

According to regulation (EC) No 2020/878

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

#### 1.1 Product Identifier

Curtis Textured Paste - Copper Oxide

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

## Use of the substance/mixture

To decorate ceramic objects.

#### 1.3 Details of the supplier of the safety data sheet

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# 1.4 Emergency Telephone Number

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# Section 2: Hazards Identification

#### 2.1 Classification of the substance or mixture

Products contain crystalline silica and therefore are classified as STOT RE2 according to criteria defined in the Regulation EC 1272/2008 and harmful according to criteria defined in Directive 67/548/EEC due to the potential to generate respirable dust. This could arise when the product is allowed to dry out. Particular attention should be given to controlling spillages.

Prolonged/repeated exposure to high concentrations of respirable free crystalline silica dust may cause delayed lung injury (silicosis) The WHO International Agency for Research on Cancer (IARC) evaluation for silica states "Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1)" but additionally notes "carcinogenicity in humans was not detected in all industrial circumstances studies. Carcinogenicity may be dependent on inherent characteristics of crystalline silica or on external factors affecting its biological activity or distribution of polymorphs" (IARC Monograph, Volume 68, 1997).

In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalations of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that then relative risk of lung cancer is increased in persons with silicosis (and, apparently, not employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore preventing the onset of silicosis will also reduce the cancer risk ..."(SCOEL SUM Doc 94-final, June 2003). So, there is a body of evidence supporting the fact that increased cancer risk would be limited to people already suffering from silicosis. Worker protection against silicosis should be assured by respecting existing regulatory occupational exposure limits and implementing additional risk management measures where required.



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Detailed reviews of the scientific evidence on the health effects of crystalline silica have been published by HSE (Health and Safety Executive UK) in the Hazard Assessment Documents EH75/4 (2002) and EH75/5 (2003). The HSE points out on its website that "Workers exposed to fine dust containing quartz are at risk of developing a chronic and possibly severely disabling lung disease known as silicosis. In addition to silicosis, there is now evidence that heavy and prolonged workplace exposure to dust containing crystalline silica can lead to an increased risk of lung cancer. The evidence suggests that an increased risk of lung cancer is likely to occur only in those workers who have developed silicosis.

Products containing Cupric Oxide:

Short-term (acute) aquatic hazard, very toxic to aquatic life (Category 1), H400

Long-term (chronic) aquatic hazard, very toxic to aquatic life with long lasting effects (Category ), H410

## 2.2 Label Elements

Porcelain Clay - CAS No. 1332-58-7



WARNING STOT RE2

Copper Oxide - CAS No. 1317-38.0



#### **Hazard Statements:**

H373 - May cause damage to lungs through prolonged or repeated exposure by inhalation.

 $\mbox{H410}-\mbox{\sc Very}$  toxic to a quatic life with long lasting effects.

#### **Precautionary Statements:**

P260 - Do not breathe dust

P273 - Avoid release to the environment

 $\ensuremath{\mathsf{P285}}$  - In case of inadequate ventilation wear respiratory protection

P391 – Collect spillage

P501 - Dispose of contents/containers in accordance with local regulations

## Section 3: Composition/information on ingredients

## 3.1 Mixtures

<u>Component</u>	<u>CAS</u> <u>EINECS</u>		<u>% Composition</u>
Respirable Crystalline Silica	14808-60-7	238-878-4	20 - 30
Kaolin Calcined	92704-41-1	296-473-8	40 - 50
Kaolin	1332-58-7	310-194-1	20 - 25
Copper Oxide	1317-38-0	215-269-1	< 5



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#### Section 4: First Aid Measures

#### 4.1 Description of first aid measures

After Inhalation- Remove patient to fresh air, loosen tight clothing and seek medical advice.

After Ingestion- Wash out mouth, drink water (two glasses at most). DO NOT MAKE PATIENT VOMIT.

After Eye Contact- Rinse immediately with plenty of water. If irritation persists, seek medical advice.

After Skin Contact- Wash affected areas with water

## 4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

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

No further relevant information available.

## Section 5: Firefighting Measures

## 5.1 Extinguishing Media

## Suitable extinguishing media

This material is non-combustible and does not give off any harmful gases when involved with fires and will not react with other materials or fire extinguishing media.

## Extinguishing media that must not be used for safety reasons

None known.

## 5.2 Special Hazards arising from the substance mixture

Not combustible. Ambient fire may liberate hazardous vapours.

#### 5.3 Advice for firefighters

## **Protective Equipment**

Employ protective equipment commonly used in the event of a fire, wear self-contained breathing apparatus.

## **Additional Information**

Prevent fire extinguishing water from contaminating surface water or the ground water system.



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#### Section 6: Accidental Release Measures

## 6.1 Personal Precautions, protective equipment and emergency procedures

Avoid inhalation of dust. Eye protection should be worn to prevent splashes to eye

## **6.2 Environmental Precautions**

Do not let product enter drains.

#### 6.3 Methods and material for containment and cleaning up

Cover up drains. Spillages of slop material should be removed by pumping. Spillages of semi-dry or dry product should be removed by vacuum methods to avoid generation of dust.

#### 6.4 Reference to other sections

Treat the recovered material as prescribed in section 13 on waste disposal.

## Section 7: Handling and Storage

## 7.1 Precautions for safe handling

## **Advice of Safe Handling**

Spillage should be prevented during transfer operations and precautions taken to prevent splashing to body and eyes. When handling all materials observe good standards of industrial hygiene. Avoid swallowing, inhaling dust and eye/skin contact through the use of personal protective equipment. When dry material has to be handled, dust masks with normal protection factor (NPF) of 10 (EN149) should be worn. When using do not eat, drink or smoke. Wash hands before breaks and after work. Do not leave children unattended whilst using the product.

## Advice on protection against fire and explosion

No special measure required.

## 7.2 Conditions for safe storage, including any incompatibilities

## Requirements for storage rooms and vessels

Keep packaging tightly closed. Slop material should be agitated during storage to prevent settling. Keep out of reach of children.

# <u>Further Information on Storage Requirements</u>

No special requirements.

#### 7.3 Specific end use(s)

No further relevant information available.



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## Section 8: Exposure Controls/ Personal Protection

## 8.1 Control Parameters

#### **Exposure Limits**

CAS No	<u>Substance</u>	<u>ppm</u>	mg/m³	Fibres/ml	Category	<u>Origin</u>
14808-60-7	Quartz (respirable crystalline silica)	-	0.1	-	TWA (8 hours)	WEL
		-	-	-	STEL (15 mins)	WEL
1317-38-0	Copper (II) oxide	-	1.0	-	TWA (8 hours)	WEL
			2.0	-	STEL (15 mins)	WEL

## **Additional Information**

Silica only becomes airborne when the product is cured and powdered.

#### 8.2 Exposure Controls

## **Occupational Exposure Controls**

Dry materials should be used under conditions of local exhaust ventilation to avoid inhalation of dust. Where it is not possible, an appropriate dust mask must be worn.

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU), safety glasses.

Use CE approved rubber gloves e.g nitrile when handling to avoid skin irritation.

## **Protective and Hygiene Measures**

Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work.

## Section 9: Physical and Chemical Properties

# 9.1 Information on basic physical and chemical properties

## **General Information**

Form- Paste

Colour- Off White/Grey

**Odour- Almost odourless** 

pH- 5-9

Water Solubility



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## Changes in the physical state

Flash Point- No data available

Melting Point- 1000°c min

Boiling Point- No data available

Evaporation Rate- No data available

Flammability- Not flammable

Solubility-Insoluble in water

Oxidising Properties- Not oxidising

Burn Rate- No data available

## 9.2 Stability and Reactivity

No known hazardous reactions or decomposition products within the sphere of its intended use as a ceramic material.

## 9.3 Chemical Stability

No decomposition if stored normally.

## 9.4 Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

#### 9.5 Conditions to avoid

No dangerous reaction known under conditions of normal use.

## 9.6 Incompatible materials

No further relevant information available.

## 9.7 Hazardous decomposition products

No further relevant information available.



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## Section 11: Toxicological Properties

## 11.1 Information on toxicological effects

# **Acute toxicity**

LD50 Oral - Rat - male - > 2,500 mg/kg

(OECD Test Guideline 423)

Symptoms: Possible damages:, Vomiting, Pain, Diarrhea

Symptoms: Irritation symptoms in the respiratory tract.

LD50 Dermal - Rat - male and female - > 2,000 mg/kg

(OECD Test Guideline 402)

#### Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation - 4 h

(OECD Test Guideline 404)

# Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation

(OECD Test Guideline 405)

## Respiratory or skin sensitization

Maximization Test - Guinea pig

Result: negative

(OECD Test Guideline 406)

## Germ cell mutagenicity

Test Type: Ames test

Test system: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Remarks: (in analogy to similar products)

The value is given in analogy to the following substances: Copper(II) sulphate

Test Type: unscheduled DNA synthesis assay

Species: Rat

Cell type: Liver cells



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Application Route: Oral

Method: OECD Test Guideline 486

Result: negative

Remarks: (in analogy to similar products)

Test Type: Micronucleus test

Species: Mouse

Cell type: Red blood cells (erythrocytes)

Application Route: Oral

Method: Directive 67/548/EEC, Annex V, B.12.

Result: negative

Remarks: (in analogy to similar products)

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Mild irritant to skin and eyes.

Drying out of product will permit respirable particles of crystalline silica to become airborne with the risk of inhalation and retention in lungs. SEE SECTION 2.

## 11.2 Additional Information

RTECS: GL7900000

Symptoms of systemic copper poisoning may include: capillary damage, headache, cold sweat, weak pulse, and kidney and liver damage, central nervous system excitation followed by depression, jaundice, convulsions, paralysis, and coma. Death may occur from shock or renal failure. Chronic copper poisoning is typified by hepatic cirrhosis, brain damage and demyelination, kidney defects, and copper deposition in the cornea as exemplified by humans with Wilson's disease. It has also been reported that copper poisoning has lead to hemolytic anemia and accelerates arteriosclerosis.



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## Section 12: Ecological Information

## 12.1 Toxicity

Toxicity to fish flow-through test LC50 - Pimephales promelas (fathead minnow) -

0.193 mg/l - 96 h

Remarks: (ECHA)

(in analogy to similar products)

The value is given in analogy to the following substances: Copper(II)

sulphate

Toxicity to daphnia

and other aquatic

invertebrates

EC50 - Daphnia magna (Water flea) - 0.011 - 0.039 mg/l - 48 h

Toxicity to algae static test NOEC - Phaeodactylum tricornutum - 0.0057 mg/l - 72 h

(ISO 10253)

Remarks: (in analogy to similar products)

(above the solubility limit in the test medium)

The value is given in analogy to the following substances: Copper(II)

chloride dihydrate

static test ErC50 - Skeletonema costatum (marine diatom) - 0.0238

mg/l - 72 h

(ISO 10253)

Remarks: (in analogy to similar products)

(above the solubility limit in the test medium)

The value is given in analogy to the following substances: Copper(II)

chloride dihydrate

# 12.2 Persistence and degradability

Not known.

## 12.3 Bio accumulative potential

No further relevant information available.



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#### 12.4 Mobility in soil

No further relevant information available.

## 12.5 Other adverse effects

No further relevant information available

## Section 13: Waste Disposal

#### 13.1 Waste treatment methods

Material should be treated as industrial waste and the procedures laid down in the Duty of Care- Environmental Protection Act observed. Consult local authority if necessary.

## Section 14: Transport Information

## 14.1 UN number

ADR/RID: 3077 IMDG: 3077 IATA: 3077

## 14.2 UN proper shipping name

ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (copper(II) oxide)

IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (copper(II) oxide)

IATA: Environmentally hazardous substance, solid, n.o.s. (copper(II) oxide)

## 14.3 Transport hazard class(es)

ADR/RID: 9 IMDG: 9 IATA: 9

# 14.4 Packaging group

ADR/RID: III IMDG: III IATA: III

#### 14.5 Environmental hazards

ADR/RID: yes IMDG Marine pollutant: yes IATA: yes

## 14.6 Special precautions for user

Not a hazardous material with respect to these transport regulations.

#### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.



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## Section 15: Regulatory Information

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

#### **Classification for Supply**

Semi- Dry Material (paste) - Warning

Dry Material-Warning

#### **References**

EH40- Workplace Exposure Limits 2005

Guidance Notes EH44- Dust General Principles of Protection

HS (G)53- Respiratory Protective Equipment

COSHH ACOP41- Pottery Production Guidance Note EH59

Reach Regulation (EC) No 1907/2006- Annex V7

CLP Regulation (EC) No 1272/2008

## 15.2 Chemical safety assessment

A chemical safety assessment has not been carried out.

# Section 16: Other Information

This data sheet is provided under CLP and REACH Regulation and is not intended to constitute an assessment of workplace risk associated with product(s) used as required under any other Health and Safety Regulation.

Workers must be informed of the presence of crystalline silica and trained in the proper use and handling of this product as required under applicable regulations.

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