



SAFETY DATA SHEET

MATERION

1. Product and company identification

Product name Nickel Vanadium Product
Manufacturer/Supplier Materion Advanced Materials Group
Address 42 Mt. Ebo Road South
Brewster, NY 10509
United States
Telephone Supplier Phone 1+845.279.0900
e-mail Not available.
Contact person
Emergency telephone number Chemtrec 1+703.527.3887
Recommended use and Limitations on use
Recommended use Not available.
SDS number 001

2. Hazards identification

GHS classification
Physical hazards Not classified.
Health hazards Serious eye damage/eye irritation Category 2A
Sensitization, respiratory Category 1
Sensitization, skin Category 1
Carcinogenicity Category 2
Environmental hazards Hazardous to the aquatic environment, acute hazard Category 1
Hazardous to the aquatic environment, long-term hazard Category 1
Label elements
Symbols None.
Signal word None.
Hazard statement None.

3. Composition/information on ingredients

Substance or mixture	Mixture		
Chemical property		CAS Number	Concentration (%)
Nickel		7440-02-0	85 - 98
Vanadium		7440-62-2	2 - < 15

4. First aid measures

Inhalation Not available.
Skin contact Not available.
Eye contact Not available.
Ingestion Not available.
Potential delayed effects Not available.
Personal protection for first-aid responders Not available.
Notes to physician Not available.

5. Fire-fighting measures

Extinguishing media Not available.
Extinguishing media to avoid None.
HAZCHEM Code Number None.

Specific hazards during fire fighting	None.
Special fire fighting procedures	Not available.
Protection of fire-fighters	Not available.
Hazards from combustion products	None.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Not available.
Environmental precautions	Not available.
Spill cleanup methods	Not available.

7. Handling and storage

Handling

Precautions	Not available.
Safe handling advice	Not available.
Prevention of fire and explosion	Not available.

Storage

Suitable storage conditions	Not available.
Incompatible materials	Not available.

8. Exposure controls/personal protection

Exposure limits

New Zealand. WES. (Workplace Exposure Standards)

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

US. ACGIH Threshold Limit Values

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

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value
Nickel (CAS 7440-02-0)	TWA	0.5 mg/m3

Australia. National Workplace OELs (Workplace Exposure Standards for Airborne Contaminants, Appendix A)

Components	Type	Value
Nickel (CAS 7440-02-0)	TWA	0.1 mg/m3

Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)

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

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

Engineering controls

Personal protective equipment

Respiratory protection	Not available.
Skin protection	Not available.
Eye/face protection	Not available.
Radioactive or thermal hazards	Not available.
Hygiene measures	Not available.

9. 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	1455 °C (2651 °F) estimated
Boiling point, initial boiling point, and boiling range	2730 °C (4946 °F) estimated
Flash point	Not available.
Auto-ignition temperature	Not applicable.
Flammability (solid, gas)	Not applicable.
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit – upper (%)	Not available.
Vapour pressure	0.00001 hPa estimated
Vapour density	Not available.
Evaporation rate	Not available.
Relative density	Not available.
Density	8.67 g/cm ³ estimated
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Decomposition temperature	Not available.
Other data	
Specific gravity	8.67 estimated

10. Stability and reactivity

Stability	None.
Conditions to avoid	None.
Incompatible materials	None.
Hazardous decomposition products	None.
Possibility of hazardous reactions	None.

11. Toxicological information

Acute toxicity	Not available.
Information on likely routes of exposure	
Ingestion	Not available.
Inhalation	Not available.
Skin contact	Not available.
Eye contact	Not available.
Routes of exposure	Not available.
Symptoms	Not available.
Skin corrosion/irritation	Not available.
Serious eye damage/eye irritation	Not available.
Skin sensitizer	Not available.
Carcinogenicity	

IARC Monographs. Overall Evaluation of Carcinogenicity

Nickel (CAS 7440-02-0)

2B Possibly carcinogenic to humans.

Chronic effects	Not available.
------------------------	----------------

Relevant negative data Not available.

12. Ecological information

Ecotoxicological data

Product		Species	Test results
Nickel Vanadium Product			
Aquatic			
Crustacea	EC50	Daphnia	1.0929 mg/l, 48 hours estimated
Fish	LC50	Fish	94.3357 mg/l, 96 hours estimated
Components		Species	Test results
Nickel (CAS 7440-02-0)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	1 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	2.923 mg/l, 96 hours

Ecotoxicity Not available.

Persistence and degradability Not available.

Bioaccumulation Not available.

**Partition coefficient
n-octanol/water (log Kow)** Not available.

Bioconcentration factor (BCF) Not available.

Mobility Not available.

Other hazardous effects Not available.

13. Disposal considerations

**Disposal
methods/information** Not available.

Special precautions Not available.

14. Transport information

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

**Transport in bulk according to
Annex II of MARPOL 73/78
and the IBC Code** Not available.

15. Regulatory information

Applicable regulations

New Zealand Inventory of Chemicals (NZIoC): Registration status

Nickel (CAS 7440-02-0)

HSNO Approved

Vanadium (CAS 7440-62-2)

May be used as a single component chemical under an appropriate group standard

16. Other information

References Not available.

Issued by
Not available.

Prepared by
Not available.

Issue date 28-May-2015