



SAFETY DATA SHEET

MATERION

1. Product and company identification

Name of the chemical	Platinum Product	
Other means of identification		
SDS number	G18	
CAS number	7440-06-4	
Recommended use of the chemical and restrictions on use		
Recommended use	Scientific research and development Other: Manufacture of medical and defense equipment Manufacture of computer, electronic and optical products, electrical equipment	
Recommended restrictions	Professional uses: Public domain (administration, education, entertainment, services, craftsmen) Consumer uses: Private households (= general public = consumers)	
Manufacturer/Importer/Supplier/ Distributor information	Materion Advanced Materials	
Address	6070 Parkland Boulevard Mayfield Heights OH 44124 United States	
Telephone	EH&S	1.216.383.4019
E-mail	ehs@materion.com	
Contact person	Theodore Knudson	
Emergency telephone number	See Section 16.	

2. Hazards identification

Hazard classification		
Physical hazards	Not classified.	
Health hazards	Not classified.	
Environmental hazards	Not classified.	
Label elements		
Symbols	None.	
Signal word	None.	
Hazard statement	The material as sold in solid form is generally not considered hazardous. However, if the process involves grinding, melting, cutting or any other process that causes a release of dust or fumes, hazardous levels of airborne particulate could be generated.	
Precautionary statement		
Prevention	Observe good industrial hygiene practices.	
Response	Wash hands after handling.	
Storage	Store away from incompatible materials.	
Disposal	Not available.	
Other hazards	None known.	
Supplemental information	For further information, please contact the Product Stewardship Department at +1.216.383.4019.	

3. Composition/information on ingredients

Substance		
Chemical name	CAS Number	Concentration (%)
Platinum Product	7440-06-4	100

4. First aid measures

First aid measures for different exposure routes	
Inhalation	Call a physician if symptoms develop or persist.

Skin contact	Get medical attention if irritation develops and persists.
Eye contact	Get medical attention if irritation develops and persists.
Ingestion	Get medical advice/attention if you feel unwell.
Most important symptoms and effects	None known.
Personal protection for first-aid responders	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
Notes to physician	Treat symptomatically.

5. Fire-fighting measures

Extinguishing media	Powder. Dry sand. Use methods for the surrounding fire.
Extinguishing media to avoid	None known.
Specific hazards during fire fighting	This product is not flammable.
Special fire fighting procedures	Use water spray to cool unopened containers.
Protection of fire-fighters	Wear suitable protective equipment.
General fire hazards	No unusual fire or explosion hazards noted.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions	Keep unnecessary personnel away.
Environmental precautions	Collect spillage.
Spill cleanup methods	Collect spillage.

7. Handling and storage

Handling	Observe good industrial hygiene practices.
Storage	Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Exposure limits

OELs. (Standards on Workplace Atmosphere of Dangerous and Hazardous Materials)

Material	Type	Value
Platinum Product (CAS 7440-06-4)	STEL	2 mg/m ³
	TWA	1 mg/m ³

US. ACGIH Threshold Limit Values

Material	Type	Value
Platinum Product (CAS 7440-06-4)	TWA	1 mg/m ³

Biological limit values	No biological exposure limits noted for the ingredient(s).
Exposure guidelines	This material does not have established exposure limits.
Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) 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	Wear safety glasses with side shields (or goggles).
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 insufficient ventilation, wear suitable respiratory equipment.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking.

9. Physical and chemical properties

Appearance

Physical state	Solid.
Form	Solid.
Color	Grey.
Odor	None.
Odor threshold	Not applicable.
Melting point/freezing point	3215.12 °F (1768.4 °C) / Not applicable.
pH	Not applicable.
Boiling point, initial boiling point, and boiling range	6917 °F (3825 °C)
Flammability (solid, gas)	None known.
Flash point	Not applicable.
Decomposition temperature	Not applicable.
Auto-ignition temperature	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not applicable.
Flammability limit - upper (%)	Not applicable.
Explosive limit - lower (%)	Not applicable.
Explosive limit - upper (%)	Not applicable.
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Density	21.45 g/cm ³ estimated
Solubility(ies)	
Solubility (water)	Insoluble
Partition coefficient (n-octanol/water)	Not applicable.
Evaporation rate	Not applicable.
Other data	
Explosive properties	Not explosive.
Molecular formula	Pt
Molecular weight	195.08 g/mol
Oxidizing properties	Not oxidizing.
Viscosity	Not applicable.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Acids. Chlorine.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Not likely, due to the form of the product.
Skin contact	Not likely, due to the form of the product.

Eye contact	Not likely, due to the form of the product.
Ingestion	Expected to be a low ingestion hazard.
Symptoms	None known.
Information on toxicological effects	
Acute toxicity	None known.
Skin corrosion/irritation	Not relevant, due to the form of the product.
Serious eye damage/eye irritation	Not likely, due to the form of the product.
Respiratory or skin sensitization	
Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	Not a skin sensitizer.
Germ cell mutagenicity	Not classified.
Carcinogenicity	Not classified.
Reproductive toxicity	Not classified.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not an aspiration hazard.
Chronic effects	No data recorded.
Other information	This product has no known adverse effect on human health.

12. Ecological information

Ecotoxicity	Not expected to be harmful to aquatic organisms.
Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulation	No data available.
Mobility in soil	The product is immiscible with water and will spread on the water surface.
Other hazardous effects	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

Disposal instructions	Dispose of contents/container in accordance with local/regional/national/international regulations.
Residual waste	Dispose of in accordance with local regulations.
Contaminated packaging	Refer to manufacturer/supplier for information on recovery/recycling.
Local disposal regulations	Dispose in accordance with all applicable regulations.

14. Transport information

IATA	
UN number	UN3200
UN proper shipping name	Pyrophoric solid, inorganic, n.o.s. (Platinum Product)
Transport hazard class(es)	
Class	4.2
Subsidiary risk	-
Packing group	Not available.
Environmental hazards	No.
ERG Code	4L
Special precautions for user	Not available.
Other information	
Passenger and cargo aircraft	Forbidden
Cargo aircraft only	Forbidden
IMDG	
UN number	UN3200

UN proper shipping name	PYROPHORIC SOLID, INORGANIC, N.O.S. (Platinum Product)
Transport hazard class(es)	
Class	4.2
Subsidiary risk	-
Packing group	I
Environmental hazards	
Marine pollutant	No.
EmS	F-G, S-M
Special precautions for user	Not available.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.
IATA; IMDG	



15. Regulatory information

Applicable regulations

Methods and Facilities Standards for the Storage, Clearance and Disposal of Industrial Waste

Not listed.

Priority Management Chemical List (Regulations on Handling Priority Managed Chemicals), as amended

Not listed.

Toxic Chemical Substances (TCS) List (EPA Toxic Substances Notice No. 0960095331E, Tables 1-3, Dec. 17, 2007, as amended)

Not listed.

Standards on Workplace Atmosphere of Dangerous and Hazardous Materials

Platinum Product (CAS 7440-06-4) Listed.

GHS Classification List: GHS implementation phase 1, 2 and 3 (CLA No. 0980145063, 0990146707, and 1020146801)

Platinum Product (CAS 7440-06-4)

Rules on Road Transportation Safety

Regulated.

International regulations

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Montreal Protocol

Not applicable.

Kyoto protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No

Country(s) or region	Inventory name	On inventory (yes/no)*
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

References

ACGIH
EPA: AQUIRE database
NLM: Hazardous Substances Data Base
US. IARC Monographs on Occupational Exposures to Chemical Agents
Taiwan. Dangerous Materials (Rules on Hazard Communication of Dangerous Materials and Toxic Materials)
Taiwan. Industrial Precursor Chemicals (Categories and Regulations Governing Inspection and Declaration of Industrial Precursor Chemicals, MOEA Decree No. 87, as amended)
Taiwan. OELs. (Standards on Workplace Atmosphere of Dangerous and Hazardous Materials)
Taiwan. Toxic Chemical Substances (TCS) (List of Toxic Chemical Substances announced by the Environmental Protection Administration)
Taiwan. Toxic Materials (Rules on Hazard Communication of Dangerous Materials and Toxic Materials)

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Prepared by

Not available.