



SAFETY DATA SHEET

MATERION

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Identification of the substance/preparation	Nickel Vanadium Product		
Version No.	01		
Issue date	28-May-2015		
CAS #	Alloy		
SDS Number	001		
Manufacturer information	Materion Advanced Materials Group 42 Mt. Ebo Road South Brewster, NY 10509		
	United States		
	Supplier Phone	1+845.279.0900	
	Chemtrec	1+703.527.3887	

2. HAZARDS IDENTIFICATION

Classification	N;R50/53
Physical hazards	Not classified as a physical hazard.
Health hazards	Not classified as a health hazard.
Environmental hazards	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS #	Percent	EC-No.	Classification
Nickel	7440-02-0	85 - 98	231-111-4	N;R50/53
Vanadium	7440-62-2	2 - 15	231-171-1	

4. FIRST-AID MEASURES

5. FIRE-FIGHTING MEASURES

6. ACCIDENTAL RELEASE MEASURES

7. HANDLING AND STORAGE

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Nickel (CAS 7440-02-0)	TWA	1,5 mg/m ³	Inhalable fraction.

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

Recommended monitoring procedures

Additional exposure data Not available.

Personal protective equipment

Skin and body protection 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.

Boiling point	2730 °C (4946 °F) estimated
Flash point	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Vapour pressure	0,00001 hPa estimated
Relative density	Not available.
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Viscosity	Not available.
Vapour density	Not available.
Evaporation rate	Not available.
Melting point/freezing point	1455 °C (2651 °F) estimated
Auto-ignition temperature	Not applicable.
VOC	Not available.
Other data	
Density	8,67 g/cm3 estimated
Specific gravity	8,67 estimated

10. STABILITY AND REACTIVITY

Conditions to avoid	Not available.
Hazardous decomposition products	Not available.

11. TOXICOLOGICAL INFORMATION

Carcinogenicity

IARC Monographs. Overall Evaluation of Carcinogenicity

Nickel (CAS 7440-02-0)

2B Possibly carcinogenic to humans.

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

13. DISPOSAL CONSIDERATIONS

14. TRANSPORT INFORMATION

ADR

UN number	3077
UN proper shipping name	Environmentally hazardous substance, solid, n.o.s.
Transport hazard class(es)	
Class	9
Subsidiary risk	-
Label(s)	9
Hazard No.(ADR)	90
Tunnel restriction code	E
Packing group	III
Environmental hazards	Yes

Special precautions for user Not available.

IATA

Not regulated as dangerous goods.

IMDG

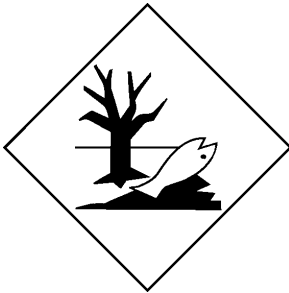
Not regulated as dangerous goods.

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

ADR



Marine pollutant



15. REGULATORY INFORMATION

Labeling

Contains Nickel, Vanadium

Symbol(s)



Dangerous for the environment

R-phrases R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrases S57 Use appropriate container to avoid environmental contamination.
S61 Avoid release to the environment. Refer to special instructions/ Safety data sheets.

16. OTHER INFORMATION

Wording of the R-phrases in sections 2 and 3 R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.