

### **Colour Paste Silver**

Page : 1 / 14 Revision nr : 2 Revision date : 28.08.2015

SECTION 1: Identification of the substance/mixture and of the company/undertaking		
1.1. Product identifier		
Trade name/designation	Colour Paste Silver	
Product code	÷ 48451	
Customs Tariff Number	: 32 12 90 00	
<b><u>1.2.</u></b> Relevant identified uses Main use category	s of the substance or mixture and uses advised against : Industrial uses, Professional uses .	
1.3. Details of the supplier of	of the safety data sheet	
Company:	EXAGON AG Räffelstrasse 10 8045 Zürich Telephone +41 44 430 36 76 E-mail: info@exagon.ch	

Website: www.exagon.ch

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

### 2.1. Classification of the substance or mixture

#### 2.1.1. Classification according to Regulation (EU) 1272/2008

**CLP-Classification** 

: This substance is classified as not hazardous according to regulation (EC) No. 1272/2008 [CLP].

Not classified

#### 2.1.2. Classification according to EU Directives 67/548/EEC or 1999/45/EC

Classification

: This mixture is classified as not hazardous according to 1999/45/EC.

Not classified

### 2.2. Label elements

**2.2.1. Labelling according to Regulation (EU) 1272/2008** Not applicable.

#### 2.2.2. Labelling according to Directives (67/548 - 1999/45)



### **Colour Paste Silver**

Page : 2 / 14 Revision nr : 2 Revision date : 28.08.2015

Printing date : 07.10.2016

Not relevant

#### 2.3. Other hazards

Other hazards

: PBT/vPvB data Not applicable In dry state: Risk of dust explosion.

### **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Substance name	Product identifier	%	Classification according to Directive 67/548/EEC
Aluminium (1)	(CAS No.) 7429-90-5 (EC No) 231-072-3 (EC Index) 013-002-00-1 (REACH-no) 01-2119529243-45-0146, 01- 2119529243-45-XXXX	65 - 80	F; R11
[2-(2-methoxymethylethoxy)methylethoxy]propanol	(CAS No.) 25498-49-1 (EC No) 247-045-4 (REACH-no) 01-2119450087-41-XXXX	17,6 - 33	Not classified
xylene	(CAS No.) 1330-20-7 (EC No) 215-535-7 (EC Index) 601-022-00-9	< 0,24	R10 Xn; R20/21 Xi; R38

Substance name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Aluminium (1)	(CAS No.) 7429-90-5 (EC No) 231-072-3 (EC Index) 013-002-00-1 (REACH-no) 01-2119529243-45-0146, 01- 2119529243-45-XXXX	65 - 80	Flam. Sol. 1, H228
[2-(2-methoxymethylethoxy)methylethoxy]propanol	(CAS No.) 25498-49-1 (EC No) 247-045-4 (REACH-no) 01-2119450087-41-XXXX	17,6 - 33	Not classified
xylene	(CAS No.) 1330-20-7 (EC No) 215-535-7 (EC Index) 601-022-00-9	< 0,24	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315

Full text of R- and H-phrases: see section 16

Comments

: (1) The substance or mixture does not emit flammable gases in contact with water.

UN Test N.5: Test method for substances which in contact with water emit flammable gases

(Note T : This substance may be marketed in a form which does not have the physical hazards as indicated by the classification in the entry in Part 3. If the results of the relevant method or methods in accordance with Part 2 of Annex I of this Regulation show that the specific form of substance marketed does not exhibit this physical property or these physical hazards, the substance shall be classified in accordance with the result or results of this test or these tests. Relevant information, including reference to the relevant test method(s) shall be included in the safety data sheet.)



### **Colour Paste Silver**

Page : 3 / 14 Revision nr : 2 Revision date : 28.08.2015

Printing date : 07.10.2016

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

4.1. Description of first aid measures	
Inhalation	<ul> <li>Provide fresh air.</li> <li>Keep at rest.</li> <li>When in doubt or if symptoms are observed, get medical advice.</li> </ul>
Skin contact	<ul> <li>Remove contaminated clothing and shoes.</li> <li>Wash with plenty of water/.</li> <li>When in doubt or if symptoms are observed, get medical advice.</li> <li>Wash contaminated clothing before reuse.</li> </ul>
Eye contact	<ul> <li>Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.</li> <li>Call a physician if irritation develops or persists.</li> </ul>
In case of ingestion	<ul> <li>Rinse mouth immediately and drink plenty of water.</li> <li>Do NOT induce vomiting</li> <li>Get medical advice/attention.</li> </ul>
Additional advice	<ul> <li>First aider: Pay attention to self-protection! See also section 8 Treat symptomatically.</li> <li>Show this safety data sheet to the doctor in attendance.</li> <li>When in doubt or if symptoms are observed, get medical advice.</li> <li>Never give anything by mouth to an unconscious person or a person with cramps.</li> </ul>
4.2. Most important symptoms and eff	fects, both acute and delayed
Inhalation	<ul> <li>Inhalation of vapours in high concentration may cause irritation of respiratory system.</li> </ul>
Skin contact	: May be irritating.
Eye contact	: Dust contact with the eyes can lead to mechanical irritation.
Ingestion	: May be irritating.
Other adverse effects	: none.

### 4.3. Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Special powder against metal fire . Dry sand . ABC-powder . Co-ordinate fire- fighting measures to the fire surroundings.
Extinguishing media which must not be used for safety reasons:	: Water Foam
5.2. Special hazards arising from the s	ubstance or mixture
Fire hazard	: Non-flammable.
Specific hazards	<ul> <li>In dry state:</li> <li>Dust may form explosive mixture in air.</li> <li>Burning produces noxious and toxic fumes.</li> <li>Hazardous decomposition products aldehydes</li> <li>Ketone</li> <li>Do not allow run-off from fire-fighting to enter drains or water courses.</li> <li>Dispose according to legislation.</li> </ul>
5.3. Advice for firefighters	
Advice for firefighters	: Special protective equipment for firefighters.



**Colour Paste Silver** 

Page : 4 / 14 Revision nr : 2 Revision date : 28.08.2015

Printing date : 07.10.2016

In case of fire: Wear self-contained breathing apparatus. Cool closed containers exposed to fire with water spray Evacuate area. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

6.1.	Personal precautions, protective equipment and emergency procedures	
For no	n-emergency personnel	<ul> <li>Evacuate area.</li> <li>Provide adequate ventilation.</li> <li>Use personal protective equipment as required.</li> <li>Personal protection equipment: see section 8</li> <li>Avoid contact with skin, eyes and clothes.</li> <li>Avoid generation of dust.</li> <li>Do not breathe vapours/dust.</li> <li>Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</li> <li>Take precautionary measures against static discharges.</li> </ul>
For err	nergency responders	<ul> <li>Ensure procedures and training for emergency decontamination and disposal are in place.</li> <li>Personal protection equipment: see section 8.</li> </ul>
6.2.	Environmental precautions	
Enviro	nmental precautions	: Do not allow to enter into surface water or drains.
6.3.	Methods and material for containr	nent and cleaning up
Method	ds for cleaning up	<ul> <li>Stop leak if safe to do so. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Collect in closed and suitable containers for disposal. Dispose according to legislation. Site should have a spill plan to ensure that adequate safeguards are in place to minimize the impact of episodic releases.</li> </ul>
6.4.	Reference to other sections	
	nal protection equipment: see section 8 sal: see section 13.	

**SECTION 7: Handling and storage** 

7.1. Precaut	ions for safe handling	
Handling	:	Use only in well-ventilated areas. Provide adequate ventilation. Use personal protective equipment as required. Personal protection equipment: see section 8 . Avoid contact with skin, eyes and clothes. Avoid generation of dust. Do not breathe vapours/dust. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges. Take any precaution to avoid mixing with incompatible materials. See also section 10 Ensure proper process control to avoid excess waste discharge (temperature, concentration, pH, time). Do not allow to enter into surface water or drains.
Advices on genera	al occupational hygiene :	Keep good industrial hygiene. When using do not eat, drink or smoke.



**Colour Paste Silver** 

Wash hands before breaks and immediately after using the product. Take off contaminated clothing.

7.2. Conditions for safe storage, i	2. Conditions for safe storage, including any incompatibilities		
Storage	<ul> <li>Keep container tightly closed in a cool, well-ventilated place.</li> <li>Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</li> <li>Protect from moisture.</li> <li>Do not store near or with any of the incompatible materials listed in section 10.</li> <li>Maximum storage period (time) :</li> <li>6 months.</li> </ul>		
Packaging materials	: Keep/Store only in original container.		
7.3 Specific end use(s)			

#### 7.3 Specific end use(s)

No data available.

### **SECTION 8: Exposure controls/personal protection**

:

#### 8.1. Control parameters

Exposure limit values

xylene (1330-20-7)		
EU	IOELV TWA (mg/m <sup>3</sup> )	221 mg/m <sup>3</sup> (pure)
EU	IOELV TWA (ppm)	50 ppm (pure)
EU	IOELV STEL (mg/m <sup>3</sup> )	442 mg/m <sup>3</sup> (pure)
EU	IOELV STEL (ppm)	100 ppm (pure)
Austria	MAK (mg/m³)	221 mg/m <sup>3</sup> (all isomers)
Austria	MAK (ppm)	50 ppm (all isomers)
Austria	MAK Short time value (mg/m <sup>3</sup> )	442 mg/m <sup>3</sup> (all isomers)
Austria	MAK Short time value (ppm)	100 ppm (all isomers)
Belgium	Limit value (mg/m <sup>3</sup> )	221 mg/m <sup>3</sup>
Belgium	Limit value (ppm)	50 ppm
Belgium	Short time value (mg/m <sup>3</sup> )	442 mg/m <sup>3</sup>
Belgium	Short time value (ppm)	100 ppm
Bulgaria	OEL TWA (mg/m <sup>3</sup> )	221,0 mg/m <sup>3</sup> (pure)
Bulgaria	OEL TWA (ppm)	50 ppm (pure)
Bulgaria	OEL STEL (mg/m <sup>3</sup> )	442 mg/m <sup>3</sup> (pure)
Bulgaria	OEL STEL (ppm)	100 ppm (pure)
Croatia	GVI (granična vrijednost izloženosti) (mg/m³)	221 mg/m <sup>3</sup>
Croatia	GVI (granična vrijednost izloženosti) (ppm)	50 ppm
Croatia	KGVI (kratkotrajna granična vrijednost izloženosti) (mg/m³)	442 mg/m <sup>3</sup>
Croatia	KGVI (kratkotrajna granična vrijednost izloženosti) (ppm)	100 ppm
Cyprus	OEL TWA (mg/m <sup>3</sup> )	221 mg/m <sup>3</sup>
Cyprus	OEL TWA (ppm)	50 ppm
Cyprus	OEL STEL (mg/m <sup>3</sup> )	442 mg/m <sup>3</sup>
Cyprus	OEL STEL (ppm)	100 ppm
France	VLE (mg/m <sup>3</sup> )	442 mg/m <sup>3</sup> (restrictive limit)
France	VLE (ppm)	100 ppm (restrictive limit)
France	VME (mg/m <sup>3</sup> )	221 mg/m <sup>3</sup> (restrictive limit)



**Colour Paste Silver** 

\_ . . . . . . . . . . . .

Page : 6 / 14 Revision nr : 2 Revision date : 28.08.2015

xylene (1330-20-7)		
France	VME (ppm)	50 ppm (restrictive limit)
Germany	TRGS 900 Occupational exposure limit value (mg/m <sup>3</sup> )	440 mg/m <sup>3</sup> (all isomers)
Germany	TRGS 900 Occupational exposure limit value (ppm)	100 ppm (all isomers)
Germany	TRGS 903 (BGW)	1,5 mg/l (Medium: whole blood - Time: end of shift - Parameter: Xylene (all isomers) 2000 mg/l (Medium: urine - Time: end of shift - Parameter: Methylhippuric(tolur-)acid (all isomers)
Gibraltar	OEL TWA (mg/m <sup>3</sup> )	221 mg/m <sup>3</sup> (pure)
Gibraltar	OEL TWA (ppm)	50 ppm (pure)
Gibraltar	OEL STEL (mg/m <sup>3</sup> )	442 mg/m <sup>3</sup> (pure)
Gibraltar	OEL STEL (ppm)	100 ppm (pure)
Greece	OEL TWA (mg/m <sup>3</sup> )	435 mg/m <sup>3</sup>
Greece	OEL TWA (ppm)	100 ppm
Greece	OEL STEL (mg/m <sup>3</sup> )	650 mg/m <sup>3</sup>
Greece	OEL STEL (ppm)	150 ppm
Italy - Portugal - USA ACGIH	ACGIH TWA (ppm)	100 ppm
Italy - Portugal - USA ACGIH	ACGIH STEL (ppm)	150 ppm
Italy	OEL TWA (mg/m <sup>3</sup> )	221 mg/m <sup>3</sup> (pure)
Italy	OEL TWA (ppm)	50 ppm (pure)
Italy	OEL STEL (mg/m <sup>3</sup> )	442 mg/m <sup>3</sup> (pure)
Italy	OEL STEL (ppm)	100 ppm (pure)
Latvia	OEL TWA (mg/m <sup>3</sup> )	221 mg/m <sup>3</sup>
Latvia	OEL TWA (ppm)	50 ppm
Spain	VLA-ED (mg/m <sup>3</sup> )	221 mg/m <sup>3</sup> (indicative limit value)
Spain	VLA-ED (ppm)	50 ppm (indicative limit value)
Spain	VLA-EC (mg/m <sup>3</sup> )	442 mg/m <sup>3</sup>
Spain	VLA-EC (ppm)	100 ppm
Switzerland	VLE (mg/m <sup>3</sup> )	870 mg/m <sup>3</sup>
Switzerland	VLE (ppm)	200 ppm
Switzerland	VME (mg/m <sup>3</sup> )	435 mg/m <sup>3</sup>
Switzerland	VME (ppm)	100 ppm
Netherlands	Grenswaarde TGG 8H (mg/m <sup>3</sup> )	210 mg/m <sup>3</sup>
Netherlands	Grenswaarde TGG 15MIN (mg/m <sup>3</sup> )	442 mg/m <sup>3</sup>
United Kingdom	WEL TWA (mg/m <sup>3</sup> )	220 mg/m <sup>3</sup>
United Kingdom	WEL TWA (ppm)	50 ppm
United Kingdom	WEL STEL (mg/m <sup>3</sup> )	441 mg/m <sup>3</sup>
United Kingdom	WEL STEL (ppm)	100 ppm
Czech Republic	Expoziční limity (PEL) (mg/m <sup>3</sup> )	200 mg/m <sup>3</sup>
Denmark	Grænseværdie (langvarig) (mg/m <sup>3</sup> )	109 mg/m <sup>3</sup>
Denmark	Grænseværdie (langvarig) (ppm)	25 ppm
Finland	HTP-arvo (8h) (mg/m <sup>3</sup> )	220 mg/m <sup>3</sup>
Finland	HTP-arvo (8h) (ppm)	50 ppm
Finland	HTP-arvo (15 min)	440 mg/m <sup>3</sup>
Finland	HTP-arvo (15 min) (ppm)	100 ppm



### **Colour Paste Silver**

Page : 7 / 14 Revision nr : 2 Revision date : 28.08.2015

Printing date : 07.10.2016

xylene (1330-20-7)		
Hungary	AK-érték	221 mg/m <sup>3</sup>
Hungary	CK-érték	442 mg/m <sup>3</sup>
Ireland	OEL (8 hours ref) (mg/m <sup>3</sup> )	221 mg/m <sup>3</sup>
Ireland	OEL (8 hours ref) (ppm)	50 ppm
Ireland	OEL (15 min ref) (mg/m3)	442 mg/m <sup>3</sup>
Ireland	OEL (15 min ref) (ppm)	100 ppm
Lithuania	IPRV (mg/m <sup>3</sup> )	200 mg/m <sup>3</sup>
Lithuania	IPRV (ppm)	50 ppm
Lithuania	TPRV (mg/m <sup>3</sup> )	450 mg/m <sup>3</sup>
Lithuania	TPRV (ppm)	100 ppm
Malta	OEL TWA (mg/m³)	221 mg/m <sup>3</sup> (pure)
Malta	OEL TWA (ppm)	50 ppm (pure)
Malta	OEL STEL (mg/m <sup>3</sup> )	442 mg/m <sup>3</sup> (pure)
Malta	OEL STEL (ppm)	100 ppm (pure)
Norway	Gjennomsnittsverdier (AN) (mg/m <sup>3</sup> )	108 mg/m <sup>3</sup>
Norway	Gjennomsnittsverdier (AN) (ppm)	25 ppm
Norway	Gjennomsnittsverdier (Korttidsverdi) (mg/m3)	135 mg/m <sup>3</sup>
Norway	Gjennomsnittsverdier (Korttidsverdi) (ppm)	37,5 ppm
Poland	NDS (mg/m <sup>3</sup> )	100 mg/m <sup>3</sup>
Romania	OEL TWA (mg/m³)	221 mg/m <sup>3</sup>
Romania	OEL TWA (ppm)	50 ppm
Romania	OEL STEL (mg/m <sup>3</sup> )	442 mg/m <sup>3</sup>
Romania	OEL STEL (ppm)	100 ppm
Slovakia	NPHV (priemerná) (mg/m <sup>3</sup> )	221 mg/m <sup>3</sup>
Slovakia	NPHV (priemerná) (ppm)	50 ppm
Slovakia	NPHV (Hraničná) (mg/m³)	442 mg/m <sup>3</sup>
Sweden	nivågränsvärde (NVG) (mg/m <sup>3</sup> )	221 mg/m <sup>3</sup>
Sweden	nivågränsvärde (NVG) (ppm)	50 ppm
Sweden	kortidsvärde (KTV) (mg/m <sup>3</sup> )	442 mg/m <sup>3</sup>
Sweden	kortidsvärde (KTV) (ppm)	100 ppm

Aluminium (7429-90-5)		
Austria	MAK (mg/m³)	10 mg/m <sup>3</sup> (inhalable fraction)
Austria	MAK Short time value (mg/m <sup>3</sup> )	20 mg/m <sup>3</sup> (inhalable fraction)
Belgium	Limit value (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup>
Bulgaria	OEL TWA (mg/m³)	10,0 mg/m <sup>3</sup> (metal dust) 1,5 mg/m <sup>3</sup> (respirable fraction)
Croatia	GVI (granična vrijednost izloženosti) (mg/m³)	10 mg/m <sup>3</sup> (total dust) 4 mg/m <sup>3</sup> (respirable dust)
France	VME (mg/m³)	10 mg/m <sup>3</sup> (metal) 5 mg/m <sup>3</sup> (dust)
Greece	OEL TWA (mg/m³)	10 mg/m <sup>3</sup> (inhalable fraction) 5 mg/m <sup>3</sup> (respirable fraction)
Italy - Portugal - USA ACGIH	ACGIH TWA (mg/m³)	1 mg/m <sup>3</sup> (respirable fraction)
Latvia	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Spain	VLA-ED (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (dust)
Switzerland	VME (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup> (respirable)



**Colour Paste Silver** 

Printing date : 07.10.2016

Revision date : 28.08.2015

Page : 8 / 14

Revision nr : 2

Aluminium (7429-90-	5)	
United Kingdom	WEL TWA (mg/m³)	10 mg/m <sup>3</sup> (inhalable dust) 4 mg/m <sup>3</sup> (respirable dust)
United Kingdom WEL STEL (mg/m <sup>3</sup> )		30 mg/m <sup>3</sup> (calculated-inhalable dust) 12 mg/m <sup>3</sup> (calculated-respirable dust)
Czech Republic	Expoziční limity (PEL) (mg/m <sup>3</sup> )	10,0 mg/m <sup>3</sup> (dust)
Denmark Grænseværdie (langvarig) (mg/m <sup>3</sup> )		5 mg/m <sup>3</sup> (dust, fume and powder, total) 2 mg/m <sup>3</sup> (dust and powder, respirable)
Hungary	AK-érték	6 mg/m <sup>3</sup> (respirable dust)
Ireland	OEL (8 hours ref) (mg/m <sup>3</sup> )	1 mg/m <sup>3</sup> (respirable dust)
Ireland	OEL (15 min ref) (mg/m3)	3 mg/m <sup>3</sup> (calculated-respirable dust)
Lithuania IPRV (mg/m <sup>3</sup> )		5 mg/m <sup>3</sup> (inhalable fraction) 2 mg/m <sup>3</sup> (respirable fraction) 1 mg/m <sup>3</sup>
Norway	Gjennomsnittsverdier (AN) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (pyrotechnical-powder)
Norway	Gjennomsnittsverdier (Korttidsverdi) (mg/m3)	10 mg/m <sup>3</sup> (pyrotechnical-powder)
Poland	NDS (mg/m <sup>3</sup> )	2,5 mg/m <sup>3</sup> (inhalable fraction) 1,2 mg/m <sup>3</sup> (respirable fraction)
Romania OEL TWA (mg/m <sup>3</sup> )		3 mg/m³ (dust) 1 mg/m³ (fume)
Romania OEL STEL (mg/m³)		10 mg/m <sup>3</sup> (powder) 3 mg/m <sup>3</sup> (fume)
Slovakia NPHV (priemerná) (mg/m <sup>3</sup> )		1,5 mg/m <sup>3</sup> (metal) 6 mg/m <sup>3</sup> (total aerosol)
Sweden nivågränsvärde (NVG) (mg/m³)		5 mg/m <sup>3</sup> (total dust) 2 mg/m <sup>3</sup> (respirable dust)

Recommended monitoring procedures

: Concentration measurement in air Personal air monitoring

8.2.	Exposure	controls

Personal protection equipment Respiratory protection	The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. In case of insufficient ventilation, wear suitable respiratory equipment. Half-face mask (DIN EN 140) (EN 140) Full face mask (EN 136) (EN 136) Filter type: A/P (EN 141)
Hand protection	The selection of specific gloves for a specific application and time of use in a working area, should also take into account other factors on the working space, such as (but not limited to): other chemicals that are possibly used, physical requirements (protection against cutting/drilling, skill, thermal protection), and the instructions/specification of the supplier of gloves.,Wear chemically resistant gloves (tested to EN374).
Eye protection	Safety glasses (EN 166)
Body protection	Wear suitable protective clothing.
Thermal hazard protection	Not required under normal use.
Engineering control measures	Provide adequate ventilation. Use only in area provided with appropriate exhaust ventilation. A washing facility/water for eye and skin cleaning purposes should be present. Ensure that the equipment is adequately grounded. Take precautionary measures against static discharges.



**Colour Paste Silver** 

:

Page : 9 / 14 Revision nr : 2 Revision date : 28.08.2015

Printing date : 07.10.2016

Organisational measures to prevent/limit releases, dispersion and
exposure
See also section 7

Environmental exposure controls

Do not allow to enter into surface water or drains. Comply with applicable Community environmental protection legislation.

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

9.1. Information on basic physical and chemical properties			
Appearance	:	Paste	
Colour		silver	
Odour	:	Ether	
Odour threshold:	:	No data available	
рН	:	Not applicable	
Melting point/freezing point	:	620 °C aluminium	
Initial boiling point and boiling range	:	2500 °C aluminium 242,8 760 mmHg [2-(2-methoxymethylethoxy)methylethoxy]propanol	
Flash point	:	124 °C [2-(2-methoxymethylethoxy)methylethoxy]propanol (CC)	
Evaporation rate	:	No data available	
Flammability (solid, gas)	:	Flammable.	
Upper/lower flammability or explosive limits	:	No data available	
Vapour pressure	:	1 mmHg [2-(2-methoxymethylethoxy)methylethoxy]propanol	
Vapour density	:	No data available	
Density	:	(Al) 2 kg/l bulk	
Relative density	:	0,965[2-(2-methoxymethylethoxy)methylethoxy]propanol	
Water solubility	:	(AI) Insoluble	
Solubility in different media	:	No data available	
Partition coefficient n-octanol/water	:	0,31 [2-(2-methoxymethylethoxy)methylethoxy]propanol	
Auto-ignition temperature	:	No data available	
Decomposition temperature	:	No data available	
Viscosity	:	5,5 mPa.s [2-(2-methoxymethylethoxy)methylethoxy]propanol	
Explosive properties	:	Not applicable The study does not need to be conducted because there are no chemical groups associated with explosive properties present in the molecule.	
Oxidising properties	:	Not applicable The classification procedure needs not to be applied because there are no chemical groups present in the molecule which are associated with oxidising properties.	
9.2. Other information			

No data available

SECTION 10: Stability and reactivity	SECTION	10: Stab	ility and	reactivity
--------------------------------------	---------	----------	-----------	------------

#### 10.1. Reactivity

Reactivity

: None under normal processing. Reference to other sections: 10.5



### **Colour Paste Silver**

Page : 10 / 14 Revision nr : 2 Revision date : 28.08.2015

Printing date : 07.10.2016

Stability	:	The product is stable under storage at normal ambient temperatures.
10.3. Possibility of hazardous reactions		
Possibility of hazardous reactions	:	In contact with water releases flammable gases. In dry state: Risk of dust explosion. Reference to other sections: 10.4 & 10.5
10.4. Conditions to avoid		
Conditions to avoid	:	Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Avoid generation of dust. See also section 7 Handling and storage
10.5. Incompatible materials		
Incompatible materials	:	Oxidising substances,, Strong acids,, Strong alkalis, See also section 7, Handling and storage
10.6. Hazardous decomposition product	s	
Hazardous decomposition products	:	Hazardous decomposition products formed under fire conditions. Reference to other sections: 5.2

### **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

xylene (1330-20-7)	
LD50/oral/rat	3500 mg/kg
LC50/inhalation/4h/rat	29,08 mg/l/4h
ATE CLP (oral)	3500 mg/kg bodyweight
ATE CLP (dermal)	1100 mg/kg bodyweight
ATE CLP (gases)	4500,000 ppmv/4h
ATE CLP (vapours)	11 mg/l/4h
ATE CLP (dust,mist)	1,5 mg/l/4h

[2-(2-methoxymethylethoxy)methylethoxy]propanol (25498-49-1)		
LD50/oral/rat	3500 mg/kg	
LD50/dermal/rabbit	15440 mg/kg	
Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met.) pH: Not applicable	
Serious eye damage/eye irritation	: Not classified (Based on available data, the classification criteria are not met.) pH: Not applicable	
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met.)	
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met.)	
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met.)	
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met.)	



### **Colour Paste Silver**

: Not classified (Based on available data, the classification criteria are not met.)
: Not classified (Based on available data, the classification criteria are not met.)
: Not classified (Based on available data, the classification criteria are not met.)

#### Other information

Symptoms related to the physical, chemical and toxicological characteristics, Reference to other sections: 4.2

SECTI	ON 12: Ecological information	
<u>12.1.</u>	<u>Toxicity</u>	
Toxicity	:	Ecological injuries are not known or expected under normal use.

xylene (1330-20-7)	
LC50 fish 1	13,4 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow- through])
EC50 Daphnia 1	3,82 mg/l (Exposure time: 48 h - Species: water flea)
LC50 fish 2	2,661 - 4,093 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 2	0,6 mg/l (Exposure time: 48 h - Species: Gammarus lacustris)

[2-(2-methoxymethylethoxy)methylethoxy]propanol (25498-49-1)	
LC50 fish 1	(96h) 11619 mg/l Pimephales promelas (fathead minnow)

### 12.2. Persistence and degradability

Persistence and degradability	:	Solvent Readily biodegradable.
12.3.Bioaccumulative potentialBioaccumulationPartition coefficient n-octanol/water	:	No data available 0,31 [2-(2-methoxymethylethoxy)methylethoxy]propanol
12.4.Mobility in soilMobility	:	No data available
12.5. Results of PBT and vPvB assessm	en	<u>t</u>
PBT/vPvB data	:	PBT/vPvB data This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

:

### 12.6. Other adverse effects

Other information



**Colour Paste Silver** 

Page : 12 / 14 Revision nr : 2 Revision date : 28.08.2015

Printing date : 07.10.2016

### **SECTION 13: Disposal considerations**

|--|

Product waste:	<ul> <li>Handle with care.</li> <li>Safe handling: see section 7</li> <li>Handling and storage</li> <li>Collect and dispose of waste product at an authorised disposal facility.</li> <li>Refer to manufacturer/supplier for information on recovery/recycling.</li> <li>If recycling is not practicable, dispose of in compliance with local regulations.</li> <li>Dispose according to legislation.</li> </ul>
Contaminated packaging	<ul> <li>If recycling is not practicable, dispose of in compliance with local regulations.</li> <li>Empty containers should be taken to local recyclers for disposal.</li> <li>Do not burn, or use a cutting torch on, the empty drum.</li> <li>Do not puncture or incinerate.</li> </ul>
Further ecological information	: Do not allow to enter into surface water or drains.
List of proposed waste codes/waste designations in accordance with EWC	<ul> <li>Classified as hazardous waste according to European Union regulations.</li> <li>Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.</li> </ul>

### **SECTION 14: Transport information**

14.1. UN number		
UN number	: NA	
14.2.UN proper shipping nameProper Shipping Name	: NA	
14.3. Transport hazard class(es)		
14.3.1. Overland transport		
ADR/RID Class(es)	<ul><li>Not classified for this transport way.</li><li>Not applicable</li></ul>	
14.3.2. Inland waterway transport (ADN)		
ADN	: Not classified for this transport way.	
14.3.3. Transport by sea		
IMDG Class or Division	<ul><li>Not classified for this transport way.</li><li>Not applicable</li></ul>	
14.3.4. Air transport		
ICAO/IATA Class or Division	<ul><li>Not classified for this transport way.</li><li>Not applicable</li></ul>	
14.4. Packing group		
Packing group	: NA	
14.5. Environmental hazards		
Other information	: Not applicable.	
14.6 Special precautions for user		
Special precautions for user	: Not applicable.	
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code		
Code: IBC	: Not applicable.	



### **Colour Paste Silver**

Page : 13 / 14 Revision nr : 2 Revision date : 28.08.2015

Printing date : 07.10.2016

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

#### 15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006 3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008 40. Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.	: xylene : Aluminium - xylene
This product contains an ingredient according to the candidate list of Annex XIV of the REACH Regulation 1907/2006/EC. Authorisations	: none : Not applicable
15.1.2. National regulations DE : WGK	: 1
15.2.Chemical safety assessmentChemical Safety Assessment	<ul> <li>For the following substances of this preparation a chemical safety assessment has been carried out: aluminium</li> <li>[2-(2-methoxymethylethoxy)methylethoxy]propanol</li> </ul>

### **SECTION 16: Other information**

Full text of R-, H- and EUH-phrases:	
Acute Tox. 4 (Dermal)	: Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	: Acute toxicity (inhal.), Category 4
Flam. Liq. 3	: Flammable liquids, Category 3
Flam. Sol. 1	: Flammable solids, Hazard Category 1
Skin Irrit. 2	: Skin corrosion/irritation, Category 2
H226	: Flammable liquid and vapour.
H228	: Flammable solid.
H312	: Harmful in contact with skin.
H315	: Causes skin irritation.
H332	: Harmful if inhaled.
R10	: Flammable.
R11	: Highly flammable.
R20/21	: Harmful by inhalation and in contact with skin.
R38	: Irritating to skin.
F	: Highly flammable
Xi	: Irritant
Xn	: Harmful



**Colour Paste Silver** 

Printing date : 07.10.2016

Key literature references and sources : Eur for data Sug	opean Metal Particulate Association (EMPA) oplier SDS
AD Dar AD Dar CLI IAT IME LEL UE RE. EC EC EW LC EW LC ST TW VPV WG	M = Algemene beoordelingsmethodiek N = Accord Européen relatif au Transport International des Marchandises hgereuses par voie de Navigation du Rhin R = Accord européen relatif au transport international des marchandises hgereuses par Route P = Classification, Labelling and Packaging Regulation according to 1272/2008/EC A = International Air Transport Association DG = International Maritime Dangerous Goods Code . = Lower Explosive Limit/Lower Explosion Limit . = Upper Explosion Limit/Upper Explosive Limit ACH = Registration, Evaluation, Authorisation and Restriction of Chemicals 50 = Median Effective Concentration C = European Waste Catalogue 50 = Median lethal concentration 50 = Median lethal dose ELR = No observed effect loading rate = Not applicable cupational Exposure Limits - Short Term Exposure Limits (STELs) T = persistent, bioaccumulating and toxic (PBT). EL = Short term exposure limit A = time weighted average B = very persistent and very bioaccumulating 6K = Wassergefährdungsklasse (Water Hazard Class under German Federal Water hagement Act)

The contents and format of this SDS are in accordance with EEC Commission Directive 1999/45/EC, 67/548/EC, 1272/2008/EC and EEC Commission Regulation 1907/2006/EC (REACH) Annex II.

DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, EXAGON AG will not assume any responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. If the product is used as a component in another product, this SDS information may not be applicable.