



PRODUCT INFORMATION SHEET

MATERION

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

1.1. Product identifier

Name of the substance Zinc Product
Identification number 7440-66-6 (CAS number)
Synonyms None.
Document number 141
Issue date 01-June-2015
Version number 01

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 product information sheet

Supplier

Company name Materion Advanced Materials Group
Address 42 Mt. Ebo Road South
Brewster, NY 10509
United States
Division
Telephone Supplier Phone 1+845.279.0900
e-mail Not available.
Contact person Not available.

1.4. Emergency telephone number Chemtrec 1+703.527.3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Directive 67/548/EEC or 1999/45/EC as amended

Classification Xn;R22, N;R50/53

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

Hazard summary

Physical hazards Not classified for physical hazards.
Health hazards Harmful if swallowed.
Environmental hazards Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Specific hazards Not available.
Main symptoms Not available.

2.2. Label elements

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

Contains: Zinc Product
Hazard pictograms None.
Signal word None.
Hazard statements The substance does not meet the criteria for classification.

Precautionary statements

Prevention Not available.
Response Not available.
Storage Not available.
Disposal Not available.

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 |
|------------------------|------------------------------|------------------------|------------------------|-----------|-------|
| Zinc Product | 100 - 100 | 7440-66-6 231-175-3 | - | - | |
| Classification: | DSD: Xn;R22, N;R50/53 | | | | |
| | CLP: - | | | | |

SECTION 4: First aid measures

General information Not available.

4.1. Description of first aid measures

Inhalation Not available.

Skin contact Not available.

Eye contact Not available.

Ingestion Not available.

4.2. Most important symptoms and effects, both acute and delayed Not available.

4.3. Indication of any immediate medical attention and special treatment needed Not available.

SECTION 5: Firefighting measures

General fire hazards Not available.

5.1. Extinguishing media

Suitable extinguishing media Not available.

Unsuitable extinguishing media Not available.

5.2. Special hazards arising from the substance or mixture Not available.

5.3. Advice for firefighters

Special protective equipment for firefighters Not available.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Not available.

For emergency responders Not available.

6.2. Environmental precautions Not available.

6.3. Methods and material for containment and cleaning up Not available.

6.4. Reference to other sections Not available.

SECTION 7: Handling and storage

7.1. Precautions for safe handling Not available.

7.2. Conditions for safe storage, including any incompatibilities Not available.

7.3. Specific end use(s) Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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 Not available.
Derived no-effect level (DNEL) Not available.
Predicted no effect concentrations (PNECs) Not available.

8.2. Exposure controls

Appropriate engineering controls Not available.

Individual protection measures, such as personal protective equipment

General information Not available.
Eye/face protection Not available.
Skin protection
- **Hand protection** Not available.
- **Other** Not available.
Respiratory protection Not available.
Thermal hazards Not available.
Hygiene measures Not available.
Environmental exposure controls Not available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state Solid.
Form Not available.
Colour Not available.
Odour Not applicable.
Odour threshold Not available.
pH Not available.
Melting point/freezing point 419,53 °C (787,15 °F)
Initial boiling point and boiling range 907 °C (1664,6 °F)
Flash point Not available.
Evaporation rate Not available.
Flammability (solid, gas) Not applicable.
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.
Solubility (other) Not available.
Partition coefficient (n-octanol/water) Not available.
Auto-ignition temperature Not available.

| | |
|----------------------------------|----------------|
| Decomposition temperature | Not available. |
| Viscosity | Not available. |
| Explosive properties | Not available. |
| Oxidizing properties | Not available. |

9.2. Other information

| | |
|--------------------------|---|
| Density | 7,13 g/cm ³ estimated at 25 °C |
| Molecular formula | Zn |
| Molecular weight | 65,38 g/mol |
| Specific gravity | 7,13 at 25 °C |

SECTION 10: Stability and reactivity

| | |
|---|----------------|
| 10.1. Reactivity | Not available. |
| 10.2. Chemical stability | Not available. |
| 10.3. Possibility of hazardous reactions | Not available. |
| 10.4. Conditions to avoid | Not available. |
| 10.5. Incompatible materials | Not available. |
| 10.6. Hazardous decomposition products | Not available. |

SECTION 11: Toxicological information

| | |
|---|----------------|
| General information | Not available. |
| Information on likely routes of exposure | |
| Inhalation | Not available. |
| Skin contact | Not available. |
| Eye contact | Not available. |
| Ingestion | Not available. |
| Symptoms | Not available. |

11.1. Information on toxicological effects

| Product | Species | Test results |
|---|----------------|--------------|
| Zinc Product (CAS 7440-66-6) | | |
| Acute | | |
| Oral | | |
| LD50 | Rat | 630 mg/kg |
| Skin corrosion/irritation | Not available. | |
| Serious eye damage/eye irritation | Not available. | |
| Respiratory sensitisation | Not available. | |
| Skin sensitisation | Not available. | |
| Germ cell mutagenicity | Not available. | |
| Carcinogenicity | Not available. | |
| Reproductive toxicity | Not available. | |
| Specific target organ toxicity - single exposure | Not available. | |
| Specific target organ toxicity - repeated exposure | Not available. | |
| Aspiration hazard | Not available. | |
| Mixture versus substance information | Not available. | |
| Other information | Not available. | |

SECTION 12: Ecological information

12.1. Toxicity

| Product | Species | | Test results |
|------------------------------|---------|--|---------------------|
| Zinc Product (CAS 7440-66-6) | | | |
| Aquatic | | | |
| Crustacea | EC50 | Water flea (Daphnia magna) | 2,8 mg/l, 48 hours |
| Fish | LC50 | Rainbow trout,donaldson trout (Oncorhynchus mykiss) | 0,56 mg/l, 96 hours |

| | |
|--|---|
| 12.2. Persistence and degradability | Not available. |
| 12.3. Bioaccumulative potential | Not available. |
| Partition coefficient n-octanol/water (log Kow) | Not available. |
| Bioconcentration factor (BCF) | Not available. |
| 12.4. Mobility in soil | Not available. |
| 12.5. Results of PBT and vPvB assessment | Not a PBT or vPvB substance or mixture. |
| 12.6. Other adverse effects | Not available. |

SECTION 13: Disposal considerations

13.1. Waste treatment methods

| | |
|-------------------------------|----------------|
| Residual waste | Not available. |
| Contaminated packaging | Not available. |
| EU waste code | Not available. |

SECTION 14: Transport information

ADR

| | |
|---|--------------------------|
| 14.1. UN number | UN1436 |
| 14.2. UN proper shipping name | ZINC POWDER or ZINC DUST |
| 14.3. Transport hazard class(es) | |
| Class | 4.3 |
| Subsidiary risk | 4.2 |
| Label(s) | 4.3 +4.2 |
| Hazard No. (ADR) | 423 |
| Tunnel restriction code | E |
| 14.4. Packing group | III |
| 14.5. Environmental hazards | No. |
| 14.6. Special precautions for user | Not available. |

RID

| | |
|---|--------------------------|
| 14.1. UN number | UN1436 |
| 14.2. UN proper shipping name | ZINC POWDER or ZINC DUST |
| 14.3. Transport hazard class(es) | |
| Class | 4.3 |
| Subsidiary risk | 4.2 |
| Label(s) | 4.3+4.2 |
| 14.4. Packing group | III |
| 14.5. Environmental hazards | No. |
| 14.6. Special precautions for user | Not available. |

ADN

| | |
|---|-----------------------|
| 14.1. UN number | UN1436 |
| 14.2. UN proper shipping name | Zinc Powder Zinc Dust |
| 14.3. Transport hazard class(es) | |
| Class | 4.3 |

| | |
|---|----------------|
| Subsidiary risk | 4.2 |
| Label(s) | 4.3+4.2 |
| 14.4. Packing group | III |
| 14.5. Environmental hazards | No. |
| 14.6. Special precautions for user | Not available. |

IATA

| | |
|---|----------------|
| 14.1. UN number | UN1436 |
| 14.2. UN proper shipping name | Zinc dust |
| 14.3. Transport hazard class(es) | |
| Class | 4.3 |
| Subsidiary risk | 4.2 |
| 14.4. Packing group | III |
| 14.5. Environmental hazards | No. |
| ERG Code | 4SW |
| 14.6. Special precautions for user | Not available. |
| Other information | |
| Passenger and cargo aircraft | Allowed. |
| Cargo aircraft only | Allowed. |

IMDG

| | |
|---|--------------------------|
| 14.1. UN number | UN1436 |
| 14.2. UN proper shipping name | ZINC POWDER or ZINC DUST |
| 14.3. Transport hazard class(es) | |
| Class | 4.3 |
| Subsidiary risk | 4.2 |
| 14.4. Packing group | III |
| 14.5. Environmental hazards | |
| Marine pollutant | No. |
| EmS | F-G, S-O |
| 14.6. Special precautions for user | Not available. |

ADN; ADR; IATA; IMDG; RID



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, as amended
Not listed.

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex II, as amended
Not listed.

Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I
Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1
Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2
Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V

Not listed.

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

Zinc Product (CAS 7440-66-6)

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.

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

Not listed.

Restrictions on use

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

Zinc Product (CAS 7440-66-6)

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.

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding, as amended

Not listed.

Other EU regulations

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

Not listed.

Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work, as amended

Zinc Product (CAS 7440-66-6)

Directive 94/33/EC on the protection of young people at work, as amended

Not listed.

National regulations

Not available.

15.2. Chemical safety assessment

Not available.

SECTION 16: Other information

List of abbreviations

Not available.

References

Not available.

Information on evaluation method leading to the classification of mixture

Not available.

Full text of any statements or R-phrases and H-statements under Sections 2 to 15

R22 Harmful if swallowed.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Revision information

None.

Training information

Not available.