



L. CORNELISSEN & SON

Artists' Colourmen

Suppliers of Materials for Painters, Gilders & Printmakers

Safety Data Sheet according to Directive 91/155/EC

Revision Date: August 2016

1) Identification of the substance/preparation and the company

Trade Name: Cornelissen Chrome Yellow Orange.

Application: Artists' Pigment

Manufacturer/Supplier:

L Cornelissen & Son Ltd
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London WC1B 3RY

Tel: 020 7636 1045

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www.cornelissen.com

2) Hazards Identification

Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008:

Carc. 1B; H350 Repr. 1A; H360Df STOT RE 2; H373 Aquatic Acute 1; H400
Aquatic Chronic 1; H410

Label elements

Signal word: Danger



Hazardous component(s) to be indicated on label: lead chromate molybdate sulfate
red

H-statement(s)

H350: May cause cancer.

H360Df: May damage the unborn child. Suspected of damaging fertility.

H373: May cause damage to organs through prolonged or repeated exposure

H410: Very toxic to aquatic life with long lasting effects.

P-statement(s)

- P201: Obtain special instructions before use.
P260: Do not breathe dust/fume/gas/mist/vapours/spray.
P273: Avoid release to the environment.
P281: Use personal protective equipment as required.
P308+P313: IF exposed or concerned: Get medical advice/attention.
P391: Collect spillage.
P501: Dispose of contents/container to hazardous or special waste collection point, in accordance with local / regional / national or international regulations.

Other hazards

Results of PBT and vPvB assessment: This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

3) Composition/Information on ingredients

Chemical characterization: Mixed phase pigment Pb(Cr,Mo,S)O₄ C.I.Pigment Red 104, surface modified

Hazardous ingredients

Ingredient	Classification (EC) 1272/2008	Conc
lead sulfochromate yellow	Carc. Cat. 2; R45 Repr. Cat. 1; R61 Repr. Cat. 3; R62 R33 N; R50-53 Carc. 1B; H350 Repr. 1A; H360Df STOT RE 2; H373** Aquatic Acute 1; H400 Aquatic Chronic 1; H410	> 93.0 % by weight
CAS No.:	1344-37-2	
EC-No.:	215-693-7	
Index-No.:	082-009-00-X	
REACH No.:	01-2119502446-46-0001	

Ingredient	Classification (EC) 1272/2008	Conc
antimony trioxide	Carc. Cat. 3; R40 Carc. 2; H351	< 2.0 % by weight
CAS No.:	1309-64-4	
EC-No.:	215-175-0	
Index-No.:	051-005-00-X	

SVHC: lead chromate molybdate sulfate red

Other data Full text of R-, H- and EUH-phrases: see section 16.

4) First Aid Measures

Description of first aid measures

General advice: Remove/Take off immediately all contaminated clothing. If unconscious place in recovery position and seek medical advice. In case of irregular breathing or respiratory arrest provide artificial respiration.
Self-protection of the first aider

If inhaled: Provide fresh air.
Where appropriate artificial ventilation.
If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

In case of skin contact: After contact with skin, wash immediately with plenty of water and soap.

In case of eye contact: In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

If swallowed: Rinse mouth immediately and drink plenty of water.
If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Notes to physician: Intra corporal lead contamination can be detected by increased lead concentrations in blood and/or urine.

Most important symptoms and effects, both acute and delayed

Symptoms: No information available.

Indication of any immediate medical attention and special treatment needed

Immediate medical attention: Treat according to symptoms (decontamination, vital functions), administer chelate formers.

5) Fire Fighting Measures

Extinguishing media

Suitable extinguishing media: Extinguishing powder.
Foam.

Extinguishing media which must not be used for safety reasons: Carbon dioxide (CO₂)
High power water jet.

Special hazards arising from the substance or mixture

Special exposure hazards arising from the substance or preparation itself, its combustion products, or released gases:

Hazardous decomposition byproducts may form with exposure to high temperatures.

Advice for firefighters

Special protective equipment for firefighting:

In case of fire: Wear self-contained breathing apparatus.

Additional information on firefighting:

The degree of risk is governed by the burning substance and the fire conditions. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Dispose of waste according to applicable legislation.

6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal precautions: Wear personal protection equipment. (see chapter 8).
Keep unprotected people away and stay on the upwind side.

Environmental precautions

Environmental precautions: Avoid release to the environment.
Do not allow to enter into soil/subsoil.
If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

Methods and material for containment and cleaning up

Methods for cleaning up: Avoid generation of dust.
For large amounts: Contain with dust binding material and dispose of.
For small amounts: Pick up with suitable appliance and dispose of.

Reference to other sections

Reference to other sections: Observe protective provisions (see chapter 7 and 8).
Disposal: see section 13.

7) Handling and Storage

Precautions for safe handling

Advice on safe handling: Avoid generation of dust.
If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.
If the formation of dust is beyond the occupational exposure limit values, approved and suitable respiratory protection must be used.

Conditions for safe storage, including any incompatibilities

Storage space and container requirements: Keep container tightly closed in a cool, well-ventilated place.
Keep/Store only in original container.

Hints on storage assembly: Do not allow food at the workplace.

Specific end use(s)

Specific use(s): Artists pigment

8) Exposure/Personal Protection

Control parameters

lead chromate molybdate sulfate red

Long-term exposure value/ mg/m ³	remarks	Source
0.05	Carc , Sen BMGV; (as Cr)	19

DNEL

Value	Target group	exposure route	remarks	Source
6 µg/m ³	Worker: inhalative	DMEL long-term inhalative (systemic)		102

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PNEC

Value	exposure route	Source
0,1 mg/l	PNEC aquatic, freshwater	102
0,01 mg/l	PNEC aquatic, marine water	102
1 mg/l	PNEC aquatic, intermittent release	102
1000 mg/l	PNEC sewage treatment plant [STP]	102

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Exposure controls

- Respiratory protection: Respiratory protection with dust development. Particle filter with high reserve capability for solid and liquid particles (e.g. EN 143 or 149, type P3 or FFP3).
- Hand protection: Chemical proof protective gloves (EN 374) e.g. nitrile rubber (0.4mm), chloroprene rubber (0.5mm), polyvinylchloride (0.7mm), among others. Due to a large variety of types the manufacturer's instructions should be followed. Additional note: the information is based on our own tests, references and information from glove manufacturers or derived from argument by analogy of similar materials. It should be noted, that the daily service life of a chemical protection glove can in practise be significantly shorter than the permeation time deduced through tests, due to many influencing factors (e.g. temperature).
- Eye protection: Protective glasses with side protection (safety goggles) (e.g. EN 166)
- Skin and body protection: Choose bodily protection device depending on operation and possible impact, e.g. apron, protective boots, chemical protection suit (according to EN 14605 for syringes or EN ISO 13982 for dust).
- General protective and hygiene measures:
In order to prevent contamination while handling, closed working clothes and working gloves should be used. Keep away from food, drink and animal feeding stuffs. Remove contaminated, saturated clothing immediately. Wash

hands before breaks and after work. Separate storage of work clothes. When using do not eat, drink or smoke.

Engineering measures: Provision is required to keep exposure below permissible limit.

9) Physical and chemical Properties

Information on basic physical and chemical properties

Form:	Powder
Colour:	red
Odour:	odourless
Odour threshold:	not determined
pH (20 °C)	pH: 5 - 7
Melting point [°C]	> 800 °C
Boiling point [°C]	Not applicable
Flash point [°C]	Not applicable
Evaporation rate [kg/(s*m ²)]:	not applicable
Flammability:	not determined
Explosion limits [Vol-%] remarks:	not determined
Risk of explosion:	not explosive.
Vapour pressure [kPa]:	not determined
Density [g/cm ³]:	5,4 g/cm ³
Relative density:	not determined
Water solubility [g/l]:	insoluble
Partition coefficient n-octanol /water (log P O/W):	Not applicable
Autoignition temperature [°C]:	Not applicable
Viscosity, dynamic [kg/(m*s)]:	Not applicable

Other information

Relative vapour density (air=1): not applicable
Other data: No information available.

10) Stability and Reactivity

Reactivity

Reactivity: No information available.

Chemical stability

Chemical stability: Stable when applying the recommended regulations for storage and handling.
Further information on correct storage: refer to chapter 7.

Possibility of hazardous reactions

Hazardous reactions: No hazardous reactions when stored and handled according to instructions.

Conditions to avoid

Conditions to avoid: No information available.

Incompatible materials

Materials to avoid: No information available.

Hazardous decomposition products

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

11) Toxicological Information

Information on toxicological effects

Oral toxicity [mg/kg]

Value	Test criterion	Test species	remarks
> 10000	LD50:	Rat.	lead chromate molybdate sulfate red
> 20000	LD50:	Rat.	antimony trioxide

Subacute, subchronic, chronic toxicity:

Chronical Toxicity: Lead chromate pigments are practically insoluble. However, gastric fluid dissolves small quantities of lead which might accumulate in part of human body. Following long-term intake of lead compounds, the bio-synthesis of Hemoglobine may be affected irreversibly.

Irritant effect on skin: Not an irritant.

Irritant effect on eyes: Not an irritant.

Carcinogenic effects: May cause cancer.

Reproduction toxicity: Possible risk of impaired fertility.
May damage the unborn child.

12) Ecological Information

Toxicity

Toxicity to fish [mg/l]

Value	Test criterion	Test species	Dur. of dosage	remarks
> 10000	LC50:	Leuciscus idus (golden orfe)	96h	lead chromate molybdate sulfate red

Toxicity to daphnia [mg/l]

Value	Test criterion	Test species	Dur. of dosage	remarks
> 100	EC50	Daphnia magna (Big water flea)	48h	lead chromate molybdate sulfate red

Toxicity to algae [mg/l]

Value	Test criterion	Test species	Dur. of dosage	remarks
> 100	EC50	Scenedesmus subspicatus	72h	lead chromate molybdate sulfate red

Persistence and degradability

Biodegradability: not applicable

Bioaccumulative potential

Bioaccumulation: No information available.

Mobility in soil

Mobility: No information available.

Results of PBT and vPvB assessment

Results of PBT characteristics determination: not applicable

Other adverse effects

Further information on ecology: Inorganic, water-insoluble product. Can be separated in waste water treatment plants by filtration or sedimentation. Highly alkaline or acidic liquids may dissolve Pb and Cr.
Product may not be released into water without pre-treatment (biological sewage plant).

13) Disposal Information

Waste treatment methods

Disposal considerations: Must be dumped or incinerated in accordance with local regulations.
Check for possible recycling.

Waste Code: 08 01 11* waste paint and varnish containing organic solvents or other dangerous substances

Uncleaned empty packaging: Handle contaminated packages in the same way as the substance itself.
Packing which cannot be properly cleaned must be disposed of.

14) Transport Information

	Land transport GGVS/ ADR/RID	Marine transport IMDG/ GGVSee	Air transport ICAO/IATA
Environ. Hazards	U-Environmentally hazardous	U - marine pollutant	U-Environmentally hazardous
Danger releasing substance:		<< Lead chromate molybdate sulfate red >>	
Labels	6.1	6.1	6.1 - Toxic Substance
Risk No.	60		
Class	6.1	6.1	6.1
UN-No	2291	2291	2291
Description of the goods			
Proper shipping name		<<Lead compound, soluble, n.o.s>>.	
Category	2		
Packaging group	III	III	III
Classification Code	T5		
Tunnel restriction code	E		
Name affix	mixture	mixture	mixture
EmS		F-A;S-A	
Stowage category		A	

Special precautions for user

Precautions: Avoid release to the environment.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

15) Regulatory Information

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

Additional regulations: Special provisions concerning the labelling of certain mixtures EUH201: Contains lead. Should not be used on surfaces liable to be chewed or sucked by children.

A content of total lead in preparations exceeding 0,15 % (m/m) has to be considered.

This product contains total lead: 56 %

Chemical safety assessment

Safety assessment For the following substances of this mixture a chemical safety assessment has been carried out:

lead chromate molybdate sulfate red

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