



# L. CORNELISSEN & SON

Artists' Colourmen

*Suppliers of Materials for Painters, Gilders & Printmakers*

## Safety Data Sheet according to Directive 91/155/EC

**Revision Date: September 2014**

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### 1) Identification of the substance/preparation and the company

**Trade Name:** Cornelissen Realgar

**Application:** Artists' Pigment

**Manufacturer/Supplier:**

L Cornelissen & Son Ltd  
105 Great Russell Street  
London WC1B 3RY

**Tel:** 020 7636 1045

**Fax:** 020 7636 3655

[www.cornelissen.com](http://www.cornelissen.com)

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### 2) Composition/Information on ingredients

Chemical Characterisation: Arsenic sulphide, natural mineral, Realgar, As<sub>4</sub>S<sub>4</sub>

Hazardous Ingredients: Arsenic sulphide.

CAS No: 1303-33-9

EC No: 033-002-00-5

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### 3) Hazards Identification

#### Classification

Classification according to Regulation (EC) No 1272/2008

GHS Classification Acute toxicity (oral), hazard category 3

Acute toxicity (inhalation), hazard category 3

Hazardous to the aquatic environment, acute category 1

Hazardous to the aquatic environment, chronic category 1

Label elements



GHS09



GHS06

Signal word                      Danger

Hazard statement(s)

H410                              Very toxic to aquatic life with long lasting effects.

H301                              Toxic if swallowed.

H331                              Toxic if inhaled.

Precautionary statement(s)

P309+P311                      If exposed or you feel unwell: Seek medical help.

P501                              Dispose of contents/container according to regional, national and international regulations.

P273                              Avoid release to the environment.

P302+P352                      If on skin: Wash with soap and water.

P270                              Do not eat, drink or smoke when using this product.

Supplemental Hazard information (EU): None.

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#### 4) First Aid Measures

General advice:                      Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled:                              Supply fresh air. Supply fresh air and keep patient calm. Keep respiratory tract clear. Give artificial respiration in case breathing is not regular or if it has stopped. In case of unconsciousness place patient stable in side position for transportation. Get medical help. In case of complaints consult a physician. Oxygen therapy in case of impaired breathing.

In case of skin contact: Wash off immediately with plenty of soap and water and rinse thoroughly. Make sure that there is no product between clothing, skin, wrist watch, shoes.

In case of eye contact: Remove contact lens. Rinse open eyes with plenty of water (10-15 min). Consult physician.

If swallowed:                              Rinse mouth with water and drink plenty of water. Induce vomiting.

General information: Take person away from hazardous area. Wash affected body parts thoroughly with soap and water. Remove contaminated clothes.

*Most important symptoms and effects, both acute and delayed*

Eye contact: Slight or retarded irritation.

Skin contact: Can cause allergic skin reactions. Resorptive effect possible. Indication of any immediate medical attention and special treatment needed.

*Indication of any Immediate Medical Attention and Special Treatment needed*

Information for physician: A risk of intoxication and local irritations must be expected after contamination with arsenic trioxide.

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## 5) Fire Fighting Measures

*Extinguishing media*

Suitable extinguishing media: CO<sub>2</sub>, extinguishing powder, water jet. Fight larger fire with water jet or alcohol resistant foam.

Unsuitable extinguishing media: High volume water jet

*Special hazards arising from the substance or mixture*

Specific hazards during fire fighting: Formation of metal oxides, sulphur oxides.

*Advice for fire fighters*

Special protective equipment for fire fighters: In the event of fire, wear self-contained breathing apparatus and protective clothing.

Further information: Collect contaminated extinguishing water and debris separately; avoid contamination of sewage system. Cool exposed containers with water mist.

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## 6 Accidental Release Measures

*Personal Precautions, Protective Equipment and Emergency Procedures*

Personal precautions: Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust. Wear appropriate protective equipment. Keep spectators away.

*Environmental precautions*

Environmental precautions: Do not flush into soil, surface water or sewer system. Keep spills and cleaning runoff out of municipal sewers and open bodies of water. If the product contaminates rivers and lakes or drains inform respective authorities.

### *Methods and Materials for Containment and Cleaning Up*

Methods and materials: Pick up and arrange disposal without creating dust. Sweep up and shovel. Do not flush with water. Keep in suitable, closed containers for disposal. Avoid dust formation.

Further information: For disposal see section 13

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## **7) Handling and Storage**

### *Precautions for Safe Handling*

Advice on safe handling: For professional use only. Keep container tightly closed. Wear adequate protective clothing. Do not eat or drink during work. Do not smoke. Avoid formation and deposition of dust. Ensure adequate ventilation.

Hygiene measures: Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

Fire and explosion protection: Avoid dust formation. Keep away from sources of ignition - do not smoke.

Safe storage: Store in tightly sealed containers in a dry and cool room. Do not store together with foodstuffs and animal feed. Do not store together with: strong oxidising substances.

Storage class (VCI): 6.1 A; Combustible toxic products.

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## **8) Exposure/Personal Protection**

### **Engineering Controls**

Adequate ventilation.

### **Control parameters**

TCL: 0.1 mg/m<sup>3</sup>

### **Exposure Controls**

#### *Appropriate engineering controls*

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### *Personal protective equipment*

- Eye/face protection: Safety glasses with protective shields. Use equipment for eye protection tested and approved under EN 166(EU).
- Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
- The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
- Body Protection: Protective clothes.
- Respiratory protection: Wear protective mask, particle filter P2 or P3 (white) dust.

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## **9) Physical and chemical Properties**

|                              |  |
|------------------------------|--|
| Form:                        | Powder                                     |
| Colour:                      | Orange                                     |
| Odour:                       | Odourless                                  |
| Odour Threshold:             | No information available                   |
| Melting point/range:         | 300-325°C.                                 |
| Boiling point/boiling range: | 707°C                                      |
| Flash point:                 | N/A  |
| Evaporation rate:            | No information available                   |
| Vapour pressure:             | N/A  |
| Density:                     | 3.46 g/cm <sup>3</sup>                     |
| Water solubility:            | Practically insoluble                      |
| Auto-ignition temperature:   | N/A  |
| Viscosity, dynamic:          | N/A  |
| Explosive properties:        | Dust can form explosive mixtures with air. |
| Oxidizing properties:        | No information available.                  |
| Bulk density                 | Not determined                             |

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## **10) Stability and Reactivity**

|                     |   |
|---------------------|---|
| Reactivity:         | Thermal decomposition. Can decompose at excessive heat. |
| Chemical stability: | No decomposition if used according to specifications.   |

|                                     |  |
|-------------------------------------|--|
| Possibility of hazardous reactions: | Risk of explosion with oxidation agents, chlorates, potassium nitrate, nitric acid.                                  |
| Conditions to avoid:                | Heat.  |
| Incompatible materials:             | Oxidation agents, chlorates, potassium nitrate, nitric acid. Water, heat, hydrogen peroxide, chlorine, chloric acid. |
| Hazardous decomposition products:   | Sulphur dioxide, hydrogen sulphide gas, arsenic.   |

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## 11) Toxicological Information

Information on toxicological effects

|                         |  |
|-------------------------|--|
| Acute toxicity:         | LD50, oral: 185 mg/kg (rat)<br>LD50, dermal: 936 mg/kg (rat)   |
| Skin irritation:        | Non irritating   |
| Eye irritation:         | Non-irritating to eyes   |
| Germ cell mutagenicity: | Can probably cause genetic defects.  |
| Carcinogenicity:        | A cancerogenic effect has been proven in humans.   |
| Reproductive toxicity:  | The chronic exposition to inorganic arsenic compounds can increase the frequency of spontaneous abortions and the rate of still births and malformations at birth. |
| Aspiration hazard:      | Non irritating   |

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## 12) Ecological Information

|                                     |   |
|-------------------------------------|---|
| Aquatic toxicity - Fish toxicity:   | LC50: > 100 mg/l<br>LC50: 82.3 mg/l (96h) |
| Persistence and degradability:      | no data available                         |
| Bio accumulative potential:         | no data available                         |
| Mobility in soil:                   | no data available                         |
| Results of PBT and vPvB assessment: | no data available                         |
| Other adverse effects:              | no data available                         |

*Further information*

|                     |   |
|---------------------|---|
| Water hazard class: | 3 |
|---------------------|---|

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## 13) Disposal Information

Waste Treatment Methods

|   |                                 |
|---|---------------------------------|
| Product:  | Must be treated as toxic waste. |
| Contaminated packaging:   | Dispose of as unused product.   |
| Dispose in accordance with all applicable local & national regulations. |                                 |

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## 14) Transport Information

*Road Transportation ADR/RID*

Class: 6.1

Packaging group: III

UN No.: 1557

Classification code: T5

Tunnel No.: E

Hazard No.: 6.1

Correct technical name: ARSENIC COMPOUND, SOLID, N.O.S. (Arsenic sulphide)

*Sea transportation*

IMDG/GGVSee Class: 6.1

Packaging group: III

UN No.: 1557

EmS No.: F-A,S-A

Hazard No.: 6.1

Marine pollutant: P

Correct technical name: ARSENIC COMPOUND, SOLID, N.O.S. (Arsenic sulphide)

*Air transportation*

ICAO/IATA Class: 6.1

Packaging group: III

UN No.: 1557

Hazard No.: 6.1

Correct technical name: ARSENIC COMPOUND, SOLID, N.O.S. (Arsenic sulphide).

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## 15) Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture: Water hazard class: 3, very hazardous for water

Chemical Safety Assessment: no data available

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## 16) Other information

This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations.

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To best of our knowledge the information contain herein is accurate. However, neither the above supplier assumes any liability whatsoever for the accuracy or completeness of the information herein

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist