



EMISHA DESIGN AND CONSULTING S.A. DE C.V.

SAFETY DATA SHEET · NOM-018-STPS-2015 · GHS

Emisha Liquid Ultra 1gr

Liquid Metal · High Thermal Conductivity

Gallium-Indium Alloy · Liquid Metal Thermal Paste

PRODUCT CODE
E-LM-U-1GR

REVISION DATE
March 2026

VERSION
1.0

PAGES
6



H290 · MAY BE CORROSIVE TO METALS

Category 1 — Corrosive to metals · GHS/GHS classification per NOM-018-STPS-2015
No health hazard label required under normal conditions of use

⚠ ATTENTION

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

1.1 PRODUCT IDENTIFIER

Trade name: Emisha Liquid Ultra 1gr Liquid Metal High Thermal Conductivity, Compatible with PC, Xbox, PS5, Consoles, Laptops

Chemical name: Gallium-Indium alloy (GalIn)

Product code: E-LM-U-1GR

Other names: Liquid Metal Thermal Compound; Liquid Metal Thermal Paste

Marketplace listing title (ES): Emisha Liquid Ultra 1gr Metal Líquido Alta Conductividad Térmica Compatible con PC, Xbox, PS5, Consolas, laptops

1.2 IDENTIFIED USES

- ▶ Thermal paste/compound for processors and heat sinks
- ▶ High-performance thermal interface for electronic applications
- ▶ Professional and technical use only

1.3 SUPPLIER / MANUFACTURER DETAILS

Company: Emisha Design And Consulting S.A. De C.V.

Address: Sur 73B, Col. Sinatel, Iztapalapa, C.P. 09470, Ciudad de México, CDMX, Mexico

Phone: +52 1 55 6170 3445

Email: 3dprint@emisha.com.mx

Website: www.emisha.com.mx

1.4 EMERGENCY PHONE

CENACOM (24 hrs): 800 003 2700 CENAPRED: 55 5004 1525
Mexican Red Cross: 065 / 800 890 1200 Local emergency: 911

2 HAZARD IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Reference standard: NOM-018-STPS-2015 / GHS (7th edition)

HAZARD CLASS	CATEGORY	H CODE
Corrosive to metals	1	H290

Not classified as hazardous to health under normal conditions of industrial use.

2.2 GHS LABEL ELEMENTS

Pictogram: GHS05 (Corrosive to metals)

Signal word: Warning

Hazard statements:

- ▶ H290 – May be corrosive to metals.

Precautionary statements:

- ▶ P102 – Keep out of reach of children.
- ▶ P234 – Keep only in the original container.
- ▶ P262 – Do not get in eyes, on skin, or on clothing.
- ▶ P280 – Wear protective gloves/clothing/eye/face protection.
- ▶ P302 – Avoid contact with skin (may cause irritation).
- ▶ P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- ▶ P390 – Absorb spillage to prevent material damage.
- ▶ P406 – Store in a non-corrosive, non-metallic container.

2.3 OTHER HAZARDS

If standard industrial hygiene practices are observed, handling this product poses no significant health risks. The product presents no fire or explosion hazard.

3 COMPOSITION / INFORMATION ON INGREDIENTS

3.1 MIXTURE · ALLOY COMPOSITION

GALLIUM (Ga) · 75%

INDIUM (In) · 25%

COMPONENT	CAS NO.	EC / EINECS NO.	CONCENTRATION (%)	GHS CLASSIFICATION
Gallium (Ga)	7440-55-3	231-163-8	70–80 %	H290 (corrosive to metals, Cat. 1)
Indium (In)	7440-74-6	231-180-0	20–30 %	No applicable hazard classification

Formulation: The alloy remains liquid at room temperature (melting point ≈ 15.7 °C). Contains no mercury, lead, or SVHC substances registered under REACH.

4 FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES

General: Remove the casualty from the exposure area. Consult a physician if symptoms persist.

Inhalation: Move the person to fresh air. Keep warm and at rest. Administer oxygen if breathing is difficult. Seek immediate medical attention.

Skin contact: Remove contaminated clothing. Brush the material off the skin. Wash the affected area with soap and water for at least 15 minutes. Seek medical attention if irritation develops or persists.

Eye contact: Rinse the eyes with lukewarm water, including under the upper and lower eyelids, for at least 15 minutes. Remove contact lenses if possible. Seek medical attention if irritation persists.

Ingestion: Rinse the mouth with water. Do not induce vomiting. Seek medical attention. Never give anything by mouth to an unconscious person.

4.2 MAIN SYMPTOMS AND EFFECTS

- ▶ Mild skin irritation with frequent or prolonged contact
- ▶ Possible eye irritation from splashes
- ▶ No acute effects expected under normal use

4.3 INDICATION OF IMMEDIATE MEDICAL ATTENTION

No special treatment is known to be required. Treat symptoms as they appear.

5 FIREFIGHTING MEASURES

5.1 EXTINGUISHING MEDIA

Suitable media: The product is non-flammable. In case of a surrounding fire: use dry powder, CO₂, or foam.

Unsuitable media: Direct water jet on the overheated product.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE

If metallic gases/oxides form at high temperature, use respiratory protective equipment.

5.3 ADVICE FOR FIREFIGHTERS

Use self-contained breathing apparatus (SCBA) independent of ambient air. Wear full protective clothing.

6 ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS

Slip hazard from spillage. Avoid contact with skin and eyes. Use appropriate PPE. Ventilate the area.

6.2 ENVIRONMENTAL PRECAUTIONS

Collect the spilled product. Provide product residues for proper disposal. Prevent entry into drains or watercourses.

6.3 METHODS OF CONTAINMENT AND CLEANUP

- ▶ Large quantities are absorbed with a syringe or collected manually
- ▶ Remove product residues with a soapy solution
- ▶ Do not use aluminum materials for cleanup

6.4 ADDITIONAL REFERENCES

Manage waste in accordance with Section 13. Cleaning agent: diluted hydrochloric acid solution or soap-and-water solution for surfaces.

7 HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

- ▶ Handle in accordance with standard industrial hygiene practices
- ▶ Avoid spills and unnecessary contact with other metallic materials
- ▶ Handling the product outside its original packaging may alter its quality and purity
- ▶ The manufacturer assumes no liability for changes resulting from external processing
- ▶ Do not use aluminum containers

7.2 CONDITIONS FOR SAFE STORAGE

- ▶ Avoid extreme temperatures at the storage location
- ▶ Do not store in glass containers: upon solidifying, the liquid expands ~0.3% in volume, which may cause internal pressure and breakage
- ▶ PE or PP plastics are suitable container materials
- ▶ Do not store next to oxidizing or acidic substances
- ▶ Keep away from aluminum and its alloys

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

Currently there are no national occupational exposure limit values (OEL) established for gallium or indium in Mexico (NOM-010-STPS-2014). Use the ACGIH TLV-TWA values as a reference where applicable.

8.2 EXPOSURE CONTROLS / PERSONAL PROTECTIVE EQUIPMENT (PPE)

TYPE OF PROTECTION	RECOMMENDED SPECIFICATION
Respiratory protection	P3 protection in case of emergency with metal oxide fume generation. Not required under normal conditions of use.
Hand protection	Nitrile rubber gloves in case of repeated and continuous skin contact.
Eye protection	Safety glasses in case of possible eye contact from splashes.
Body protection	Suitable work clothing in case of splash risk.
Work hygiene	Wash hands after work and before breaks.

9 PHYSICAL AND CHEMICAL PROPERTIES

PROPERTY	VALUE	PROPERTY	VALUE
Physical state	Metallic liquid at room temp. (>15.7°C)	Dynamic viscosity	0.0021 Pa-s
Color	Bright silver	Water solubility	Not applicable
Odor	Odorless	Flammability	Non-flammable
Melting point	≈ 15.7 °C (60.3 °F)	Explosive properties	Not applicable
Boiling point	> 1300 °C	Oxidizing properties	Not applicable
Vapor pressure	< 10 ⁻⁸ torr at 500 °C	Thermal conductivity	≈ 38 W/m-K
Density	≈ 6.44 g/cm³ (at 25 °C)	pH	Not applicable

10 STABILITY AND REACTIVITY

10.1 REACTIVITY

The product forms amalgams with metals such as copper, tin, lead, zinc, gold, and silver. It is especially reactive with oxide-free light metals (aluminum in particular). Verify compatibility before applying to unknown surfaces.

10.2 CHEMICAL STABILITY

Stable under normal ambient conditions. No hazardous polymerization will occur.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS

None if used in accordance with the instructions.

10.4 CONDITIONS TO AVOID

- Contact with aluminum followed by the addition of water (exothermic reaction)
- Extreme storage temperatures

10.5 INCOMPATIBLE MATERIALS

- Aluminum and aluminum alloys
- Halogenated compounds, hydrogen peroxide/hydrochloric acid
- Chlorine, bromine
- Strong oxidizing substances

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

None if the substance is used correctly.

11 TOXICOLOGICAL INFORMATION

11.1 ACUTE TOXICITY

The metal alloy has not been evaluated as a whole. The individual components are below acute toxicity limits even when complete absorption is assumed.

11.2 EFFECTS ON HUMANS

Provided the applicable industrial hygiene standards are observed, no harmful health effects are known.

Routes of exposure:

- **Ingestion:** The product leaves the body via natural routes.
- **Skin contact:** Frequent contact may cause skin degreasing.
- **Inhalation:** Not applicable due to the extremely low vapor pressure at room temperature.
- **Eye contact:** Splashes may cause irritation.

12 ECOLOGICAL INFORMATION

12.1 ECOLOGICAL TOXICITY

The product is not miscible with water and tends to sediment. No quantitative data is available on the ecological effect of this product.

12.2 GENERAL ASSESSMENT

With proper handling and use, no ecological problems are expected. Do not discharge into sewers, surface watercourses, or soil.

13 DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS

Intended use or recycling is preferable to disposal. Gallium and indium are recoverable metals with market value. Manage as hazardous waste in accordance with NOM-052-SEMARNAT-2005 and applicable state legislation. Metal raw-material recovery companies accept this material at standard recovery prices.

13.2 ADDITIONAL REFERENCES

Cleaning agent: diluted and heated hydrochloric acid. Soap-and-water solution for surfaces.

14 TRANSPORT INFORMATION

PARAMETER	ADR / RID / IMDG / IATA	DESCRIPTION
14.1 UN number	UN 2803	–
14.2 UN proper shipping name	GALLIUM	Gallium
14.3 Hazard class	8	Corrosive substance
14.4 Packing group	III	Minor danger
14.5 Marine pollutant	No	–
Special precautions	Corrosive to metals, especially aluminum and its alloys. Use resistant plastic (PE/PP) containers.	

15 REGULATORY INFORMATION

15.1 SPECIFIC REGULATIONS AND LEGISLATION

STANDARD / REGULATION	APPLICABILITY
NOM-018-STPS-2015 (GHS System)	Applicable – basis of this SDS
NOM-010-STPS-2014 (Workplace air contaminants)	Applicable – exposure limits
NOM-052-SEMARNAT-2005 (Hazardous waste)	Applicable – waste management
Regulation (EC) No 1907/2006 (REACH)	Not applicable (product for the Mexican market)
Water hazard class	Not hazardous to water (self-assessment)
Ozone-depleting substances	Not applicable
Persistent organic pollutants	Not applicable

15.2 CHEMICAL SAFETY ASSESSMENT

No Chemical Safety Assessment has been carried out for this mixture.

16 OTHER INFORMATION

FULL TEXT OF H STATEMENTS

▸ H290 – May be corrosive to metals.

REVISION HISTORY

VERSION	DATE	DESCRIPTION
1.0	March 2026	Initial version

PREPARED BY

Emisha Design And Consulting S.A. De C.V.

⚠ **Legal notice:** The information contained in this Safety Data Sheet is based on the manufacturer's current level of knowledge and is prepared in accordance with NOM-018-STPS-2015 (GHS). It does not guarantee specific product properties or establish contractual rights. The user is responsible for verifying the product's suitability for their specific application.

This SDS complies with the requirements of NOM-018-STPS-2015 (Globally Harmonized System — GHS, 7th edition) and references the REACH Regulation (EC) No 1907/2006 as an international Emisha Liquid Ultra 1gr - E-LM-U-1GR - Rev. 1.0 - technical reference. March 2026