposal.

SECTION 7: HANDLING AND STORAGE

Operation and disposal: observe good operation procedures; keep away from ignition sources, do not smoke, and do not spray on open flames or other ignition sources. Do not smoke, eat or drink in the working area.

Conditions for safe storage: Store in a cool and dry place. Pressure vessels should be protected from sunlight and should not be exposed to temperatures exceeding 50 °C.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limit values (EH40)

CAS NO.	Substance	ppm	mg/m ³	Category	Source
7429-90-5	Aluminum metal, respirable dust	-	4	TWA(8h)	WEL

DNEL/DMEL

CAS NO.	Substance	Exposure route	Effect	Limit values
7429-90-5	Aluminium powder(stable)			
	Worker DNEL, long term	Inhalation	Systemic	3.72 mg/m ³
	Worker DNEL, long term	Inhalation	Part	3.72 mg/m ³
	Consumer DNEL, long term	Oral	Systemic	7.9mg/kg bw/day

8.2. Exposure controls

Engineering measures: Use only in well ventilated areas. If exposure limits are exceeded, provide adequate ventilation.

Individual protection measures



Respiratory protection: Not normally needed. If exposure limits are exceeded, use a half or full-face respirator with combined dust/organic vapour filter.

Hand protection: Chemical resistant gloves (e.g., nitrile rubber, neoprene)

Eye protection: Safety glasses

Skin and body protection: usually not required. If the leakage exceeds the standard, please wear rubber protective clothing, one-piece work clothes and work boots.

Hygienic measures: keep good personal hygiene habits, wash hands thoroughly after operating or handling the product, and clean work clothes and protective equipment regularly to remove pollutants; No smoking or eating in the workplace; Keep the workplace clean.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state : soft paste

Odour: mild odor

Colour: gray

Vapour pressure @ 20°C: <1mmHg

Boiling point: Not applicable

% Aromatics by weight: No data available

Melting point: No data available

PH: Not applicable

% Volatile (by volume): No data available

Density: ≈1.1kg/L

Flast point: >300°C

Vapour density (air=1) : No data available

Ignition temperature: No data available

Water solubility: insoluble

Explosive limit: No data available

Rate of evaporation (ether=1) : No data available

Other information: None

SECTION 10: STABILITY AND REACTIVITY

Chemical stability : Stable when stored at normal ambient temperature.

Possibility of hazardous reactions : No dangerous reactions known under conditions of normal use.

Hazardous substances generated by decomposition: will not decompose under normal use conditions.

Conditions to avoid :Open flames and red hot surfaces.

Materials to avoid: strong acid, strong alkali and strong oxidant such as liquid chlorine and concentrated oxygen.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Based on available data on components, the classification criteria are not met.

CAS NO.	7429-90-5	Chemical name		Aluminium powder(stable)
Exposure route	Dose	Species	Source	Method
Inhalation	LD50 >15900mg/kg	rat	Research Report (1969)	OECD Guideline 401

Irritation and corrosivity: based on available data, the classification criteria are not met.

Germ cell mutagenicity/Carcinogenicity/Reproductive toxicity: based on available data, the classification criteria are not met.

STOT – single exposure: based on available data, the classification criteria are not met.

STOT – repeated exposure: based on available data, the classification criteria are not met.

Aspiration hazard: based on available data, the classification criteria are not met.

Other information: None known



SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

CAS NO.	7429-90-5	Chemical name			Aluminium powder(stable)
Aquatic toxicity	Dose	h/d	Species	Source	Method
Acute fish toxicity	LC50 6.17mg/l	96h	Rainbow trout	Canadian Journal of Fisheries and Aquatic Product	Juvenile rainbow trout exposed to fluoride
Acute algal toxicity	ErC50 0.0169 mg/l	76h	Crescent algae	Research Report (2009)	OECD Guideline 201
Crustacean acute toxicity	EC50 0.72mg/l	48h	Ceriodaphnia dubia	Research Report (1992)	Others: United States Environmental Protection Agency, 1985. measuring method
Fish toxicity	NOEC 0.4mg/l	7d	Pimephales promelas	Research Report (1992)	Others: USEPA 1989. Short term approach
Crustacean toxicity	NOEC 1.02mg/l	6d	Pimephales promelas	Research Report (1992)	Others: United States Environmental Protection Agency, 1985. measuring method

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

Based on Annex XIII of REACH, the substances in the mixture do not meet the PBT/vPvB classification criteria.

12.6. Other adverse effects

No data available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal recommendations : Dispose of waste according to applicable legislation.

Contaminated packaging : Non-contaminated packages may be recycled. Dispose of waste according to applicable legislation.

SECTION 14: TRANSPORT INFORMATION

Land transport (ADR/RID)

14.1 UN number: No dangerous good in sense of this transport regulation.

14.2 UN proper shipping name: No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

MSDS SuperChem 862



14.4. Packing group: No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.1 UN number: No dangerous good in sense of this transport regulation.

14.2 UN proper shipping name: No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1 UN number: No dangerous good in sense of this transport regulation.

14.2 UN proper shipping name: No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.1 UN number: No dangerous good in sense of this transport regulation.

14.2 UN proper shipping name: No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: No dangerous good in sense of this transport regulation.

14.5. Environmental hazards: No

14.6 Special precautions for user: No information available.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code: No information available.

SECTION 15: REGULATORY INFORMATION

This MSDS complies with the following national standards

《Content and Project Sequence of Safety Data Sheet for Chemicals 》 (GB/T16483-2008)

《General Rules for Classification and Hazard Publicity of Chemicals 》 (GB13690-2009)

《Classification and Name Number of Dangerous Goods 》 (GB6944-2012)

《Classification Method for Transport Packaging of Dangerous Goods 》 (GB/T15098-2008)

《Guidelines for the Preparation of Labels of Hazardous Chemicals 》 (GB15258-2009)

《Classification and Name Number of Dangerous Goods 》 (GB6944-2012)

《Packaging Marks for Dangerous Goods 》 (GB190-2009)

《Pictorial Marks for Packaging, Storage and Transportation 》 (GB/T191-2008)

《List of Dangerous Goods 》 (GB12268-2012)

《General Rules for Storage of Common Dangerous Goods 》 (GB15603-1995)

《General Technical Conditions for Transport Packaging of Dangerous Goods 》 (GB12463-1990)

《General Rules for Classification and Safety of Chemicals 》 (GB13690-2009)

《Specifications for Classification and Labeling of Chemicals 》 (GB30000)

And the following rules:

《Provisions on the Administration of Road Transport of Dangerous Goods 》 (Decree No. 2, 2013 of the Ministry of Transport of the People's Republic of China)



《Regulations on the Administration of Railway Transport of Dangerous Goods 》 (2008 Edition of the Ministry of Railways of the People's Republic of China)

《Regulations on the Safety Management of Hazardous Chemicals 》 (promulgated by the State Council in 2013)

《List of the Most Common Dangerous Goods 》

《Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Wastes 》

《Recommendations on the Transport of Dangerous Goods 》 United Nations (UN TRDG)

SECTION 16: OTHER INFORMATION

Key literature references

1. Zhou Guotai, Safety Technology of Dangerous Chemicals, Chemical Industry Press, 1997
2. Toxic Chemicals Management Office of the State Environmental Protection Administration, Beijing Institute of Chemical Industry, Environmental Data Manual of Chemical Toxicity Regulations, China Environmental Science Press, 1992
3. New Safety Manual for Dangerous Goods, Chemical Industry Press, April 2001
4. 《Catalogue of Hazardous Chemicals (2015 Edition)》

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