



# SAFETY DATA SHEET

**MATERION**

## 1. Identification

Product identifier	Platinum Nickel Targets
Other means of identification	
SDS number	G51
Manufacturer/Importer/Supplier/Distributor information	
Manufacturer	
Company name	Materion Advanced Materials Germany GmbH
Address	Borsigstrasse 10 Germany
Telephone	49.60.23.91.82.0
Website	www.materion.com
E-mail	Materion.Germany@materion.com
Contact person	Hermann Schmiing
Emergency phone number	49.60.23.91.82.0

## 2. Hazard(s) identification

Physical hazards	Not classified.	
Health hazards	Sensitization, skin	Category 1
	Carcinogenicity	Category 2
	Specific target organ toxicity, repeated exposure	Category 1 (Respiratory system)
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	

### Label elements



Signal word	Danger
Hazard statement	May cause an allergic skin reaction. Suspected of causing cancer. Causes damage to organs (respiratory system) through prolonged or repeated exposure by inhalation.
Precautionary statement	
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. In case of inadequate ventilation wear respiratory protection.
Response	If on skin: Wash with plenty of water. If exposed or concerned: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
Storage	Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	For further information, please contact the Product Stewardship Department at +1.800.862.4118.

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	Common name and synonyms	CAS number	%
Platinum		7440-06-4	90 - 99
Nickel		7440-02-0	1 - 10

### 4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	May cause an allergic skin reaction.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	If you feel unwell, seek medical advice (show the label where possible).

### 5. Fire-fighting measures

Suitable extinguishing media	Powder. Dry sand.
Unsuitable extinguishing media	Water.
Specific hazards arising from the chemical	No unusual fire or explosion hazards noted.
Special protective equipment and precautions for firefighters	Wear suitable protective equipment.
Fire fighting equipment/instructions	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.
General fire hazards	No unusual fire or explosion hazards noted.

### 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Stop the flow of material, if this is without risk. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

### 7. Handling and storage

Precautions for safe handling	Do not handle until all safety precautions have been read and understood. Wear appropriate personal protective equipment. Wash hands thoroughly after handling.
Conditions for safe storage, including any incompatibilities	Store locked up. Store away from incompatible materials (see Section 10 of the SDS).

### 8. Exposure controls/personal protection

#### Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

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

Material	Type	Value
Platinum Nickel Targets	PEL	1 mg/m3

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

Components	Type	Value
Nickel (CAS 7440-02-0)	PEL	1 mg/m3

**US. ACGIH Threshold Limit Values**

Material	Type	Value	Form
Platinum Nickel Targets	TWA	1.5 mg/m3	Inhalable fraction.

Components	Type	Value	Form
Nickel (CAS 7440-02-0)	TWA	1.5 mg/m3	Inhalable fraction.
Platinum (CAS 7440-06-4)	TWA	1 mg/m3	

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

Material	Type	Value
Platinum Nickel Targets	TWA	0.015 mg/m3

Components	Type	Value
Nickel (CAS 7440-02-0)	TWA	0.015 mg/m3
Platinum (CAS 7440-06-4)	TWA	1 mg/m3

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

Material	Type	Value
Platinum Nickel Targets	PEL	0.5 mg/m3

Components	Type	Value
Nickel (CAS 7440-02-0)	PEL	0.5 mg/m3
Platinum (CAS 7440-06-4)	PEL	1 mg/m3

**Biological limit values**

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

**Appropriate engineering controls**

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

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

**Eye/face protection** Chemical goggles are recommended.

**Skin protection**

**Hand protection** Wear gloves to prevent metal cuts and skin abrasions during handling.

**Other** Use personal protective equipment as required.

**Respiratory protection** In case of inadequate ventilation, use respiratory protection.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**

Observe any medical surveillance requirements. Contaminated work clothing should not be allowed out of the workplace.

**9. Physical and chemical properties****Appearance**

**Physical state** Solid.

**Form** Solid.

**Color** Dark grey.

**Odor** None.

**Odor threshold** Not applicable.

**pH** Not applicable.

**Melting point/freezing point** 2651 °F (1455 °C) estimated / Not applicable.

**Initial boiling point and boiling range** Not applicable.

Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	None known.
<b>Upper/lower flammability or explosive limits</b>	
Explosive limit - lower (%)	Not applicable.
Explosive limit - lower (%) temperature	Not applicable.
Explosive limit - upper (%)	Not applicable.
Explosive limit - upper (%) temperature	Not applicable.
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	Not applicable.
<b>Solubility(ies)</b>	
Solubility (water)	Insoluble.
Partition coefficient (n-octanol/water)	Not applicable. Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition temperature	Not applicable.
Viscosity	Not applicable.
<b>Other information</b>	
Density	20.30 g/cm <sup>3</sup> estimated
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

## 10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials.
Incompatible materials	Strong acids.
Hazardous decomposition products	No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	May cause an allergic skin reaction.
Eye contact	Not likely, due to the form of the product.
Ingestion	Expected to be a low ingestion hazard.

**Symptoms related to the physical, chemical and toxicological characteristics** May cause respiratory irritation. May cause an allergic skin reaction. Dermatitis. Rash.

### Information on toxicological effects

Acute toxicity	None known.
Skin corrosion/irritation	May cause skin irritation.

<b>Serious eye damage/eye irritation</b>	Not likely, due to the form of the product.
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
<b>Skin sensitization</b>	May cause an allergic skin reaction.
<b>Germ cell mutagenicity</b>	Not classified.
<b>Carcinogenicity</b>	Suspected of causing cancer.
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>	
Nickel (CAS 7440-02-0)	2B Possibly carcinogenic to humans.
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)</b>	
Nickel (CAS 7440-02-0)	Not regulated.
<b>US. National Toxicology Program (NTP) Report on Carcinogens</b>	
Nickel (CAS 7440-02-0)	Known To Be Human Carcinogen. Reasonably Anticipated to be a Human Carcinogen.
<b>Reproductive toxicity</b>	Not classified.
<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Causes damage to organs through prolonged or repeated exposure.
<b>Aspiration hazard</b>	Not an aspiration hazard.
<b>Chronic effects</b>	Prolonged inhalation may be harmful. Causes damage to organs through prolonged or repeated exposure. Prolonged exposure may cause chronic effects.

## 12. Ecological information

<b>Ecotoxicity</b>	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.
<b>Persistence and degradability</b>	No data is available on the degradability of any ingredients in the mixture.
<b>Bioaccumulative potential</b>	No data available.
<b>Mobility in soil</b>	No data available.
<b>Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

<b>Disposal instructions</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Waste from residues / unused products</b>	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).
<b>Contaminated packaging</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. Transport information

<b>DOT</b>	Not regulated as dangerous goods.
<b>IATA</b>	Not regulated as dangerous goods.
<b>IMDG</b>	Not regulated as dangerous goods.

## 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### 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)

Nickel (CAS 7440-02-0) 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** No (Exempt)

#### SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Nickel	7440-02-0	1 - 10

### Other federal regulations

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

Nickel (CAS 7440-02-0)

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

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

### US state regulations

#### California Proposition 65



**WARNING:** This product can expose you to Nickel, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

#### California Proposition 65 - CRT: Listed date/Carcinogenic substance

Nickel (CAS 7440-02-0) Listed: October 1, 1989

#### US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Nickel (CAS 7440-02-0)  
Platinum (CAS 7440-06-4)

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

**Issue date** 06-14-2019

**Version #** 01

**Disclaimer** 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.