



# SAFETY DATA SHEET

**MATERION**

## 1. Identification

**Product identifier** Zirconium Nitride (ZrN) Targets and Solids

### Other means of identification

**SDS number** 2DT  
**Materion Code** 2DT  
**CAS number** 25658-42-8

### Manufacturer/Importer/Supplier/Distributor information

#### Manufacturer

**Company name** Materion Advanced Chemicals Inc.  
**Address** 407 N 13th Street  
1316 W. St. Paul Avenue  
Milwaukee, WI 53233  
United States  
**Telephone** 414.212.0257  
**E-mail** advancedmaterials@materion.com  
**Contact person** Laura Hamilton  
**Emergency phone number** Chemtrec 800.424.9300

## 2. Hazard(s) identification

**Physical hazards** Not classified.  
**Health hazards** Not classified.  
**Environmental hazards** Not classified.  
**OSHA defined hazards** Not classified.

### Label elements

**Hazard symbol** None.  
**Signal word** None.  
**Hazard statement** Not available.  
**Precautionary statement**  
**Prevention** Minimize dust generation and accumulation.  
**Response** Not available.  
**Storage** Not available.  
**Disposal** Not available.

**Hazard(s) not otherwise classified (HNOC)** None known.

**Supplemental information** None.

## 3. Composition/information on ingredients

### Substances

Chemical name	Common name and synonyms	CAS number	%
Zirconium Nitride		25658-42-8	100

## 4. First-aid measures

**Inhalation** Not available.  
**Skin contact** Not available.  
**Eye contact** Not available.

Ingestion Not available.

Most important symptoms/effects, acute and delayed Not available.

## 5. Fire-fighting measures

Suitable extinguishing media Not available.

Unsuitable extinguishing media Not available.

Specific hazards arising from the chemical Not applicable.

Special protective equipment and precautions for firefighters Not available.

## 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Not available.

Methods and materials for containment and cleaning up Not available.

Environmental precautions Not available.

## 7. Handling and storage

Precautions for safe handling Not available.

Conditions for safe storage, including any incompatibilities Not available.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Material	Type	Value
Zirconium Nitride (CAS 25658-42-8)	PEL	5 mg/m <sup>3</sup>

#### US. ACGIH Threshold Limit Values

Material	Type	Value
Zirconium Nitride (CAS 25658-42-8)	STEL	10 mg/m <sup>3</sup>
	TWA	5 mg/m <sup>3</sup>

#### US. NIOSH: Pocket Guide to Chemical Hazards

Material	Type	Value
Zirconium Nitride (CAS 25658-42-8)	STEL	10 mg/m <sup>3</sup>
	TWA	5 mg/m <sup>3</sup>

#### US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants

Material	Type	Value
Zirconium Nitride (CAS 25658-42-8)	PEL	5 mg/m <sup>3</sup>
	STEL	10 mg/m <sup>3</sup>

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

Appropriate engineering controls Not available.

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

Eye/face protection Not available.

<b>Skin protection</b>	
<b>Hand protection</b>	Not available.
<b>Other</b>	Not available.
<b>Respiratory protection</b>	Not available.
<b>Thermal hazards</b>	Not available.

## 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	Solid.
<b>Form</b>	Not available.
<b>Color</b>	Not available.

**Odor** Not available.

**Odor 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)** Not available.

### Upper/lower flammability or explosive limits

**Flammability limit - lower (%)** Not available.

**Flammability limit - upper (%)** Not available.

**Explosive limit - lower (%)** Not available.

**Explosive limit - upper (%)** Not available.

**Vapor pressure** < 0.0000001 kPa at 25 °C

**Vapor 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.

### Other information

**Molecular formula** NZr

**Molecular weight** 105.23 g/mol

## 10. Stability and reactivity

**Reactivity** Not available.

**Chemical stability** Not available.

**Possibility of hazardous reactions** Not available.

**Conditions to avoid** Not available.

**Incompatible materials** Not available.

Hazardous decomposition products Not available.

## 11. Toxicological information

### Information on likely routes of exposure

Inhalation Not available.  
Skin contact Not available.  
Eye contact Not available.  
Ingestion Not available.

Symptoms related to the physical, chemical and toxicological characteristics Not available.

### Information on toxicological effects

Acute toxicity Not available.  
Skin corrosion/irritation Not available.  
Serious eye damage/eye irritation Not available.

### Respiratory or skin sensitization

Respiratory sensitization Not available.  
Skin sensitization Not available.

Germ cell mutagenicity Not available.

### Carcinogenicity

#### IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

#### US. National Toxicology Program (NTP) Report on Carcinogens

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.

## 12. Ecological information

Ecotoxicity No ecotoxicity data noted for the ingredient(s).

Persistence and degradability Not available.

Bioaccumulative potential Not available.

Mobility in soil Not available.

Other adverse effects Not available.

## 13. Disposal considerations

Disposal instructions Not available.

Waste from residues / unused products Not available.

Contaminated packaging Not available.

## 14. Transport information

### DOT

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

## 15. Regulatory information

### US federal regulations

#### Toxic Substances Control Act (TSCA)

##### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

#### SARA 304 Emergency release notification

Not regulated.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical      Yes

#### SARA 313 (TRI reporting)

Not regulated.

### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)      Not regulated.

## 16. Other information, including date of preparation or last revision

Issue date	12-21-2017
Revision date	01-15-2018
Version #	02
Disclaimer	Not available.