

COLESHILL ALUMINIUM LIMITED



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Aluminium Alloy Ingots for Sand Casting
Gravity and Pressure Casting
Hardener Alloys

Established in 1957

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product Name: **Aluminium Foundry Alloys**

Use (s): **Remelting and Casting**

Appearance and Odour: **Grey to silver solid: odourless**

Supplier:

Coleshill Aluminium Limited. Gorse Lane, Coleshill, Warwickshire B46 1JU

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2. Hazards Identification

Not hazardous in solid form. Fines particles from processing may be readily ignitable. Fine particles and molten metal are highly reactive with water, strong oxidisers, acids and alkalis, halogenated compounds and certain metal oxides.

3. Composition/Information on Ingredients

Components:

CAS	EC number	Designation	Content	Classification	R Phrase(s)
7429-90-5	231-072-3	Aluminium	Majority	-	-
7440-50-8	231-159-6	Copper	Up to 12%	-	-
7440-02-0	231-111-4	Nickel	Up to 1%	-	-
7439-95-4	231-104-6	Magnesium	Up to 12%	-	-
7439-89-6	231-096-4	Iron	Up to 1.5%	-	-
7440-21-3	231-130-8	Silicon	Up to 26%	-	-
7440-66-6	231-158-0	Zinc	Up to 14%	-	-
7439-96-6	231-105-1	Manganese	Up to 3%	-	-
7440-32-6	231-142-3	Titanium	Up to 1%	-	-
7440-31-5	231-141-8	Tin	Up to 8%	-	-

*For more detailed chemical composition, refer to the certificate of analysis

Identification number of the European Commission relative to EINECS (European Inventory of Existing Commercial Chemical Substances) or ELINCS (European List of Notified Chemical Substances).

4. First Aid

General Information: No special measures required

Inhalation: In case of symptoms, remove to a ventilated area. If symptoms persist, consult a doctor

Skin Contact: In case of burns with hot metal, rinse with plenty of cold water. If burn is severe, consult a doctor

Eyes Contact: Flush eyes thoroughly with water, taking care to rinse under eyelids. If symptoms continue, consult a doctor

Ingestion: Not applicable

5. Fire Fighting Measure(s)

Extinguishing Media: Not a fire hazard unless in particle form (small chips, fine turnings, dusts). Suspensions of aluminium dust in air may pose a severe explosion hazard, especially in a confined atmosphere. Avoid sparks and prevent electrostatic charges from accumulating. A potential for explosion exists for a mixture of fine and coarse particles if at least 15% to 20% of the material is finer than 44 microns (325 mesh). Buffing and polishing generate finer material than grinding, sawing and cutting. In case of aluminium fires, use a class D dry-powder extinguisher. Do not use water or halogenated extinguishing media.

Hazardous Combustion Product(s): Not applicable

6. Accidental Release Measures

Environmental Protection/Cleaning Method(s): Recycle if possible

7. Handling and Storage

Handling Precautions: Because of the risk of explosion, aluminium ingots and metal scrap should be thoroughly dried prior to remelting. Exercise caution before handling to ensure metal is not hot.

Storage Conditions: Not applicable

8. Exposure Controls/Personal Protection

Components with values that require workplace monitoring

CAS Number	Designation	Workplace Exposure Limits mg/m ³	
		Long Term	Short Term
7429-90-5	Aluminium		
	<ul style="list-style-type: none"> • Inhalable dust • Respirable dust 	10 4	- -
7440-50-8	Copper		
	<ul style="list-style-type: none"> • Fume • Dust and mist 	0.2 1	- 2
7439-96-5	Manganese (Mn and compounds)		
	<ul style="list-style-type: none"> • Fume 	0.5	-
1309-48-4	Magnesium (oxide)		
	<ul style="list-style-type: none"> • Inhalable dust • Fume/respirable dust 	10 4	- -
7440-31-5	Tin	2	4
7440-32-6	Titanium (oxide)		
	<ul style="list-style-type: none"> • Inhalable dust • Respirable dust 	10 4	- -
7440-21-3	Silicon		
	<ul style="list-style-type: none"> • Inhalable dust • Respirable dust 	10 4	- -
1309-37-1	Iron		
	<ul style="list-style-type: none"> • Oxide fume 	5	10
7440-02-0	Nickel	0.5	-

Use suitable respiratory protection if workplace concentration requires it
 Filler type P1
 Protection of eyes, hands, skin not mandatory

9. Physical and Chemical Properties

pH:	Not applicable	Flash Point:	Not applicable
Boiling Point:	Not applicable	Autoignition Temperature:	Not applicable
Melting Point:	500-770 °C	Lower Flammable Limit:	Not applicable
Vapour Pressure:	Not applicable	High Flammable Limit:	Not applicable
Vapour Density (air=1)	Not applicable	Evaporation Rate:	Not applicable
Relative Density (water=1)	2.8	Water Solubility	Not applicable
Odour Threshold:	Not applicable		

10. Stability and Reactivity

Massive metal is stable and non-reactive under normal conditions of use, storage and transport.

Conditions and Material to Avoid:

Molten aluminium may explode on contact with water. In the form of fine particles, may explode when mixed with halogenated acids, halogenated solvents, bromates, iodates and ammonium nitrate. Aluminium particles on contact with copper, lead or iron oxides can react vigorously with release of heat if there is a source of ignition or intense heat.

Hazardous Decomposition Product(s):

In the form of particles (small chips, fine turnings, dusts), aluminium reacts with water and air humidity, strong basic solutions, strong acidic solutions, halogenated acids (eg hydrofluoric acid), producing flammable hydrogen gas.

11. Toxicological Information

Acute and Chronic Toxicity:

Aluminium does not present acute or chronic health effects.

Sensitisation:

No sensitivity effect known from the alloy

Carcinogenicity:

The alloy is not carcinogenic

12. Ecological Information

Ecotoxicity: Aluminium is not classified ecotoxic or hazardous to the aquatic environment.

13. Disposal Considerations

Aluminium scrap and waste should be recycled.
Aluminium in the form of fine particles may be reactive. (European Waste Catalogue EU 12 01 03 : Wastes from shaping and physical and mechanical surface treatment of metals and plastics; non-ferrous metal filings and turnings.)

14. Transport Information

Not regulated under ADR (road), ICAO/ IATA (air), IMDG (sea) or RID (rail).

15. Regulatory Information

The material is not subject to classification according to EC lists and other sources of literature known to us.

16. Other Information

COLESHILL LABORATORIES LIMITED

Registered Office

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BS EN ISO 9001 : 2015

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Kinetrol Limited
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GU9 9NU

TEST REPORT

Serial Number: 34442

Date: 29 April 2026

Order Number
Your Reference 34442
Description KIN-LM9-B2539 04/26
Specification LM9 BS 1490 for chemical analysis

Elements %	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ni	Ti	Pb	Sn
Requirements	10.0 to 13.0	0.6 MAX	0.20 MAX	0.3 to 0.7	0.2 to 0.6	0.05 MAX	0.1 MAX	0.1 MAX	0.2 MAX	0.1 MAX	0.05 MAX
Results	10.66	0.45	0.13	0.47	0.52	0.01	0.03	0.04	0.04	0.01	0.92

Elements %	Sr	Na								
Requirements										
Results										

End of test report

For and on behalf of COLESHILL LABORATORIES LIMITED