# MATERION

# SAFETY DATA SHEET

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

1.1. Product identifier

Trade name or **Aluminum Copper** 

designation of the mixture

**Synonyms** None. **Document number** 1CC **Materion Code** 1CC

**Issue date** 22-February-2018

**Version number** 

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 Chemicals Inc.

**Address** 407 N. 13th Street

> 1316 W. St. Paul Avenue Milwaukee, WI 53233

**United States** Milwaukee

**Telephone** 414.212.0257 e-mail advancedmaterials@materion.com

Noreen Atkinson **Contact person** 

1.4. Emergency telephone

number

**Division** 

#### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

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

**Health hazards** 

Acute toxicity, oral Category 4 Acute toxicity, inhalation Category 3 Serious eye damage/eye irritation Category 2

Specific target organ toxicity - single exposureCategory 3 respiratory tract irritation H335 - May cause respiratory

irritation.

**Hazard summary** May cause irritation to the respiratory system. Dangerous for the environment if discharged into

watercourses.

2.2. Label elements

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

**Contains:** Aluminium, Copper

**Hazard pictograms** 



Signal word Warning

**Hazard statements** 

May cause respiratory irritation. H335 Very toxic to aquatic life. H400

Very toxic to aquatic life with long lasting effects. H410

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### **Precautionary statements**

**Prevention** 

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

Response

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTRE/doctor if you feel unwell.

P391 Collect spillage.

**Storage** 

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

**Disposal** 

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

**Supplemental label** 

information

None.

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
Aluminium	47 - 99,5	7429-90-5 231-072-3	-	013-002-00-1	
Classification:	Aquatic Acute 1;H400, A	quatic Chronic 1;H	410		Т
Copper	0,5 - 34	7440-50-8 231-159-6	01-2119480154-42-0080	029-019-01-X	
Classification:	STOT SE 3;H335				

#### List of abbreviations and symbols that may be used above

CLP: Regulation No. 1272/2008. DSD: Directive 67/548/EEC.

M: M-factor

vPvB: very persistent and very bioaccumulative substance. PBT: persistent, bioaccumulative and toxic substance.

#: This substance has been assigned Community workplace exposure limit(s).

**Composition comments** The full text for all R- and H-phrases is displayed in section 16.

## **SECTION 4: First aid measures**

**General information** Ensure that medical personnel are aware of the material(s) involved, and take precautions to

protect themselves.

4.1. Description of first aid measures

**Inhalation** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Move to fresh

air. Call a POISON CENTRE or doctor/physician if you feel unwell.

**Skin contact** Get medical attention if irritation develops and persists.

**Eye contact** Rinse with water. Get medical attention if irritation develops and persists.

**Ingestion** Get medical advice/attention if you feel unwell.

4.2. Most important

symptoms and effects, both

acute and delayed

Not available.

4.3. Indication of any immediate medical attention

immediate medical attention and special treatment

Provide general supportive measures and treat symptomatically. Treat symptomatically.

needed

## **SECTION 5: Firefighting measures**

**General fire hazards** No unusual fire or explosion hazards noted.

5.1. Extinguishing media

Suitable extinguishing

Powder. Dry sand.

media

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Unsuitable extinguishing

media

Water. Do not use water jet as an extinguisher, as this will spread the fire. Carbon dioxide (CO2).

5.2. Special hazards arising from the substance or

mixture

Not available.

5.3. Advice for firefighters

Special protective equipment for firefighters

Wear suitable protective equipment.

**Special firefighting** 

procedures

Water runoff can cause environmental damage.

#### SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Local authorities should be advised if significant spillages cannot be contained. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate personal protective equipment. Ensure adequate ventilation.

For emergency

Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

responders 6.2. Environmental

Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

Stop the flow of material, if this is without risk. Collect spillage. Prevent product from entering

drains. Prevent entry into waterways, sewer, basements or confined areas.

6.4. Reference to other

For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

sections

precautions

# **SECTION 7: Handling and storage**

7.1. Precautions for safe handling

Avoid prolonged exposure. Avoid release to the environment. Do not empty into drains.

7.2. Conditions for safe storage, including any

Store in a cool, dry place out of direct sunlight.

incompatibilities

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), BGBI. II, no. 184/2001

Components	Туре	Value	Form
Aluminium (CAS 7429-90-5)	MAK	5 mg/m3	Respirable fraction.
		10 mg/m3	Inhalable fraction.
	STEL	20 mg/m3	Inhalable fraction.
		10 mg/m3	Respirable fraction.
Copper (CAS 7440-50-8)	MAK	1 mg/m3	Inhalable fraction.
		0,1 mg/m3	Fume and respirable dust.
	STEL	4 mg/m3	Inhalable fraction.
		0,4 mg/m3	Fume and respirable dust.
Belgium. Exposure Limit Values.			
Components	Туре	Value	Form
Aluminium (CAS 7429-90-5)	TWA	1 mg/m3	Respirable fraction.
Copper (CAS 7440-50-8)	TWA	1 mg/m3	Dust and mist.
		0,2 mg/m3	Fume.
<b>Bulgaria. OELs. Regulation No 13</b>	3 on protection of workers a	against risks of exposure to	chemical agents at work
Components	Туре	Value	Form
Aluminium (CAS 7429-90-5)	TWA	2 mg/m3	
-		10 mg/m3	Dust.

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Copper (CAS 7440-50-8)

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TWA

1,5 mg/m3

0,1 mg/m3

Respirable fraction.

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

Components	Туре	Value	Form
Aluminium (CAS 7429-90-5)	MAC	4 mg/m3	Respirable dust.
C (CAC 7440 F0 C)	MAG	10 mg/m3	Total dust.
Copper (CAS 7440-50-8)	MAC	0,21 mg/m3	Dust and fume.
O	STEL	2 mg/m3	Dust and fume.
Cyprus. OELs. Control of factory a amended.	atmospnere and dangerous	substances in factories regi	liation, P1 311/73, as
Components	Туре	Value	Form
Copper (CAS 7440-50-8)	TWA	0,2 mg/m3	Fume.
Czech Republic. OELs. Governme	nt Decree 361		
Components	Туре	Value	Form
Aluminium (CAS 7429-90-5)	TWA	10 mg/m3	Dust.
Copper (CAS 7440-50-8)	Ceiling	2 mg/m3	Dust.
		0,2 mg/m3	Fume.
	TWA	1 mg/m3	Dust.
		0,1 mg/m3	Fume.
Denmark. Exposure Limit Values		Value	Form
Components	Туре	Value	
Aluminium (CAS 7429-90-5)	TLV	5 mg/m3	Dust and fume.
		5 mg/m3	Fume.
		2 mg/m3	Respirable dust and/o fume.
Copper (CAS 7440-50-8)	TLV	1 mg/m3	Dust.
Copper (CA3 / <del>11</del> 0-30-0)	I L V		
Estanta OFI O 11 15	and the second second	0,1 mg/m3	Fume.
Estonia. OELs. Occupational Expo September 2001)	osure Limits of Hazardous S	ubstances. (Annex of Regula	ation No. 293 of 18
Components	Туре	Value	Form
Aluminium (CAS 7429-90-5)	TWA	4 mg/m3	Respirable dust.
		10 mg/m3	Total dust.
Copper (CAS 7440-50-8)	TWA	1 mg/m3	Total dust.
		0,2 mg/m3	Respirable dust.
Finland. Workplace Exposure Lin	nits		
Components	Туре	Value	Form
Aluminium (CAS 7429-90-5)	TWA	1,5 mg/m3	Welding fume.
Copper (CAS 7440-50-8)	TWA	0,1 mg/m3	Respirable dust and/o
,		, 5,	fume.
		0,02 mg/m3	Respirable.
France. Threshold Limit Values (			
Components	Туре	Value	Form
Aluminium (CAS 7429-90-5)	VME	5 mg/m3	Dust.
		5 mg/m3	Welding fume.
		10 mg/m3	
		2 mg/m3	Dust.
Copper (CAS 7440-50-8)	VLE	2 1119/1113	Dusti
Copper (CAS 7440-50-8)	VLE VME	1 mg/m3	Dust.
Copper (CAS 7440-50-8)		<u> </u>	
Copper (CAS 7440-50-8)  Germany. DFG MAK List (advisor	VME y OELs). Commission for the	1 mg/m3 0,2 mg/m3	Dust. Fume.
Germany. DFG MAK List (advisor Compounds in the Work Area (DI	VME y OELs). Commission for the FG)	1 mg/m3 0,2 mg/m3 • Investigation of Health Ha	Dust. Fume. zards of Chemical
Germany. DFG MAK List (advisor Compounds in the Work Area (DI Components	VME y OELs). Commission for the FG) Type	1 mg/m3 0,2 mg/m3 e Investigation of Health Ha Value	Dust. Fume. zards of Chemical Form
Germany. DFG MAK List (advisor Compounds in the Work Area (DI Components	VME y OELs). Commission for the FG)	1 mg/m3 0,2 mg/m3 e Investigation of Health Ha Value 4 mg/m3	Dust. Fume.  zards of Chemical  Form  Inhalable fraction.
Germany. DFG MAK List (advisor Compounds in the Work Area (DI Components Aluminium (CAS 7429-90-5)	VME y OELs). Commission for the FG) Type	1 mg/m3 0,2 mg/m3 e Investigation of Health Ha Value	Dust. Fume. zards of Chemical Form
Germany. DFG MAK List (advisor Compounds in the Work Area (DI Components Aluminium (CAS 7429-90-5) Copper (CAS 7440-50-8)	VME y OELs). Commission for the FG) Type TWA TWA	1 mg/m3 0,2 mg/m3 e Investigation of Health Ha Value 4 mg/m3 1,5 mg/m3 0,01 mg/m3	Dust. Fume.  zards of Chemical  Form  Inhalable fraction. Respirable fraction.
, ,	VME y OELs). Commission for the FG) Type TWA TWA	1 mg/m3 0,2 mg/m3 e Investigation of Health Ha Value 4 mg/m3 1,5 mg/m3 0,01 mg/m3	Dust. Fume.  zards of Chemical  Form  Inhalable fraction. Respirable fraction.
Germany. DFG MAK List (advisor Compounds in the Work Area (DI Components Aluminium (CAS 7429-90-5) Copper (CAS 7440-50-8) Germany. TRGS 900, Limit Value	VME  y OELs). Commission for the FG)  Type  TWA  TWA  s in the Ambient Air at the V	1 mg/m3 0,2 mg/m3 e Investigation of Health Ha Value 4 mg/m3 1,5 mg/m3 0,01 mg/m3	Dust. Fume.  zards of Chemical  Form  Inhalable fraction. Respirable fraction. Respirable fraction.

Greece. OELs (Decree No. 90/19 Components	Туре	Value	Form
Aluminium (CAS 7429-90-5)	TWA	5 mg/m3	Inhalable
,		10 mg/m3	Pyrophoric powder.
		10 mg/m3	Welding fume.
		10 mg/m3	Respirable.
Copper (CAS 7440-50-8)	STEL	2 mg/m3	Dust.
,	TWA	1 mg/m3	Dust.
		0,2 mg/m3	Fume.
Hungary. OELs. Joint Decree on ( Components	Chemical Safety of Workplad Type	ces Value	Form
-			-
Aluminium (CAS 7429-90-5)	TWA	6 mg/m3	Respirable.
Copper (CAS 7440-50-8)	STEL	4 mg/m3	Cmala
	T\A/A	0,4 mg/m3	Smoke.
	TWA	1 mg/m3	Cmala
		0,1 mg/m3	Smoke.
Iceland. OELs. Regulation 154/1 Components	999 on occupational exposu Type	ire limits Value	Form
Aluminium (CAS 7429-90-5)	TWA	5 mg/m3	Fume.
		10 mg/m3	Dust.
Copper (CAS 7440-50-8)	TWA	1 mg/m3	Total dust.
	• • •	0,1 mg/m3	Respirable dust.
Ireland. Occupational Exposure I	imits	5/± mg/m3	respirable dusti
Components	Туре	Value	Form
Aluminium (CAS 7429-90-5)	TWA	1 ppm	Respirable dust.
Copper (CAS 7440-50-8)	STEL	2 mg/m3	Dust and mist.
	TWA	1 mg/m3	Dust and mist.
		0,2 mg/m3	Fume.
Italy. Occupational Exposure Lim	its		
Components	Туре	Value	Form
Aluminium (CAS 7429-90-5)	TWA	1 mg/m3	Respirable fraction.
Copper (CAS 7440-50-8)	TWA	1 mg/m3	Dust and mist.
,		0,2 mg/m3	Fume.
Latvia. OELs. Occupational expos	sure limit values of chemical	I substances in work enviro	nment
Components	Туре	Value	
Aluminium (CAS 7429-90-5)	TWA	2 mg/m3	
Copper (CAS 7440-50-8)	STEL	1 mg/m3	
	TWA	0,5 mg/m3	
Lithuania. OELs. Limit Values for	Chemical Substances, Gen	eral Requirements	
Components	Туре	Value	Form
Aluminium (CAS 7429-90-5)	TWA	5 mg/m3	Inhalable fraction.
-		2 mg/m3	Respirable fraction.
Copper (CAS 7440-50-8)	TWA	1 mg/m3	Inhalable fraction.
,		0,2 mg/m3	Respirable fraction.
Netherlands. OELs (binding)		-	
Components	Туре	Value	Form
Copper (CAS 7440-50-8)	TWA	0,1 mg/m3	Inhalable fraction.
Norway. Administrative Norms fo			_
Components	Туре	Value	Form
Aluminium (CAS 7429-90-5)	TLV	5 mg/m3	Welding fume.
		5 mg/m3	Pyrophoric powder.
	TLV	1 mg/m3	Dust.
Copper (CAS 7440-50-8)			Fume.
Copper (CAS 7440-50-8)		0,1 mg/m3	i uilie.
,, ,	ing maximum permissible c	. •	
Poland. MACs. Regulation regard work environment, Annex 1		concentrations and intensiti	es of harmful factors in
Copper (CAS 7440-50-8)  Poland. MACs. Regulation regard  work environment, Annex 1  Components	ing maximum permissible c	. •	

Material name: Aluminum Copper

SDS EU

Poland. MACs. Regulation regarding maximum permissible concentrations and intensities of harmful factors in the
work environment, Annex 1

Components	Туре	Value	Form
Copper (CAS 7440-50-8)	TWA	1,2 mg/m3 0,2 mg/m3	Respirable fraction.
Portugal. VLEs. Norm on occupat	ional exposure to chemical	agents (NP 1796)	
Components	Туре	Value	Form
Aluminium (CAS 7429-90-5)	TWA	10 mg/m3	Dust.
Copper (CAS 7440-50-8)	TWA	1 mg/m3	Dust and mist.
,		0,2 mg/m3	Fume.
Romania. OELs. Protection of wo	rkers from exposure to che	mical agents at the workpla	ce
Components	Туре	Value	Form
Aluminium (CAS 7429-90-5)	STEL	3 mg/m3	Fume.
		10 mg/m3	Dust.
	TWA	3 mg/m3	Dust.
		1 mg/m3	Fume.
Copper (CAS 7440-50-8)	STEL	1,5 mg/m3	Dust.
		0,2 mg/m3	Fume.
	TWA	0,5 mg/m3	Dust.
Slovakia. OELs. Regulation No. 30	00/2007 concerning protec	tion of health in work with o	chemical agents
Components	Туре	Value	Form
Aluminium (CAS 7429-90-5)	TWA	4 mg/m3	Inhalable fraction.
		1,5 mg/m3	Respirable fraction.
Copper (CAS 7440-50-8)	TWA	1 mg/m3	Inhalable fraction.
		0,2 mg/m3	Respirable fume.
Slovenia. OELs. Regulations conc		rs against risks due to expos	sure to chemicals while
working (Official Gazette of the F Components	Republic of Slovenia) Type	Value	Form
			Tabalable fraction
Copper (CAS 7440-50-8)	TWA	1 mg/m3 0,1 mg/m3	Inhalable fraction.
		0,1 1119/1113	Respirable fume.
Spain. Occupational Exposure Lin			F
Components	Туре	Value	Form
Aluminium (CAS 7429-90-5)	TWA	5 mg/m3	Welding fume.
		10 mg/m3	Dust.
Copper (CAS 7440-50-8)	TWA	1 mg/m3	Dust and mist.
		0,2 mg/m3	Fume.
Sweden. OELs. Work Environmen	t Authority (AV), Occupation	onal Exposure Limit Values (	AFS 2015:7)
Components	Туре	Value	Form
Aluminium (CAS 7429-90-5)	TWA	5 mg/m3	Total dust.
(		2 mg/m3	Respirable dust.
Copper (CAS 7440-50-8)	TWA	1 mg/m3	Total dust.
,		0,2 mg/m3	Respirable dust.
Switzerland. SUVA Grenzwerte a	m Arheitsnlatz	-, 3, -	
Components	Туре	Value	Form
Aluminium (CAS 7429-90-5)	TWA	3 mg/m3	Respirable dust.
Copper (CAS 7440-50-8)	STEL	0,2 mg/m3	Inhalable dust.
, ,	TWA	0,1 mg/m3	Inhalable dust.
UK. EH40 Workplace Exposure Li		. 3.	
Components	Туре	Value	Form
		4 mg/m3	Respirable dust.
Aluminium (CAS 7429-90-5)	TWA		•
Aluminium (CAS 7429-90-5)	TWA	10 mg/m3	Inhalable dust.
,		10 mg/m3 2 ma/m3	
,	STEL	2 mg/m3	Inhalable dusts and mists
Aluminium (CAS 7429-90-5) Copper (CAS 7440-50-8)		<u>-</u> -	Inhalable dust. Inhalable dusts and mists. Inhalable dusts and mists. Fume.

### **Biological limit values**

Croatia. BLV. Dangerous	Substance Exposure I	Limit Values at Wo	orkplace, Anne	exes 4 (as amended)
Components	Value	Determinant	Specimen	Sampling time

Aluminium (CAS 7429-90-5) 200 mg/l Aluminium Urine

#### Slovakia. BLVs (Biological Limit Value). Regulation no. 355/2006 concerning protection of workers exposed to chemical agents, Annex 2

Components	Value	Determinant	Specimen	Sampling time
Aluminium (CAS 7429	-90-5) 60 μg/g	Aluminium	Creatinine in	*
			urine	

<sup>\* -</sup> For sampling details, please see the source document.

## Switzerland. BAT-Werte (Biological Limit Values in the Workplace as per SUVA)

Follow standard monitoring procedures.

Components	Value	Determinant	Specimen	Sampling time	
Aluminium (CAS 742	9-90-5) 60 µg/g	Aluminium	Creatinine in	*	
			urine		

<sup>\* -</sup> For sampling details, please see the source document.

**Recommended monitoring** 

procedures

**Derived no effect levels** 

(DNELs)

Not available.

**Predicted no effect** concentrations (PNECs) Not available.

8.2. Exposure controls

Appropriate engineering

controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

#### Individual protection measures, such as personal protective equipment

**General information** Not available.

Eye/face protection Not normally needed.

Skin protection

- Hand protection Not normally needed.

- Other Personal protection equipment should be chosen according to the CEN standards and in discussion

with the supplier of the personal protective equipment.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Not available.

**Hygiene measures** Wash hands before breaks and immediately after handling the product. Handle in accordance with

good industrial hygiene and safety practices.

**Environmental exposure** 

controls

Contain spills and prevent releases and observe national regulations on emissions. Environmental

manager must be informed of all major releases.

# **SECTION 9: Physical and chemical properties**

# 9.1. Information on basic physical and chemical properties

### **Appearance**

Physical state Solid. Solid. Form

Colour Not available. Odour Not available. **Odour threshold** Not available. Not available. pН

Melting point/freezing point Initial boiling point and

660 °C (1220 °F) estimated 2327 °C (4220,6 °F) estimated

boiling range

Flash point Not available. **Evaporation rate** Not available. Flammability (solid, gas) Not available.

Material name: Aluminum Copper SDS FU

<sup>\* -</sup> For sampling details, please see the source document.

Upper/lower flammability or explosive limits

Flammability limit - lower Not available.

(%)

Flammability limit -

upper (%)

Not available.

0,23 hPa estimated Vapour pressure

Vapour density Not available. Relative density Not available.

Solubility(ies)

Solubility (water) Not available. Not available. **Partition coefficient** 

(n-octanol/water)

**Auto-ignition temperature** Not available. **Decomposition temperature** Not available. Not available. Viscosity **Explosive properties** Not available. **Oxidising properties** Not available.

9.2. Other information

Density 4,87 g/cm3 estimated

4,87 estimated Specific gravity

**SECTION 10: Stability and reactivity** 

10.1. Reactivity Not available.

10.2. Chemical stability Material is stable under normal conditions.

10.3. Possibility of hazardous No dangerous reaction known under conditions of normal use.

reactions

10.4. Conditions to avoid None under normal conditions.

10.5. Incompatible materials None known.

10.6. Hazardous No hazardous decomposition products are known.

decomposition products

**SECTION 11: Toxicological information** 

**General information** Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure

**Inhalation** May cause irritation to the respiratory system.

Skin contact Due to lack of data the classification is not possible. Eye contact Due to lack of data the classification is not possible. Ingestion Due to lack of data the classification is not possible.

**Symptoms** Not available.

11.1. Information on toxicological effects

**Acute toxicity** May cause respiratory irritation.

Skin corrosion/irritation Due to lack of data the classification is not possible. Serious eye damage/eye Due to lack of data the classification is not possible.

irritation

Respiratory sensitisation Due to lack of data the classification is not possible. Due to lack of data the classification is not possible.

Germ cell mutagenicity Due to lack of data the classification is not possible.

Carcinogenicity Due to lack of data the classification is not possible.

Hungary, 26/2000 EüM Ordinance on protection against and preventing risk relating to exposure to carcinogens at work (as amended)

Not listed.

Due to lack of data the classification is not possible. Reproductive toxicity

Specific target organ toxicity

- single exposure

Skin sensitisation

Respiratory tract irritation.

Specific target organ toxicity Due to lack of data the classification is not possible.

- repeated exposure

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**Aspiration hazard** Due to lack of data the classification is not possible.

Mixture versus substance

information

Not available.

Not available. Other information

## **SECTION 12: Ecological information**

Very toxic to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected. 12.1. Toxicity

12.2. Persistence and

degradability

No data is available on the degradability of this product.

12.3. Bioaccumulative

potential

Not available.

**Partition coefficient** 

n-octanol/water (log Kow)

Not available.

**Bioconcentration factor (BCF)** 12.4. Mobility in soil

Not available. Not available.

12.5. Results of PBT

Not a PBT or vPvB substance or mixture.

and vPvB assessment

12.6. Other adverse effects Not available.

12.7. Additional information

**Estonia Dangerous substances in groundwater Data** 

Copper (CAS 7440-50-8) Copper (Cu) 1000 UG/L

Copper (Cu) 15 UG/L

**Estonia Dangerous substances in soil Data** 

Copper (CAS 7440-50-8) Copper (Cu) 100 mg/kg

Copper (Cu) 150 mg/kg Copper (Cu) 500 mg/kg

# **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

**Residual waste** Dispose of in accordance with local regulations. Empty containers or liners may retain some product

residues. This material and its container must be disposed of in a safe manner (see: Disposal

instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

**EU** waste code The Waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

**Disposal** 

methods/information

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into

sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international

regulations.

## **SECTION 14: Transport information**

**ADR** 

14.1. - 14.6.: Not regulated as dangerous goods.

**RID** 

14.1. - 14.6.: Not regulated as dangerous goods.

**ADN** 

14.1. - 14.6.: Not regulated as dangerous goods.

IATA

14.1. - 14.6.: Not regulated as dangerous goods.

**IMDG** 

14.1. - 14.6.: Not regulated as dangerous goods.

**General information** IMDG Regulated Marine Pollutant.

# **SECTION 15: Regulatory information**

# 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture **EU** regulations

Material name: Aluminum Copper SDS FU Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as

amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended Not listed.

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

Copper (CAS 7440-50-8)

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.

#### Restrictions on use

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

Aluminium (CAS 7429-90-5)

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.

#### Other EU regulations

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

Aluminium (CAS 7429-90-5) Copper (CAS 7440-50-8)

Other regulations The product is classified and labelled in accordance with EC directives or respective national laws

This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.

**National regulations** 

Not available.

15.2. Chemical safety

No Chemical Safety Assessment has been carried out.

assessment

## **SECTION 16: Other information**

List of abbreviations Information on evaluation method leading to the classification of mixture

Not available. Not available.

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Material name: Aluminum Copper SDS FU