LM138 Lead Free Low Melt Moulding Alloy Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Date of issue: 13/03/23 Version: 1.2

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product form	:	Ingot
Product name	:	LM138 Lead Free Low Melt Moulding Alloy
Type of product	:	Alloy

1.2 Relevant identified uses of the substance or mixture and uses advised against

1.2.1 Relevant identified uses

Main use category	:	Industrial use
Industrial/Professional use spec	:	Industrial use
Use of the substance/mixture	:	Soldering
Function or use category	:	Welding and soldering products, flux products

1.2.2 Uses advised against

No additional information available

1.2.2 Uses advised against

No additional information available

1.3 Details of the supplier of the safety data sheet

Easy Composites Ltd
Unit 39, Park Hall Business Village, Stoke on Trent,
Staffordshire,
ST3 5XA.
United Kingdom.

Tel: +44 (0)1782 454499 -

sales@easycomposites.com

1.4 Emergency telephone number

Emergency number : +44 (0)1782 454499 (working hours only)

Section 2: Hazards identification

2.1 Classification of the substance or mixture

Not classified

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

No labelling applicable

2.3 Other Hazards

Other hazards not contributing to the classification

As supplied this product is not hazardous, however this product may become hazardous in use and the information in this data sheet reflects the hazards associated with melting, brazing and other metallurgical operations. In brazing metals give rise to thermally produced particulates of smaller dimension than may be produced if the metals are divided mechanically. Where insufficient ventilation or respiratory protection is available these particulates may produce “metal fume fever” in workers from an acute or long term exposure.

Section 3: Composition/information on ingredients

3.1 Substance

Not applicable

3.2 Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
BISMUTH	(CAS No) 7440-69-9 (EC no) 231-177-4	40-60	Not classified
Tin	(CAS No) 7440-31-5 (EC no) 231-141-8	40-60	Not classified

Full text of H-statements: see section 16

Section 4: First aid measures

4.1 Description of first aid measures

First-aid measures general : Get medical advice/attention if you feel unwell.

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, seek medical advice.

First-aid measures after skin contact : Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Not expected to present a significant eye contact hazard under anticipated conditions of normal use. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

First-aid measures after ingestion : Not expected to present a significant ingestion hazard under anticipated conditions of normal use. Rinse mouth. If large quantities are ingested, seek medical advice/attention.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : Inhalation of fumes may cause metal fume fever. ACUTE “Metal Fume Fever” Symptoms include: irritation of eyes, nose, throat, and skin; flu-like symptoms – sudden or delayed onset of chills, weakness, fatigue, nausea, vomiting, headache, diarrhea, muscular pains; tightness of chest; paralysis; loss of consciousness or death.

Symptoms/injuries after skin contact : Repeated or prolonged contact may cause slight irritation to the skin.

Symptoms/injuries after eye contact : Dust from this product may cause eye irritation.

Symptoms/injuries after ingestion : Not expected to present a significant ingestion hazard under anticipated conditions of normal use. There may be irritation to the throat.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Section 5: Firefighting measures

Suitable extinguishing media : Dry powder. Use extinguishing media appropriate for surrounding fire.

5.2 Special hazards arising from the substance or mixture

Fire hazard : The product is not flammable.

Explosion hazard : Product is not explosive.

Reactivity in case of fire : Not known.

Hazardous decomposition products in case of fire : Toxic fumes may be released

5.3 Advice for firefighters

Precautionary measures fire : No special measures required.

Firefighting instructions : Use extinguishing media appropriate for surrounding fire.

Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

General measures	: Avoid release to the environment.

6.1.1. For non-emergency personnel

Protective equipment	: Wear suitable protective clothing, gloves and eye or face protection.
Emergency procedures	: Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe dust, fume.

6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. Wear suitable protective clothing, gloves and eye or face protection. For further information refer to section 8: "Exposure controls/personal protection". Avoid contact with skin and eyes. Do not breathe Dust, fume.
Emergency procedures	: Ventilate area.

6.2 Environmental precautions

Avoid release to the environment.

6.3 Methods and material for containment and cleaning up

For containment	: Collect spillage.
Methods for cleaning up	: Pick up solid material. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13).
Other information	: Dispose of in accordance with relevant local regulations

6.4 Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For disposal of solid materials or residues refer to section 13 : "Disposal considerations".

Section 7: Handling and storage

7.1 Precautions for safe handling

Precautions for safe handling	: Ensure good ventilation of the work station. Wear personal protective equipment. Avoid creating or spreading dust. Do not breathe dust, fume.
Hygiene measures	: Always wash hands after handling the product. Do not eat, drink or smoke when using this product. Wash hands and other exposed areas and remove contaminated clothing before eating, drinking or smoking and when leaving work.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures	: Ensure adequate ventilation, especially in confined areas.
Storage conditions	: Store in a well-ventilated place.
Incompatible products	: Corrosive substances.
Incompatible materials	: Acetylene; ammonia; nitric acid; ethylene imine; sulfuric acid; chlorine trifluoride; peroxides; permonosulfuric acid; peroxyformic acid; oxalic acid; tartaric acid; bromoazide; halogens; bromine trifluoride; cupric nitrate; sulfur.
Storage area	: Store in a well-ventilated place.
Packaging materials	: Keep only in original container.

7.3 Specific end use(s)

Welding and soldering products, flux products.

Section 8: Exposure controls/personal protection

8.1 Control parameters

No additional information available

8.2 Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protective equipment:

Gloves. Safety glasses.

Materials for protective clothing:

Wear suitable protective clothing

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

During brazing operations, the most significant route of overexposure is via inhalation of fumes, in case of insufficient ventilation, wear suitable respiratory equipment

Environmental exposure controls:

Avoid release to the environment.

Other information:

During brazing operations, the most significant route of overexposure is via inhalation of fumes.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	:	Solid
Appearance	:	Silver-gray alloy. Metallic wire, rod, strip.
Colour	:	Silver.
Odour	:	odourless.
Odour threshold	:	No data available
pH	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	No data available
Freezing point	:	Not applicable
Boiling point	:	No data available
Flash point	:	Not applicable
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Non flammable
Vapour pressure	:	No data available
Relative vapour density at 20 °C	:	No data available
Relative density	:	Not applicable
Solubility	:	insoluble in water.
Log Pow	:	No data available

Viscosity, kinematic	:	Not applicable
Viscosity, dynamic	:	No data available
Explosive properties	:	Product is not explosive.
Oxidising properties	:	Oxidising solids Not applicable.
Explosive limits	:	Not applicable

9.2 Other information

No additional information available

Section 10: Stability and reactivity

10.1 Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4 Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5 Incompatible materials

Acetylene; ammonia; nitric acid; ethylene imine; sulfuric acid; chlorine trifluoride; peroxides; permonosulfuric acid; peroxyformic acid; oxalic acid; tartaric acid; bromoazide; halogens; bromine trifluoride; cupric nitrate; sulfur.

10.6 Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity	:	ACUTE “Metal Fume Fever” Symptoms include: irritation of eyes, nose, throat, and skin; flu-like symptoms – sudden or delayed onset of chills, weakness, fatigue, nausea, vomiting, headache, diarrhea, muscular pains; tightness of chest; paralysis; loss of consciousness or death (Alloys in their solid state do not produce inhalation, skin or ingestion hazards. However, heating welding, cutting, brazing, grinding and machining may cause dust or fumes to be released which could be harmful if inhaled.)
Skin corrosion/irritation	:	Not classified (Alloys in their solid state do not produce inhalation, skin or ingestion hazards. However, heating welding, cutting, brazing, grinding and machining may cause dust or fumes to be released which could be harmful if inhaled.)
Additional information	:	Contact dermatitis may result from direct exposure to the skin.
Serious eye damage/irritation	:	Not classified (Alloys in their solid state do not produce inhalation, skin or ingestion hazards. However, heating welding, cutting, brazing, grinding and machining may cause dust or fumes to be released which could be harmful if inhaled.)
Additional information	:	Dust from this product may cause eye irritation
Respiratory or skin sensitisation	:	Not classified (Alloys in their solid state do not produce inhalation, skin or ingestion hazards. However, heating welding, cutting, brazing, grinding and machining may cause dust or fumes to be released which could be harmful if inhaled.)
Germ cell mutagenicity	:	Not classified (Alloys in their solid state do not produce inhalation, skin or ingestion hazards. However, heating welding, cutting, brazing, grinding and machining may cause dust or fumes to be released which could be harmful if inhaled.)
Carcinogenicity	:	Not classified (Alloys in their solid state do not produce inhalation, skin or ingestion hazards. However, heating welding, cutting, brazing, grinding and machining may cause dust or fumes to

be released which could be harmful if inhaled.)

Reproductive toxicity	:	Not classified (Alloys in their solid state do not produce inhalation, skin or ingestion hazards. However, heating welding, cutting, brazing, grinding and machining may cause dust or fumes to be released which could be harmful if inhaled.)
Specific target organ toxicity (single exposure)	:	Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity (repeated exposure)	:	Not classified (Based on available data, the classification criteria are not met)

Aspiration hazard hazards.	: Not classified (Alloys in their solid state do not produce inhalation, skin or ingestion However, heating welding, cutting, brazing, grinding and machining may cause dust or fumes to be released which could be harmful if inhaled.)

Section 12: Ecological information

12.1 Toxicity

Ecology – general	: The product is not considered harmful to aquatic organisms nor to cause long term adverse effects in the environment.
Ecology – wat	: The product does not have any known adverse effect on the tested aquatic organisms.

12.2 Persistance and degradability

LOWMELT 138 Alloy	
Persistence and degradability	The product is not biodegradable.

12.3 Bioaccumulative potentail

LOWMELT 138 Alloy	
Bioaccumulative potential	Not established

12.4 Mobility in soil

LOWMELT 138 Alloy	
Ecology - soil	Not established.

12.5 Results of PBT and vPvB

No additional information available

12.6 Other adverse effects

Other adverse effects	: None known.
Additional information	: Avoid release to the environment

Section 13: Disposal Considerations

13.1 waste treatment methods

Regional legislation (waste)	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's instructions
Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.

Section 14: Transport information

In accordance with ADR / RID / IMDG / IATA / AND

14.1 UN number

UN-No. (ADR)	: Not applicable
UN-No. (IMDG)	: Not applicable
UN-No. (IATA)	: Not applicable
UN-No. (ADN)	: Not applicable
UN-No. (RID)	: Not applicable

14.2 UN proper shipping name

Proper Shipping Name (ADR)	: Not applicable
Proper Shipping Name (IMDG)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable
Proper Shipping Name (ADN)	: Not applicable
Proper Shipping Name (RID)	: Not applicable

14.3 Transport hazards class(es)

ADR

Transport hazard class(es) (ADR) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

ADN

Transport hazard class(es) (ADN) : Not applicable

RID

Transport hazard class(es) (RID) : Not applicable

14.4 Packing group

Packing group (ADR) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable
Packing group (ADN) : Not applicable
Packing group (RID) : Not applicable

14.5 Environmental hazard

Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available

14.6 Special precautions for user

- Overland transport

Not applicable

- Transport by sea

Not applicable

- Air transport

Not applicable

- Inland waterway transport

Not applicable

- Rail transport

Not applicable

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable

Section 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex II restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances

15.1.2 National regulations

No additional information available

15.2 Chemical safety assessment

No chemical safety assessment has been carried out.

Section 16: Other information

Data sources : The European Chemicals Agency (ECHA).

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product