

Safety Data Sheet according to Directive 91/155/EC

# **Revision Date: January 2014**

1) Identification of the substance/preparation and the company
Trade Name:Cornelissen Orpiment (Auripigmentum, King's Yellow, Arsenic Sulfide).
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
2) Composition/Information on ingredients
Orpiment
Chemical Name: Arsenic pentasulfide, natural mineral.

Hazardous Ingredients: Arsenic sulphide.

CAS No: 1303-33-9

EC no: 033-002-00-5

# 3) Hazards Identification

# Classification

Classification according to	Regulation (EC) N	lo 1272/2008
CUS Classification Aguta t	oricity (oral).	hazard catago

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
Hazard designation:	





Signal word: Dange	r
Hazard designation:	<ul><li>H410 Very toxic to aquatic life with long lasting effects.</li><li>H301 Toxic if swallowed.</li><li>H331 Toxic if inhaled.</li></ul>
Safety designation:	P309+P311 If exposed or you feel unwell: Seek medical attention.
	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.

# 4) First Aid Measures

General information:	Take person away from hazardous area.	
Ocherai information.	Wash affected body parts thoroughly with soap and water.	
	Remove contaminated clothes.	
If inhaled:	Supply fresh air. Keep respiratory tract clear. Get medical help. In case of unconsciousness place patient stable in side position	
	for transportation.	
	Oxygen therapy in case of impaired breathing.	
In case of skin contact	Wash off immediately with plenty of soap and water and rinse thoroughly.	
1	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.	
Most important symptoms and effects, both acute and delayed:		
Possible symptoms:	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:		

1 5	of intoxication and local irritations must be ted after contamination with arsenic trioxide.
5) Fire Fighting Measures	
Extinguishing media	
Suitable extinguishing media:	CO2, extinguishing powder, water jet. Fight larger fire with water jet or alcohol resistant foam.
Unsuitable extinguishing media:	Water with full jet.
Special hazards arising from the substance	or mixture
Specific hazards during fire fighting:	In case of fire: formation of metal oxides, sulphur oxides.
Advice for fire fighters	
Protective equipment:	Wear self-contained respiratory protective device and protective clothing.
Further information:	Collect contaminated extinguishing water and debris separately; avoid contamination of sewage

#### **6** Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:	Avoid contact with skin, eyes and clothing. Do not ingest or inhale.
	Avoid formation of dust.
	Wear appropriate protective equipment. Keep spectators
	away.
Environmental precautions	

system.

Cool exposed containers with water mist.

Environmental precautions: Prevent contamination of soils, drains and surface water. Methods and Materials for Containment and Cleaning Up

Methods and materials: Clean up mechanically. Transfer liquids and solid diking material to separate suitable containers for recovery or disposal. Avoid dust formation. Dispose of contaminated material as waste. Ensure adequate ventilation.

#### 7) Handling and Storage

Precautions for Safe Handling	
Advice on safe handling:	The product should only be handled by professional personnel.

Wear adequate protective clothing. Do not eat or drink during work. Do not smoke. Avoid formation and deposition of dust. Ensure good ventilation/exhaustion at the workplace.

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Information on fire and explosion protection: Avoid dust formation

Safe Storage		
Storage conditions:	Store sealed containers in a dry, cool, ventilated location.	
Requirements for storage areas and containers:		
	Close open containers with care and store in an upright	
	position to avoid spilling.	
	The floor should not have a bottom drain.	
	Fill only in labelled containers.	
Storage compatibility:	Do not store together with: foodstuffs and animal feed.	

## 8) Exposure/Personal Protection

Exposure Controls

Appropriate engineering controls: Adequate ventilation.

Personal protective equipment

General	Follow normal measures in the handling of chemicals
	Keep away from foodstuffs.
	Wash hands during breaks and at the end of work.
	Remove soiled clothing.
	Do not inhale dust.
4	Do not eat, drink or smoke while working.
	Wash hands before breaks and at the end of work.
Eye/face protection:	Tightly sealed safety glasses.
Skin protection:	Handle with suitable impervious protective gloves.
Body Protection:	Protective work clothing.
Respiratory protection:	Use breathing mask with filter P2 or P3.

## 9) Physical and chemical Properties

Form:	Powder
Colour:	Yellow
Odour:	None
Odour Threshold:	N/A
Melting point:	300-325°С
Boiling point/boiling range:	707°C
Flash point:	N/A
Evaporation rate:	N/A
Vapour pressure:	N/A

Relative vapour density:	N/A
Density:	3.46 g/m <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.

# 10) Stability and Reactivity

Reactivity:	Thermal decomposition.
Chemical stability:	Stable under normal conditions.
Possibility of hazardous reactions:	Risk of explosion with oxidation agents, chlorates, potassium nitrate, nitric acid. Reacts with water, heat, hydrogen peroxide, chlorine, chloric acid.
Conditions to avoid:	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.

# 11) Toxicological Information

Information on toxicological effects	Y
Acute toxicity:	LD50, oral: 185 mg/kg (rat) LD50, dermal: 936 mg/kg (rat)
Skin corrosion/irritation:	Non irritating.
Eye irritation:	Non irritating.
Inhalation	Non irritating.
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.
Cancerogenity:	A cancerogenic effect has been proven in humans.
Mutagenicity:	Can probably cause genetic defects.

# 12) Ecological Information

Persistence and degradability:
Bio accumulative potential:
Mobility in soil:

No data available No data available No data available

Water hazard:	Class 3.
Prevent contamination of soils, drains and surface water.	
Ecological effects	
Aquatic toxicity:	LC50: 82.3 mg/l (96h)

## 13) Disposal Information

Waste Treatment Methods	
Product:	Dispose of product as hazardous waste. Dispose in accordance with all applicable local & national regulations.
Contaminated packaging:	Dispose of as unused product.

## 14) Transport Information

Land ADR/RID:	Class: 6.1 T5, UN 1557, Packaging Group III
Maritime Transport:	Class: 6.1 T5, UN 1557, Packaging Group III
Air Cargo ICAO-TI and IATA-DGR	Class: 6.1 T5, UN 1557, Packaging Group III

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

## 15) Regulatory Information

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

Employment restrictions regarding young persons must be observed. For use by technically qualified individuals.

Water hazard class: 3, very hazardous for water.

Chemical Safety Assessment: No data available

# 16) Other information

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

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 sued with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist