



SAFETY DATA SHEET

MATERION

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

Identification of the substance/preparation Vanadium Oxide (V2O3)
Version No. 01
Issue date 05-May-2015
CAS # 1314-34-7
SDS Number V-MSDS0031
Manufacturer information Materion Advanced Chemicals Inc.
407 N. 13th Street
1316 W. St. Paul Avenue
Milwaukee, WI 53233

United States
advancedmaterials@materion.com
414.212.0257

2. HAZARDS IDENTIFICATION

Classification T;R25, Xn;R20
Physical hazards Not classified as a physical hazard.
Health hazards Harmful by inhalation. Toxic if swallowed.
Environmental hazards Not classified as an environmental hazard.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS #	Percent	EC-No.	Classification
vanadium oxide	1314-34-7	100	215-230-9	T;R25, Xn;R20

4. FIRST-AID MEASURES

5. FIRE-FIGHTING MEASURES

6. ACCIDENTAL RELEASE MEASURES

7. HANDLING AND STORAGE

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits No exposure limits noted for ingredient(s).
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 Not available.
Flash point Not available.
Flammability limits in air, upper, % by volume Not available.

Flammability limits in air, lower, % by volume	Not available.
Vapour pressure	Not available.
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	1940 °C (3524 °F)
Auto-ignition temperature	Not available.
VOC	Not available.
Molecular weight	149,88 g/mol
Molecular formula	O3-V2
Other data	
Density	4,87 g/cm3
Specific gravity	4,87

10. STABILITY AND REACTIVITY

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

11. TOXICOLOGICAL INFORMATION

Toxicological data

Product	Species	Test results
vanadium oxide (CAS 1314-34-7)		
Acute		
Dermal		
LD50	Rat	> 2500 mg/kg
Inhalation		
LC50	Rat	4 mg/l, 4 Hours
Oral		
LD50	Mouse	130 mg/kg

12. ECOLOGICAL INFORMATION

13. DISPOSAL CONSIDERATIONS

14. TRANSPORT INFORMATION

ADR

Not regulated as dangerous goods.

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

Labeling

Contains	vanadium oxide
EC number	215-230-9

Symbol(s)



Toxic

R-phrase(s)

R20 Harmful by inhalation.
R25 Toxic if swallowed.

S-phrase(s)

S29 Do not empty into drains.
S60 This material and its container must be disposed of as hazardous waste.

16. OTHER INFORMATION

Wording of the R-phrases in sections 2 and 3

R20 Harmful by inhalation.
R25 Toxic if swallowed.