



# SAFETY DATA SHEET

**MATERION**

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

### 1.1. Product identifier

**Trade name or designation of the mixture** Silver Based Alloys  
**Synonyms** None.  
**Document number** W03  
**Issue date** 05-May-2015  
**Version number** 02  
**Revision date** 07-July-2015  
**Supersedes date** 05-May-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 safety data sheet

#### Supplier

**Company name** Materion Advanced Materials Technologies and Services Inc.  
**Address** 2978 Main Street  
Buffalo, NY 14214  
United States  
**Division** Buffalo  
**Telephone** 716-837-1000  
**e-mail** Not available.  
**Contact person** Not available.

**1.4. Emergency telephone number** 800-424-9300 Chemtrec

## 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** N;R50/53

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

#### Environmental hazards

Hazardous to the aquatic environment, acute aquatic hazard Category 1 H400 - Very toxic to aquatic life.  
Hazardous to the aquatic environment, long-term aquatic hazard Category 1 H410 - Very toxic to aquatic life with long lasting effects.

#### Hazard summary

**Physical hazards** Not classified for physical hazards.  
**Health hazards** Not classified for health hazards.  
**Environmental hazards** Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
**Specific hazards** Not available.

### 2.2. Label elements

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

**Contains:** Copper, Gold, Silver  
**Hazard pictograms** None.  
**Signal word** Warning  
**Hazard statements**  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.

## Precautionary statements

### Prevention

P273 Avoid release to the environment.

### Response

P391 Collect spillage.

### Storage

Not available.

### Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

## Supplemental label information

9,79 % of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 9,79 % of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

**2.3. Other hazards** None known.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Silver	60 - < 99	7440-22-4 231-131-3	-	-	# M=1000
<b>Classification:</b>	<b>DSD:</b> N;R50/53				
	<b>CLP:</b> Aquatic Acute 1;H400, Aquatic Chronic 1;H410				
Gold	4 - < 15	7440-57-5 231-165-9	-	-	
<b>Classification:</b>	<b>DSD:</b> -				
	<b>CLP:</b> -				
Copper	1 - < 15	7440-50-8 231-159-6	01-2119480154-42-0080	-	
<b>Classification:</b>	<b>DSD:</b> -				
	<b>CLP:</b> STOT SE 3;H335				

## 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

Components	Type	Value	Form
Copper (CAS 7440-50-8)	MAK	1 mg/m <sup>3</sup>	Inhalable fraction.
	STEL	0,1 mg/m <sup>3</sup> 4 mg/m <sup>3</sup> 0,4 mg/m <sup>3</sup>	Fume and respirable dust. Inhalable fraction. Fume and respirable dust.
Silver (CAS 7440-22-4)	MAK	0,1 mg/m <sup>3</sup>	Inhalable fraction.
	STEL	0,1 mg/m <sup>3</sup>	Inhalable fraction.

##### Belgium. Exposure Limit Values.

Components	Type	Value	Form
Copper (CAS 7440-50-8)	TWA	1 mg/m <sup>3</sup>	Dust and mist.
		0,2 mg/m <sup>3</sup>	Fume.
Silver (CAS 7440-22-4)	TWA	0,1 mg/m <sup>3</sup>	

##### Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work

Components	Type	Value
Copper (CAS 7440-50-8)	TWA	0,1 mg/m <sup>3</sup>
Silver (CAS 7440-22-4)	TWA	0,1 mg/m <sup>3</sup>

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

Components	Type	Value	Form
Copper (CAS 7440-50-8)	MAC	0,21 mg/m <sup>3</sup>	Dust and fume.
	STEL	2 mg/m <sup>3</sup>	Dust and fume.
Silver (CAS 7440-22-4)	MAC	0,1 mg/m <sup>3</sup>	

##### Cyprus. OELs. Control of factory atmosphere and dangerous substances in factories regulation, PI 311/73, as amended.

Components	Type	Value	Form
Copper (CAS 7440-50-8)	TWA	0,2 mg/m <sup>3</sup>	Fume.

**Czech Republic. OELs. Government Decree 361 Components**

Components	Type	Value	Form
Copper (CAS 7440-50-8)	Ceiling	2 mg/m <sup>3</sup>	Dust.
		0,2 mg/m <sup>3</sup>	Fume.
	TWA	1 mg/m <sup>3</sup>	Dust.
		0,1 mg/m <sup>3</sup>	Fume.
Silver (CAS 7440-22-4)	Ceiling	0,3 mg/m <sup>3</sup>	
	TWA	0,1 mg/m <sup>3</sup>	

**Denmark. Exposure Limit Values Components**

Components	Type	Value	Form
Copper (CAS 7440-50-8)	TLV	1 mg/m <sup>3</sup>	Dust.
		0,1 mg/m <sup>3</sup>	Fume.
Silver (CAS 7440-22-4)	TLV	0,01 mg/m <sup>3</sup>	Dust.

**Estonia. OELs. Occupational Exposure Limits of Hazardous Substances. (Annex of Regulation No. 293 of 18 September 2001)**

Components	Type	Value	Form
Copper (CAS 7440-50-8)	TWA	1 mg/m <sup>3</sup>	Total dust.
		0,2 mg/m <sup>3</sup>	Respirable dust.
Silver (CAS 7440-22-4)	TWA	0,1 mg/m <sup>3</sup>	

**Finland. Workplace Exposure Limits Components**

Components	Type	Value	Form
Copper (CAS 7440-50-8)	TWA	1 mg/m <sup>3</sup>	Respirable dust and/or fume.
		0,1 mg/m <sup>3</sup>	
Silver (CAS 7440-22-4)	TWA	0,1 mg/m <sup>3</sup>	

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

Components	Type	Value	Form
Copper (CAS 7440-50-8)	VLE	2 mg/m <sup>3</sup>	Dust.
		1 mg/m <sup>3</sup>	Dust.
		0,2 mg/m <sup>3</sup>	Fume.
Silver (CAS 7440-22-4)	VME	0,1 mg/m <sup>3</sup>	

**Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG) Components**

Components	Type	Value	Form
Copper (CAS 7440-50-8)	TWA	0,01 mg/m <sup>3</sup>	Respirable fraction.
Silver (CAS 7440-22-4)	TWA	0,1 mg/m <sup>3</sup>	Inhalable fraction.

**Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace Components**

Components	Type	Value	Form
Silver (CAS 7440-22-4)	AGW	0,1 mg/m <sup>3</sup>	Inhalable fraction.

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

Components	Type	Value	Form
Copper (CAS 7440-50-8)	STEL	2 mg/m <sup>3</sup>	Dust.
		1 mg/m <sup>3</sup>	Dust.
		0,2 mg/m <sup>3</sup>	Fume.
Silver (CAS 7440-22-4)	TWA	0,1 mg/m <sup>3</sup>	

**Hungary. OELs. Joint Decree on Chemical Safety of Workplaces Components**

Components	Type	Value	Form
Copper (CAS 7440-50-8)	STEL	4 mg/m <sup>3</sup>	Smoke.
		0,4 mg/m <sup>3</sup>	
		1 mg/m <sup>3</sup>	
	TWA	0,1 mg/m <sup>3</sup>	Smoke.
		0,4 mg/m <sup>3</sup>	
		0,1 mg/m <sup>3</sup>	
Silver (CAS 7440-22-4)	STEL	0,4 mg/m <sup>3</sup>	
		TWA	0,1 mg/m <sup>3</sup>

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

Components	Type	Value	Form
Copper (CAS 7440-50-8)	TWA	1 mg/m <sup>3</sup>	Total dust.
		0,1 mg/m <sup>3</sup>	Respirable dust.
Silver (CAS 7440-22-4)	TWA	0,01 mg/m <sup>3</sup>	Dust.

**Ireland. Occupational Exposure Limits**

Components	Type	Value	Form
Copper (CAS 7440-50-8)	STEL	2 mg/m <sup>3</sup>	Dust and mist.
	TWA	1 mg/m <sup>3</sup>	Dust and mist.
Silver (CAS 7440-22-4)	TWA	0,2 mg/m <sup>3</sup>	Fume.
		0,1 mg/m <sup>3</sup>	

**Italy. Occupational Exposure Limits**

Components	Type	Value
Silver (CAS 7440-22-4)	TWA	0,1 mg/m <sup>3</sup>

**Latvia. OELs. Occupational exposure limit values of chemical substances in work environment**

Components	Type	Value
Copper (CAS 7440-50-8)	STEL	1 mg/m <sup>3</sup>
	TWA	0,5 mg/m <sup>3</sup>
Silver (CAS 7440-22-4)	TWA	0,1 mg/m <sup>3</sup>

**Lithuania. OELs. Limit Values for Chemical Substances, General Requirements**

Components	Type	Value	Form
Copper (CAS 7440-50-8)	TWA	1 mg/m <sup>3</sup>	Inhalable fraction.
		0,2 mg/m <sup>3</sup>	Respirable fraction.
Silver (CAS 7440-22-4)	TWA	0,1 mg/m <sup>3</sup>	

**Malta. OELs. Occupational Exposure Limit Values (L.N. 227. of Occupational Health and Safety Authority Act (CAP. 424), Schedules I and V)**

Components	Type	Value
Silver (CAS 7440-22-4)	TWA	0,1 mg/m <sup>3</sup>

**Netherlands. OELs (binding)**

Components	Type	Value	Form
Copper (CAS 7440-50-8)	TWA	0,1 mg/m <sup>3</sup>	Inhalable fraction.
Silver (CAS 7440-22-4)	TWA	0,1 mg/m <sup>3</sup>	

**Norway. Administrative Norms for Contaminants in the Workplace**

Components	Type	Value	Form
Copper (CAS 7440-50-8)	TLV	1 mg/m <sup>3</sup>	Dust.
		0,1 mg/m <sup>3</sup>	Fume.
Silver (CAS 7440-22-4)	TLV	0,1 mg/m <sup>3</sup>	Dust and fume.

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

Components	Type	Value	Form
Copper (CAS 7440-50-8)	TWA	0,2 mg/m <sup>3</sup>	Inhalable fraction.
Silver (CAS 7440-22-4)	TWA	0,05 mg/m <sup>3</sup>	

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

Components	Type	Value	Form
Copper (CAS 7440-50-8)	TWA	1 mg/m <sup>3</sup>	Dust and mist.
		0,2 mg/m <sup>3</sup>	Fume.
Silver (CAS 7440-22-4)	TWA	0,1 mg/m <sup>3</sup>	

**Romania. OELs. Protection of workers from exposure to chemical agents at the workplace**

Components	Type	Value	Form
Copper (CAS 7440-50-8)	STEL	1,5 mg/m <sup>3</sup>	Dust.
		0,2 mg/m <sup>3</sup>	Fume.
Silver (CAS 7440-22-4)	TWA	0,5 mg/m <sup>3</sup>	Dust.
	TWA	0,1 mg/m <sup>3</sup>	

**Slovakia. OELs. Regulation No. 300/2007 concerning protection of health in work with chemical agents**

Components	Type	Value	Form
Copper (CAS 7440-50-8)	TWA	1 mg/m <sup>3</sup>	Inhalable fraction.
		0,2 mg/m <sup>3</sup>	Respirable fume.
Silver (CAS 7440-22-4)	TWA	0,1 mg/m <sup>3</sup>	

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

Components	Type	Value	Form
Copper (CAS 7440-50-8)	TWA	1 mg/m <sup>3</sup> 0,1 mg/m <sup>3</sup>	Inhalable fraction. Respirable fume.
Silver (CAS 7440-22-4)	TWA	0,01 mg/m <sup>3</sup>	

**Spain. Occupational Exposure Limits**

Components	Type	Value	Form
Copper (CAS 7440-50-8)	TWA	1 mg/m <sup>3</sup> 0,2 mg/m <sup>3</sup>	Dust and mist. Fume.
Silver (CAS 7440-22-4)	TWA	0,1 mg/m <sup>3</sup>	

**Sweden. Occupational Exposure Limit Values**

Components	Type	Value	Form
Copper (CAS 7440-50-8)	TWA	1 mg/m <sup>3</sup> 0,2 mg/m <sup>3</sup>	Total dust. Respirable dust.
Silver (CAS 7440-22-4)	TWA	0,1 mg/m <sup>3</sup>	Total dust.

**Switzerland. SUVA Grenzwerte am Arbeitsplatz**

Components	Type	Value	Form
Copper (CAS 7440-50-8)	STEL TWA	0,2 mg/m <sup>3</sup> 0,1 mg/m <sup>3</sup>	Inhalable dust. Inhalable dust.
Silver (CAS 7440-22-4)	STEL TWA	0,8 mg/m <sup>3</sup> 0,1 mg/m <sup>3</sup>	Inhalable dust. Inhalable dust.

**UK. EH40 Workplace Exposure Limits (WELs)**

Components	Type	Value	Form
Copper (CAS 7440-50-8)	STEL TWA	2 mg/m <sup>3</sup> 1 mg/m <sup>3</sup>	Inhalable dusts and mists. Inhalable dusts and mists.
Silver (CAS 7440-22-4)	TWA	0,2 mg/m <sup>3</sup> 0,1 mg/m <sup>3</sup>	Fume.

**EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU**

Components	Type	Value
Silver (CAS 7440-22-4)	TWA	0,1 mg/m <sup>3</sup>

**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.

<b>Colour</b>	Not available.
<b>Odour</b>	Not applicable.
<b>Odour threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	960,5 °C (1760,9 °F) estimated
<b>Initial boiling point and boiling range</b>	2000 °C (3632 °F) estimated
<b>Flash point</b>	Not available.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Vapour pressure</b>	0,06 hPa estimated
<b>Vapour density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Solubility (other)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Explosive properties</b>	Not available.
<b>Oxidizing properties</b>	Not available.
<b>9.2. Other information</b>	
<b>Density</b>	11,22 g/cm <sup>3</sup> estimated
<b>Specific gravity</b>	11,23 estimated

## SECTION 10: Stability and reactivity

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

## SECTION 11: Toxicological information

<b>General information</b>	Not available.
<b>Information on likely routes of exposure</b>	
<b>Inhalation</b>	Not available.
<b>Skin contact</b>	Not available.
<b>Eye contact</b>	Not available.
<b>Ingestion</b>	Not available.
<b>Symptoms</b>	Not available.
<b>11.1. Information on toxicological effects</b>	

Components	Species	Test results
Silver (CAS 7440-22-4)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rat	> 2000 mg/kg
<b>Oral</b>		
LD50	Rat	> 5000 mg/kg
<b>Skin corrosion/irritation</b>	Not available.	
<b>Serious eye damage/eye irritation</b>	Not available.	
<b>Respiratory sensitisation</b>	Not available.	
<b>Skin sensitisation</b>	Not available.	
<b>Germ cell mutagenicity</b>	Not available.	
<b>Carcinogenicity</b>	Not available.	
<b>Reproductive toxicity</b>	Not available.	
<b>Specific target organ toxicity - single exposure</b>	Not available.	
<b>Specific target organ toxicity - repeated exposure</b>	Not available.	
<b>Aspiration hazard</b>	Not available.	
<b>Mixture versus substance information</b>	Not available.	
<b>Other information</b>	Not available.	

## SECTION 12: Ecological information

### 12.1. Toxicity

Components	Species	Test results
Silver (CAS 7440-22-4)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Daphnia magna) 0,0002 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas) 0,0023 - 0,0033 mg/l, 96 hours
<b>12.2. Persistence and degradability</b>	Not available.	
<b>12.3. Bioaccumulative potential</b>	Not available.	
<b>Partition coefficient n-octanol/water (log Kow)</b>	Not available.	
<b>Bioconcentration factor (BCF)</b>	Not available.	
<b>12.4. Mobility in soil</b>	Not available.	
<b>12.5. Results of PBT and vPvB assessment</b>	Not a PBT or vPvB substance or mixture.	
<b>12.6. Other adverse effects</b>	Not available.	

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

<b>Residual waste</b>	Not available.
<b>Contaminated packaging</b>	Not available.
<b>EU waste code</b>	Not available.

## SECTION 14: Transport information

### ADR

<b>14.1. UN number</b>	UN3077
<b>14.2. UN proper shipping name</b>	Environmentally hazardous substance, solid, n.o.s.
<b>14.3. Transport hazard class(es)</b>	
<b>Class</b>	9



**Subsidiary risk** -  
**Label(s)** 9  
**Hazard No. (ADR)** 90  
**Tunnel restriction code** E  
**14.4. Packing group** III  
**14.5. Environmental hazards** Yes  
**14.6. Special precautions for user** Not available.

#### RID

**14.1. UN number** UN3077  
**14.2. UN proper shipping name** Environmentally hazardous substance, solid, n.o.s.  
**14.3. Transport hazard class(es)**  
**Class** 9  
**Subsidiary risk** -  
**Label(s)** 9  
**14.4. Packing group** III  
**14.5. Environmental hazards** Yes  
**14.6. Special precautions for user** Not available.

#### ADN

**14.1. UN number** UN3077  
**14.2. UN proper shipping name** Environmentally Hazardous Solid, N.o.s.  
**14.3. Transport hazard class(es)**  
**Class** 9  
**Subsidiary risk** -  
**Label(s)** 9  
**14.4. Packing group** III  
**14.5. Environmental hazards** Yes  
**14.6. Special precautions for user** Not available.

#### IATA

**14.1. UN number** UN3077  
**14.2. UN proper shipping name** Environmentally hazardous substance, solid, n.o.s.  
**14.3. Transport hazard class(es)**  
**Class** 9  
**Subsidiary risk** -  
**14.4. Packing group** III  
**14.5. Environmental hazards** Yes  
**ERG Code** 9L  
**14.6. Special precautions for user** Not available.

#### Other information

**Passenger and cargo aircraft** Allowed.  
**Cargo aircraft only** Allowed.

#### IMDG

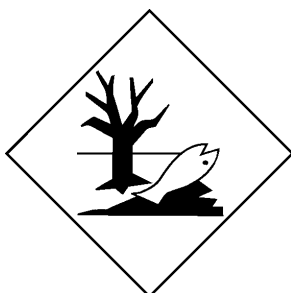
**14.1. UN number** UN3077  
**14.2. UN proper shipping name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., MARINE POLLUTANT  
**14.3. Transport hazard class(es)**  
**Class** 9  
**Subsidiary risk** -  
**14.4. Packing group** III  
**14.5. Environmental hazards**  
**Marine pollutant** Yes  
**EmS** F-A, S-F

**14.6. Special precautions for user** Not available.

**ADN; ADR; IATA; IMDG; RID**



**Marine pollutant**



## **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**

**List of abbreviations** Not available.

**References** Not available.

**Information on evaluation method leading to the classification of mixture** Not available.

**Full text of any statements or R-phrases and H-statements under Sections 2 to 15**

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
H335 May cause respiratory irritation.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.

**Revision information** None.

**Training information** Not available.