

Cadmium column Ready to Use

Date 30.4.2008

Previous date: 3.4.2008

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

1.1 Identification of the substance or preparation

1.1.1 Commercial Product Name

Cadmium column
Ready to Use

1.1.2 Product code

984067

1.2 Use of the Substance/Preparation

1.2.1 Expressed in writing

For general laboratory purposes.

1.3 Company/undertaking identification

1.3.1 Supplier

Thermo Fisher Scientific Oy, Clinical Diagnostics Finland

1.3.2 Contact information:

Ratastie 2, P.O.Box 100
FI-01621 Vantaa
FINLAND
+358-9-329 100
+358-9-3291 0300
FI0921547-0

2. HAZARDS IDENTIFICATION

Very toxic. Dangerous for the environment.

May cause cancer. Very toxic by inhalation. Toxic: danger of serious damage to health by prolonged exposure through inhalation and if swallowed. Possible risk of impaired fertility. Possible risk of harm to the unborn child. Possible risk of irreversible effects.

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Hazardous components

3.1.1 CAS/EC and Reg.number	3.1.2 Chemical name of the substance	3.1.3 Concentration	3.1.4 Classification
7440-43-9	Cadmium (non-pyrophoric)	~ 100 %	Carc. Cat. 2; R45;Muta. Cat. 3; R68;Repr. Cat. 3; R62-63;T; R48/23/25;T+; R26;N; R50-53

4. FIRST AID MEASURES

4.2 Inhalation

Move to fresh air. Obtain medical attention.

4.3 Skin contact

Rinse immediately with plenty of water for at least 15 minutes. Take off all contaminated clothing immediately.

4.4 Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention immediately if symptoms occur.

4.5 Ingestion

Rinse mouth. Obtain medical attention.

**Cadmium column
Ready to Use**

Date 30.4.2008

Previous date: 3.4.2008

5. FIRE-FIGHTING MEASURES

- 5.1 Suitable extinguishing media**
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- 5.3 Specific hazards**
Burning produces obnoxious and toxic fumes.
- 5.4 Special protective equipment for firefighters**
respirator, complete suit protecting against chemicals

6. ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions**
Use personal protective equipment.
- 6.2 Environmental precautions**
Should not be released into the environment.
- 6.3 Methods for cleaning up**
Pick up and transfer to properly labelled containers. Wear personal protective equipment.: Respiratory protection, Protective gloves, Goggles. Dispose of as hazardous waste in compliance with local and national regulations.

7. HANDLING AND STORAGE

- 7.1 Handling**
Avoid exposure - obtain special instructions before use. Wear protective gloves/clothing. Goggles.
- 7.2 Storage**
Keep at temperatures between 15 and 20°C. Keep tightly closed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- 8.1 Exposure Limit Values**
- 8.1.1 Threshold limits**
7440-43-9 Cadmium (non-pyrophoric) 0.02 mg/m³ (8 h)
skin, Cd
- 8.2 Exposure controls**
- 8.2.1 Occupational exposure controls**
Take off all contaminated clothing immediately. When using do not eat or drink. Avoid dust formation.
- 8.2.1.1 Respiratory protection**
Breathing apparatus with filter.
- 8.2.1.2 Hand protection**
Impervious gloves
- 8.2.1.3 Eye protection**
Goggles
- 8.2.1.4 Skin and body protection**
Lab coat

9. PHYSICAL AND CHEMICAL PROPERTIES

- 9.1 General Information (appearance, odour)**
granules (0.3 - 1 mm), grey
- 9.2 Important Health Safety and Environmental Information**
- 9.2.1 pH** -

**Cadmium column
Ready to Use**

Date 30.4.2008

Previous date: 3.4.2008

9.2.2	Boiling point/range	767 °C
9.2.3	Flash point	-
9.2.4	Flammability (solid, gas)	-
9.2.5	Explosive properties	-
9.2.5.1	Lower explosion limit	-
9.2.5.2	Upper explosion limit	-
9.2.7	Vapour pressure	-
9.2.8	Relative density	8.64 g/ml
9.2.9	Solubility	-
9.2.9.1	Water solubility	insoluble
9.2.9.2	Fat solubility (solvent - oil to be specified)	-
9.2.10	Partition coefficient (n-octanol/water)	-

10. STABILITY AND REACTIVITY

- 10.1 Conditions to avoid**
Heat, flames and sparks.
- 10.2 Materials to avoid**
Oxidizing agents, Metals, Acids.
- 10.3 Hazardous decomposition products**
Toxic cadmium oxide fumes.

11. TOXICOLOGICAL INFORMATION

- 11.1 Acute toxicity**
LC50/inhalation/30min/rat = 25 mg/m³
LD50/oral/rat = 2330 mg/kg
LD50/oral/mouse = 890 mg/kg
- 11.2 Primary irritation**
Prolonged skin contact may cause skin irritation.
- 11.3 Sensitisation**
No sensitization responses were observed.
- 11.4 Subacute, subchronic and prolonged toxicity**
May cause cancer. Possible risk of impaired fertility. Possible risk of harm to the unborn child.
- 11.5 Human experience**
May cause cancer.

12. ECOLOGICAL INFORMATION

- 12.1 Ecotoxicity**
- 12.1.1 Aquatic toxicity**
Fish: TLm / 24 h / rainbow trout = 30 ppm
TL50 / 96 h / Fathead minnow = 7.2 ppm
LCO / 96 h / sunfish = 0.08 ppm

13. DISPOSAL CONSIDERATIONS

Hazardous waste. The product has to be disposed of as laboratory chemical in accordance with local regulations.

**Cadmium column
Ready to Use**

Date 30.4.2008

Previous date: 3.4.2008

14. TRANSPORT INFORMATION

14.1	UN-No	UN 2570
14.2	Packaging group	II
14.3	Land transport	
14.3.1	Class	6.1
14.3.3	Description of the goods	Cadmium compound
14.4	Sea transport	
14.4.1	IMDG	6.1 / II UN 2570
14.4.2	Proper shipping name	Cadmium compound
	Packaging group	II
14.5	Air transport	
14.5.1	ICAO/IATA	6.1 UN 2570
14.5.2	Proper shipping name	Cadmium compound

15. REGULATORY INFORMATION

15.1	Information on the warning label	
15.1.1	Letter code of the warning symbol and indications of danger for the preparation	
	T+	Very toxic
	N	Dangerous for the environment
15.1.2	Names of the ingredients given on the warning label	
	Cadmium (non-pyrophoric)	
15.1.3	R-phrases(s)	
	R45	May cause cancer.
	R26	Very toxic by inhalation.
	R48/23/25	Toxic: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.
	R62	Possible risk of impaired fertility.
	R63	Possible risk of harm to the unborn child.
	R68	Possible risk of irreversible effects.
	R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
15.1.4	S-phrases(s)	
	S53	Avoid exposure - obtain special instructions before use.
	S45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
	S60	This material and its container must be disposed of as hazardous waste.
	S61	Avoid release to the environment. Refer to special instructions/safety data sheets.

16. OTHER INFORMATION

16.1	List of relevant R phrases	
	R50	Very toxic to aquatic organisms.
	R53	May cause long-term adverse effects in the aquatic environment.
	R45	May cause cancer.
	R26	Very toxic by inhalation.
	R48/23/25	Toxic: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.
	R62	Possible risk of impaired fertility.
	R63	Possible risk of harm to the unborn child.

**Cadmium column
Ready to Use**

Date 30.4.2008

Previous date: 3.4.2008

R68 Possible risk of irreversible effects.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

16.4 Additional information available from:

Code of the Material Safety Data Sheet: D06744-01-MSDS-Cadmium column-EN

Corporation mentioned in point 1.3.

The information in this datasheet is to our best knowledge correct and complete, and is offered in good faith as accurate. It characterizes the product with regard to the appropriate safety precautions. It does not guarantee properties of the product.

16.5 Literary reference

The MSDS of the manufacturer.

This product has been evaluated in accordance with the directives 1967/548/EEC, 1999/45/EC and 2001/58/EC. IATA Dangerous Goods Regulations

06.04.2008

LMKo