



# SAFETY DATA SHEET

**MATERION**

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

### 1.1. Product identifier

**Name of the substance** Zinc Titanate  
**Identification number** 234-850-0 (EC number)  
**Registration number** -  
**Document number** 2NU  
**Synonyms** None.  
**Materion Code** 2NU  
**Issue date** 25-June-2020

### 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** Laura Hamilton

### 1.4. Emergency telephone number

**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.

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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

**Hazard summary** Harmful if swallowed.

### 2.2. Label elements

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

**Contains:** Zinc Titanate

#### Hazard pictograms



**Signal word** Warning

**Hazard statements**  
H302 Harmful if swallowed.

#### Precautionary statements

**Prevention**  
P270 Do not eat, drink or smoke when using this product.

**Response**  
P304 + P312 IF INHALED: Call a POISON CENTRE or doctor/physician if you feel unwell.  
P330 Rinse mouth.

**Storage** Store away from incompatible materials.

**Disposal**  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**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 Titanate	100	12036-43-0 234-850-0	-	-	
<b>Classification:</b>	Acute Tox. 4;H302				

## SECTION 4: First aid measures

**General information** Remove victim immediately from source of exposure. If you feel unwell, seek medical advice (show the label where possible).

### 4.1. Description of first aid measures

**Inhalation** Move into fresh air and keep at rest. If not breathing, give artificial respiration. If exposed or concerned: get medical attention/advice.

**Skin contact** Wash off with soap and plenty of water. Get medical attention if irritation develops and persists.

**Eye contact** Flush eyes with water as a precaution.

**Ingestion** Never give anything by mouth to an unconscious person. Rinse mouth. Call a poison center or doctor/physician.

**4.2. Most important symptoms and effects, both acute and delayed**

Nausea, vomiting. Abdominal pain.

**4.3. Indication of any immediate medical attention and special treatment needed**

Not available.

## SECTION 5: Firefighting measures

**General fire hazards** Decomposition in a fire produces toxic fumes.

### 5.1. Extinguishing media

**Suitable extinguishing media** Dry chemical, CO<sub>2</sub>, water spray or alcohol resistant foam.

**Unsuitable extinguishing media** None known.

**5.2. Special hazards arising from the substance or mixture**

Decomposition of this product may yield metallic oxides.

### 5.3. Advice for firefighters

**Special protective equipment for firefighters** Wear self-contained breathing apparatus and protective clothing.

**Special firefighting procedures** Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** Wear necessary protective equipment. Avoid generation and spreading of dust. Avoid inhalation of vapours/spray and contact with skin and eyes. Avoid inhalation of dust. Ensure adequate ventilation.

**For emergency responders** Not available.

**6.2. Environmental precautions**

Prevent entry into drains.

**6.3. Methods and material for containment and cleaning up**

Pick up and arrange disposal without creating dust. Sweep up or vacuum up spillage and collect in suitable container for disposal.

**6.4. Reference to other sections**

Not available.

## SECTION 7: Handling and storage

- 7.1. Precautions for safe handling** Avoid conditions which create dust. Wear protective gloves/protective clothing/eye protection/face protection.
- 7.2. Conditions for safe storage, including any incompatibilities** Keep container in a well-ventilated place. Store in a dry place.
- 7.3. Specific end use(s)** Not available.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

**Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)**

Material	Type	Value	Form
Zinc Titanate (CAS 12036-43-0)	TWA	2 mg/m <sup>3</sup>	Inhalable fraction.
		0,1 mg/m <sup>3</sup>	Respirable fraction.

**Ordinance of the Minister of Labour and Social Policy on 6 June 2014 on the maximum permissible concentrations and intensities of harmful health factors in the work environment, Journal of Laws 2014, item 817**

Material	Type	Value
Zinc Titanate (CAS 12036-43-0)	STEL	30 mg/m <sup>3</sup>
	TWA	10 mg/m <sup>3</sup>

**Slovakia. OELs. Regulation No. 300/2007 concerning protection of health in work with chemical agents**

Material	Type	Value	Form
Zinc Titanate (CAS 12036-43-0)	TWA	2 mg/m <sup>3</sup>	Inhalable fraction.
		0,1 mg/m <sup>3</sup>	Respirable fraction.

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Recommended monitoring procedures** Not available.

**Derived no effect levels (DNELs)** Not available.

**Predicted no effect concentrations (PNECs)** Not available.

### 8.2. Exposure controls

**Appropriate engineering controls** Minimise dust generation and accumulation. Provide adequate general and local exhaust ventilation.

#### Individual protection measures, such as personal protective equipment

**General information** Not available.

**Eye/face protection** Wear safety glasses with side shields (or goggles).

#### Skin protection

**- Hand protection** Use protective gloves.

**- Other** Wear necessary protective equipment.

**Respiratory protection** If ventilation is insufficient, suitable respiratory protection must be provided.

**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

<b>Physical state</b>	Solid.
<b>Form</b>	Powder.
<b>Colour</b>	White.

<b>Odour</b>	None.
<b>Odour threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	Not available.
<b>Flash point</b>	Not available.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Vapour pressure</b>	Not available.
<b>Vapour density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Explosive properties</b>	Not available.
<b>Oxidising properties</b>	Not available.

## 9.2. Other information

<b>Molecular formula</b>	O3TiZn
<b>Molecular weight</b>	161,24 g/mol
<b>Specific gravity</b>	5,17

## SECTION 10: Stability and reactivity

<b>10.1. Reactivity</b>	Not available.
<b>10.2. Chemical stability</b>	Stable at normal conditions.
<b>10.3. Possibility of hazardous reactions</b>	Not known.
<b>10.4. Conditions to avoid</b>	None under normal conditions.
<b>10.5. Incompatible materials</b>	Strong oxidising agents.
<b>10.6. Hazardous decomposition products</b>	Titanium/titanium oxides Zinc/zinc oxides

## SECTION 11: Toxicological information

<b>General information</b>	Not available.
<b>Information on likely routes of exposure</b>	
<b>Inhalation</b>	Not available.
<b>Skin contact</b>	Not available.
<b>Eye contact</b>	Not available.
<b>Ingestion</b>	Not available.
<b>Symptoms</b>	Not available.
<b>11.1. Information on toxicological effects</b>	
<b>Acute toxicity</b>	No data available.
<b>Skin corrosion/irritation</b>	Not available.
<b>Serious eye damage/eye irritation</b>	Not available.
<b>Respiratory sensitisation</b>	Not available.
<b>Skin sensitisation</b>	Not available.

**Germ cell mutagenicity** Not available.

**Carcinogenicity**

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

Not listed.

**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** No toxicity data noted for the ingredient(s).

**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.

**12.7. Additional information**

**Estonia Dangerous substances in groundwater Data**

Zinc Titanate (CAS 12036-43-0)

Zinc (Zn) 50 ug/l

Zinc (Zn) 5000 ug/l

**Estonia Dangerous substances in soil Data**

Zinc Titanate (CAS 12036-43-0)

Zinc (Zn) 1000 mg/kg

Zinc (Zn) 200 mg/kg

Zinc (Zn) 500 mg/kg

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

**Residual waste** Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied.

**EU waste code** Not available.

**Disposal methods/information** Dispose of contents/container in accordance with local/regional/national/international regulations.

**SECTION 14: Transport information**

**ADR**

14.1. - 14.6.: Not regulated as dangerous goods.

**RID**

14.1. - 14.6.: Not regulated as dangerous goods.

**ADN**

14.1. - 14.6.: Not regulated as dangerous goods.

**IATA**

14.1. - 14.6.: Not regulated as dangerous goods.

**IMDG**

14.1. - 14.6.: Not regulated as dangerous goods.

## 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**

Zinc Titanate (CAS 12036-43-0)

**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.

#### National regulations

Not available.

#### 15.2. Chemical safety assessment

Not available.

## SECTION 16: Other information

#### List of abbreviations

Not available.

#### References

Not available.

#### Training information

Not available.