



SAFETY DATA SHEET

MATERION

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

1.1. Product identifier

Name of the substance Lanthanum, Solids and Pieces
Identification number 231-099-0 (EC number)
Synonyms Lanthanum
Document number 2EU
Materion Code 2EU
Issue date 07-December-2017
Version number 02
Revision date 15-January-2018
Supersedes date 07-December-2017

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

Identified uses Not available.
Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

Supplier

Company name Materion Advanced Chemicals Inc.
Address 407 N. 13th Street
1316 W. St. Paul Avenue
Milwaukee, WI 53233
United States
Division Milwaukee
Telephone 414.212.0257
e-mail advancedmaterials@materion.com
Contact person Noreen Atkinson

1.4. Emergency telephone number

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The substance has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

Physical hazards
Flammable solids Category 2 H228 - Flammable solid.

Hazard summary May be ignited by heat, sparks or flames.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Contains: Lanthanum, Solids and Pieces

Hazard pictograms



Signal word None.

Hazard statements
H228 Flammable solid.

Precautionary statements

Prevention
P231 Handle and store contents under inert gas/.

Response
P370 + P378 In case of fire: Use appropriate media to extinguish.

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|---------------------------------------|--|
| Storage | Store away from incompatible materials. |
| Disposal | Dispose of waste and residues in accordance with local authority requirements. |
| Supplemental label information | None. |
| 2.3. Other hazards | None known. |

SECTION 3: Composition/information on ingredients

3.1. Substances

General information

| Chemical name | % | CAS-No. / EC No. | REACH Registration No. | INDEX No. | Notes |
|------------------------------|-------------------|------------------------|------------------------|-----------|-------|
| Lanthanum, Solids and Pieces | 100 | 7439-91-0 231-099-0 | - | - | |
| Classification: | Flam. Sol. 2;H228 | | | | |

List of abbreviations and symbols that may be used above

CLP: Regulation No. 1272/2008.

DSD: Directive 67/548/EEC.

M: M-factor

vPvB: very persistent and very bioaccumulative substance.

PBT: persistent, bioaccumulative and toxic substance.

#: This substance has been assigned Community workplace exposure limit(s).

Composition comments The full text for all R- and H-phrases is displayed in section 16.

SECTION 4: First aid measures

General information Not available.

4.1. Description of first aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Rinse with water. Get medical attention if irritation develops and persists.

Eye contact Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists.

Ingestion Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed Direct contact with eyes may cause temporary irritation.

4.3. Indication of any immediate medical attention and special treatment needed Treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital.

SECTION 5: Firefighting measures

General fire hazards Flammable solid. No unusual fire or explosion hazards noted.

5.1. Extinguishing media

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

Special protective equipment for firefighters Wear suitable protective equipment. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Special firefighting procedures In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. For personal protection, see section 8 of the SDS.

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| For emergency responders | Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS. |
| 6.2. Environmental precautions | Not available. |
| 6.3. Methods and material for containment and cleaning up | Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Stop the flow of material, if this is without risk. Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Following product recovery, flush area with water. Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. Never return spills to original containers for re-use. |
| 6.4. Reference to other sections | For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS. |

SECTION 7: Handling and storage

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| 7.1. Precautions for safe handling | Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Explosion-proof general and local exhaust ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Use care in handling/storage. |
| 7.2. Conditions for safe storage, including any incompatibilities | Keep away from heat, sparks and open flame. Store in original tightly closed container. Store in a well-ventilated place. Store in cool place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS). Store in accordance with local/regional/national/international regulation. |
| 7.3. Specific end use(s) | Not available. |

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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| Occupational exposure limits | No exposure limits noted for ingredient(s). |
| Biological limit values | No biological exposure limits noted for the ingredient(s). |
| Recommended monitoring procedures | Follow standard monitoring procedures. |
| Derived no effect levels (DNELs) | Not available. |
| Predicted no effect concentrations (PNECs) | Not available. |

8.2. Exposure controls

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| Appropriate engineering controls | Explosion-proof general and local exhaust ventilation. |
|---|--|

Individual protection measures, such as personal protective equipment

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| General information | Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. |
| Eye/face protection | Wear safety glasses with side shields (or goggles). |
| Skin protection | |
| - Hand protection | Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier. |
| - Other | Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. |
| Respiratory protection | Respiratory protection not required. |
| Thermal hazards | Wear appropriate thermal protective clothing, when necessary. |
| Hygiene measures | When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. |
| Environmental exposure controls | Not available. |

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

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|---|--------------------------|
| Appearance | |
| Physical state | Solid. |
| Form | Solid. |
| Colour | Not available. |
| Odour | Not available. |
| Odour threshold | Not available. |
| pH | Not available. |
| Melting point/freezing point | Not available. |
| Initial boiling point and boiling range | Not available. |
| Flash point | Not available. |
| Evaporation rate | Not available. |
| Flammability (solid, gas) | Flammable solid. |
| Upper/lower flammability or explosive limits | |
| Flammability limit - lower (%) | Not available. |
| Flammability limit - upper (%) | Not available. |
| Vapour pressure | < 0,0000001 kPa at 25 °C |
| Vapour density | Not available. |
| Relative density | Not available. |
| Solubility(ies) | |
| Solubility (water) | Not available. |
| Partition coefficient (n-octanol/water) | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |
| Explosive properties | Not explosive. |
| Oxidising properties | Not oxidising. |
| 9.2. Other information | |
| Molecular formula | La |
| Molecular weight | 138,9 g/mol |

SECTION 10: Stability and reactivity

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| 10.1. Reactivity | Not available. |
| 10.2. Chemical stability | Material is stable under normal conditions. |
| 10.3. Possibility of hazardous reactions | No dangerous reaction known under conditions of normal use. |
| 10.4. Conditions to avoid | Heat, flames and sparks. Contact with incompatible materials. None under normal conditions. |
| 10.5. Incompatible materials | Strong oxidising agents. |
| 10.6. Hazardous decomposition products | No hazardous decomposition products are known. |

SECTION 11: Toxicological information

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| General information | Occupational exposure to the substance or mixture may cause adverse effects. |
| Information on likely routes of exposure | |
| Inhalation | Due to lack of data the classification is not possible. |
| Skin contact | Due to lack of data the classification is not possible. |
| Eye contact | Due to lack of data the classification is not possible. |
| Ingestion | Due to lack of data the classification is not possible. |
| Symptoms | Exposure may cause temporary irritation, redness, or discomfort. |
| 11.1. Information on toxicological effects | |
| Acute toxicity | No data available. |
| Skin corrosion/irritation | Due to partial or complete lack of data the classification is not possible. |

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| Serious eye damage/eye irritation | Due to partial or complete lack of data the classification is not possible. |
| Respiratory sensitisation | Due to partial or complete lack of data the classification is not possible. |
| Skin sensitisation | Due to partial or complete lack of data the classification is not possible. |
| Germ cell mutagenicity | Due to partial or complete lack of data the classification is not possible. |
| Carcinogenicity | Due to partial or complete lack of data the classification is not possible. |

Hungary. 26/2000 EüM Ordinance on protection against and preventing risk relating to exposure to carcinogens at work (as amended)

Not listed.

| | |
|---|---|
| Reproductive toxicity | Due to partial or complete lack of data the classification is not possible. |
| Specific target organ toxicity - single exposure | Due to partial or complete lack of data the classification is not possible. |
| Specific target organ toxicity - repeated exposure | Due to partial or complete lack of data the classification is not possible. |
| Aspiration hazard | Due to partial or complete lack of data the classification is not possible. |
| Mixture versus substance information | No information available. |
| Other information | Not available. |

SECTION 12: Ecological information

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|--|--|
| 12.1. Toxicity | The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. |
| 12.2. Persistence and degradability | No data is available on the degradability of this product. |
| 12.3. Bioaccumulative potential | No data available. |
| Partition coefficient n-octanol/water (log Kow) | Not available. |
| Bioconcentration factor (BCF) | Not available. |
| 12.4. Mobility in soil | No data available. |
| 12.5. Results of PBT and vPvB assessment | Not available. |
| 12.6. Other adverse effects | No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component. |

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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| Residual waste | Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). |
| Contaminated packaging | Empty containers should be taken to an approved waste handling site for recycling or disposal. |
| EU waste code | Not available. |
| Disposal methods/information | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations. |
| Special precautions | Dispose in accordance with all applicable regulations. |

SECTION 14: Transport information

ADR

| | |
|---|----------------------------------|
| 14.1. UN number | UN3089 |
| 14.2. UN proper shipping name | Metal powders, flammable, n.o.s. |
| 14.3. Transport hazard class(es) | |
| Class | 4.1 |
| Subsidiary risk | - |
| Label(s) | 4.1 |
| Hazard No. (ADR) | Not available. |
| Tunnel restriction code | Not available. |
| 14.4. Packing group | II |

- 14.5. Environmental hazards** No.
- 14.6. Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

RID

- 14.1. UN number** UN3089
- 14.2. UN proper shipping name** Metal powders, flammable, n.o.s.
- 14.3. Transport hazard class(es)**
- Class** 4.1
 - Subsidiary risk** -
 - Label(s)** 4.1
- 14.4. Packing group** II
- 14.5. Environmental hazards** No.
- 14.6. Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

ADN

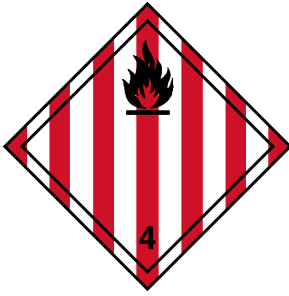
- 14.1. UN number** UN3089
- 14.2. UN proper shipping name** Metal powders, flammable, n.o.s.
- 14.3. Transport hazard class(es)**
- Class** 4.1
 - Subsidiary risk** -
 - Label(s)** 4.1
- 14.4. Packing group** II
- 14.5. Environmental hazards** No.
- 14.6. Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

IATA

- 14.1. UN number** UN3089
- 14.2. UN proper shipping name** Metal powders, flammable, n.o.s.
- 14.3. Transport hazard class(es)**
- Class** 4.1
 - Subsidiary risk** -
 - Label(s)** 4.1
- 14.4. Packing group** II
- 14.5. Environmental hazards** No.
- 14.6. Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

IMDG

- 14.1. UN number** UN3089
- 14.2. UN proper shipping name** Metal powders, flammable, n.o.s.
- 14.3. Transport hazard class(es)**
- Class** 4.1
 - Subsidiary risk** -
 - Label(s)** 4.1
- 14.4. Packing group** II
- 14.5. Environmental hazards**
- Marine pollutant** No.
- EmS** Not available.
- 14.6. Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.



SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.

Not listed.

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

Not listed.

Other regulations

The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.

National regulations

Follow national regulation for work with chemical agents.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations

Not available.

Information on evaluation method leading to the classification of mixture

Not applicable.

Disclaimer

Materion Advanced Chemicals Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. This document has been prepared using data from sources considered to be technically reliable and the information is believed to be correct. Materion makes no warranties, expressed or implied, as to the accuracy of the information contained herein. Materion cannot anticipate all conditions under which this information and its products may be used and the actual conditions of use are beyond its control. The user is responsible to evaluate all available information when using this product for any particular use and to comply with all Federal, State, Provincial and Local laws, statutes and regulations.