



PRODUCT INFORMATION SHEET

MATERION

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Name of the substance	Yttrium
Identification number	7440-65-5 (CAS number)
Synonyms	None.
Document number	Y-MSDS0013
Issue date	02-June-2015
Version number	02
Supersedes date	02-June-2015

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Not available.
Uses advised against	None known.

1.3. Details of the supplier of the product information sheet

Supplier

Company name	Materion Advanced Materials Group		
Address	42 Mt. Ebo Road South Brewster, NY 10509 United States		
Division			
Telephone	Supplier Phone		1+845.279.0900
e-mail	Not available.		
Contact person	Not available.		

1.4. Emergency telephone number	Chemtrec	1+703.527.3887
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Directive 67/548/EEC or 1999/45/EC as amended

Classification according to Regulation (EC) No 1272/2008 as amended

Hazard summary

Physical hazards	Not classified for physical hazards.
Health hazards	Not classified for health hazards.
Environmental hazards	Not classified for hazards to the environment.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Contains:	Yttrium
Hazard pictograms	None.
Signal word	None.
Hazard statements	The substance does not meet the criteria for classification.

Precautionary statements

Prevention	Not available.
Response	Not available.
Storage	Not available.
Disposal	Not available.

Supplemental label information	None.
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2.3. Other hazards	None known.
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SECTION 3: Composition/information on ingredients

3.1. Substances

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Yttrium	100	7440-65-5 231-174-8	-	-	
Classification:					
DSD:	-				
CLP:	-				

SECTION 4: First aid measures

General information Not available.

4.1. Description of first aid measures

Inhalation Not available.

Skin contact Not available.

Eye contact Not available.

Ingestion Not available.

4.2. Most important symptoms and effects, both acute and delayed Not available.

4.3. Indication of any immediate medical attention and special treatment needed Not available.

SECTION 5: Firefighting measures

General fire hazards Not available.

5.1. Extinguishing media

Suitable extinguishing media Not available.

Unsuitable extinguishing media Not available.

5.2. Special hazards arising from the substance or mixture Not available.

5.3. Advice for firefighters

Special protective equipment for firefighters Not available.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

For non-emergency personnel Not available.

For emergency responders Not available.

6.2. Environmental precautions Not available.

6.3. Methods and material for containment and cleaning up Not available.

6.4. Reference to other sections Not available.

SECTION 7: Handling and storage

7.1. Precautions for safe handling Not available.

7.2. Conditions for safe storage, including any incompatibilities Not available.

7.3. Specific end use(s) Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Austria. MAK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001

Material	Type	Value	Form
Yttrium	MAK	1 mg/m ³	Respirable fraction.
	STEL	10 mg/m ³	Respirable fraction.
Components	Type	Value	Form
Yttrium (CAS 7440-65-5)	MAK	1 mg/m ³	Respirable fraction.
	STEL	10 mg/m ³	Respirable fraction.

Belgium. Exposure Limit Values.

Material	Type	Value
Yttrium	TWA	1 mg/m ³
Components	Type	Value
Yttrium (CAS 7440-65-5)	TWA	1 mg/m ³

Croatia. Dangerous Substance Exposure Limit Values in the Workplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/09

Material	Type	Value
Yttrium	MAC	1 mg/m ³
	STEL	3 mg/m ³
Components	Type	Value
Yttrium (CAS 7440-65-5)	MAC	1 mg/m ³
	STEL	3 mg/m ³

Denmark. Exposure Limit Values

Material	Type	Value	Form
Yttrium	TLV	1 mg/m ³	Dust.
Components	Type	Value	Form
Yttrium (CAS 7440-65-5)	TLV	1 mg/m ³	Dust.

Finland. Workplace Exposure Limits

Material	Type	Value
Yttrium	TWA	1 mg/m ³
Components	Type	Value
Yttrium (CAS 7440-65-5)	TWA	1 mg/m ³

France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984

Material	Type	Value
Yttrium	VME	1 mg/m ³
Components	Type	Value
Yttrium (CAS 7440-65-5)	VME	1 mg/m ³

Greece. OELs (Decree No. 90/1999, as amended)

Material	Type	Value
Yttrium	TWA	5 mg/m ³
Components	Type	Value
Yttrium (CAS 7440-65-5)	TWA	5 mg/m ³

Iceland. OELs. Regulation 154/1999 on occupational exposure limits

Material	Type	Value	Form
Yttrium	TWA	1 mg/m ³	Dust.
Components	Type	Value	Form
Yttrium (CAS 7440-65-5)	TWA	1 mg/m ³	Dust.

Ireland. Occupational Exposure Limits

Material	Type	Value
Yttrium	STEL	3 mg/m ³
	TWA	1 mg/m ³

Ireland. Occupational Exposure Limits Components

Material	Type	Value
Yttrium (CAS 7440-65-5)	STEL	3 mg/m3
	TWA	1 mg/m3

Italy. Occupational Exposure Limits Material

Material	Type	Value
Yttrium	TWA	1 mg/m3
Components	Type	Value
Yttrium (CAS 7440-65-5)	TWA	1 mg/m3

Norway. Administrative Norms for Contaminants in the Workplace Material

Material	Type	Value
Yttrium	TLV	1 mg/m3
Components	Type	Value
Yttrium (CAS 7440-65-5)	TLV	1 mg/m3

Poland. MACs. Minister of Labour and Social Policy Regarding Maximum Allowable Concentrations and Intensities in Working Environment Material

Material	Type	Value
Yttrium	TWA	1 mg/m3
Components	Type	Value
Yttrium (CAS 7440-65-5)	TWA	1 mg/m3

Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796) Material

Material	Type	Value
Yttrium	TWA	1 mg/m3
Components	Type	Value
Yttrium (CAS 7440-65-5)	TWA	1 mg/m3

Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia) Material

Material	Type	Value	Form
Yttrium	TWA	5 mg/m3	Inhalable fraction.
Components	Type	Value	Form
Yttrium (CAS 7440-65-5)	TWA	5 mg/m3	Inhalable fraction.

Spain. Occupational Exposure Limits Material

Material	Type	Value
Yttrium	TWA	1 mg/m3
Components	Type	Value
Yttrium (CAS 7440-65-5)	TWA	1 mg/m3

UK. EH40 Workplace Exposure Limits (WELs) Material

Material	Type	Value
Yttrium	STEL	3 mg/m3
	TWA	1 mg/m3
Components	Type	Value
Yttrium (CAS 7440-65-5)	STEL	3 mg/m3
	TWA	1 mg/m3

Biological limit values No biological exposure limits noted for the ingredient(s).**Recommended monitoring procedures** Not available.**Derived no-effect level (DNEL)** Not available.**Predicted no effect concentrations (PNECs)** Not available.**8.2. Exposure controls****Appropriate engineering controls** Not available.

Individual protection measures, such as personal protective equipment

Eye/face protection	Not available.
Skin protection	
- Hand protection	Not available.
- Other	Not available.
Respiratory protection	Not available.
Thermal hazards	Not available.
Hygiene measures	Not available.
Environmental exposure controls	Not available.

SECTION 9: Physical and chemical properties**9.1. Information on basic 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	1522 °C (2771,6 °F)
Initial boiling point and boiling range	3345 °C (6053 °F)
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Vapour pressure	< 0,0000001 kPa at 25 °C
Vapour density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Soluble in hot H2O
Solubility (other)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Explosive properties	Not available.
Oxidizing properties	Not available.

9.2. Other information

Molecular formula y

SECTION 10: Stability and reactivity

10.1. Reactivity	Not available.
10.2. Chemical stability	Not available.
10.3. Possibility of hazardous reactions	Not available.
10.4. Conditions to avoid	Not available.
10.5. Incompatible materials	Not available.
10.6. Hazardous decomposition products	Not available.

SECTION 11: Toxicological information

General information Not available.

Information on likely routes of exposure

Inhalation Not available.

Skin contact Not available.

Eye contact Not available.

Ingestion Not available.

Symptoms Not available.

11.1. Information on toxicological effects

Acute toxicity No data available.

Skin corrosion/irritation Not available.

Serious eye damage/eye irritation Not available.

Respiratory sensitisation Not available.

Skin sensitisation Not available.

Germ cell mutagenicity Not available.

Carcinogenicity Not available.

Reproductive toxicity Not available.

Specific target organ toxicity - single exposure Not available.

Specific target organ toxicity - repeated exposure Not available.

Aspiration hazard Not available.

Mixture versus substance information Not available.

Other information Not available.

SECTION 12: Ecological information

12.1. Toxicity No toxicity data noted for the ingredient(s).

12.2. Persistence and degradability Not available.

12.3. Bioaccumulative potential Not available.

Partition coefficient n-octanol/water (log K_{ow}) Not available.

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil Not available.

12.5. Results of PBT and vPvB assessment Not a PBT or vPvB substance or mixture.

12.6. Other adverse effects Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste Not available.

Contaminated packaging Not available.

EU waste code Not available.

SECTION 14: Transport information

ADR

Not regulated as dangerous goods.

RID

Not regulated as dangerous goods.

ADN

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulations**

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I, as amended

Not listed.

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex II, as amended

Not listed.

Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended

Not listed.

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use

Not regulated.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended

Not listed.

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding, as amended

Not listed.

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances

Not listed.

Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work, as amended

Not listed.

Directive 94/33/EC on the protection of young people at work, as amended

Not listed.

National regulations

Not available.

15.2. Chemical safety assessment

Not available.

SECTION 16: Other information**Further information**

Not available.

Disclaimer

To avoid any misunderstandings or incorrect assumptions by the receiver of the safety information, it should be made clear that the supplied information is not in the form of a Safety Data Sheet (SDS), but is actually a voluntary Product Information Sheet closely following the guidelines of the Safety Data Sheet – COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 (REACH/SDS).