

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name : Chrysophanol
Synonyms : 2-methyl-4,5-dihydroxyanthraquinone; Chrysophanic acid;
3-methyl-1,8-dihydroxyanthraquinone
CAS No. : 481-74-3
EINECS/ELINCS : 207-572-2
Brand : SCC
Company : Stanford Chemicals Company
23661 Birtcher Dr.
Lake Forest, CA 92630 USA
Emergency Telephone No. : +1 (949) 468 0555
Fax : +1 (949) 812 6690
Website : www.stanfordchem.com
Identified Uses : Laboratory chemicals, Manufacture of substances

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]:

Physical Hazards : Not classified
Health Hazards : Skin Corrosion/Irritation, Category 2
Serious Eye Damage/Eye Irritation, Category 2

2.2 Label elements

2.2.1 Labeling according to Regulation (EC) No 1272/2008 [CLP]:

Pictograms or hazard symbols

GHS Signal Word: Warning



GHS Hazard Phrases:

H315: Causes skin irritation.

H319: Causes serious eye irritation.

GHS Precaution Phrases:

P264: Wash {hands} thoroughly after handling.

P280: Wear {protective gloves/protective clothing/eye protection/face protection}.

P362+364: Take off contaminated clothing and wash it before reuse.

GHS Response Phrases:

P302+352: IF ON SKIN: Wash with plenty of soap and water.

P332+313: If skin irritation occurs, get medical advice/attention.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+313: If eye irritation persists, get medical advice/attention.

GHS Storage and Disposal Phrases: Please refer to Section 7 for Storage and Section 13 for Disposal information.

- 2.3 Adverse human health Causes serious eye irritation
 Effects and symptoms: Causes skin irritation.
 Material may be irritating to the mucous membranes and upper respiratory tract.
 May be harmful by inhalation, ingestion, or skin absorption.
 May cause respiratory system irritation.
 To the best of our knowledge, the toxicological properties have not been thoroughly investigated.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Classification of the substance or mixture

CAS No. & RTECS No.	Hazardous Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	GHS Classification
481-74-3 CB6725000	Chrysophanol	90% - 99%	207-572-2 NA	Skin Corr. 2: H315 Eye Damage 2: H319 STOT (SE) 3: H335

4. FIRST AID MEASURES

4.1 Description of first aid measures :

- In case of inhalation: Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.
- In case of skin contact: Immediately wash skin with soap and plenty of water for at least 15 minutes. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.
- In case of eye contact: Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Have eyes examined and tested by medical personnel.
- In case of ingestion: Wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel.

5. FIRE-FIGHTING MEASURES

- 5.1 Suitable extinguishing media Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.
 Use water spray to cool fire-exposed containers.
- Unsuitable extinguishing media A solid water stream may be inefficient.
- 5.2 Flammable properties and hazards Carbon oxides
- 5.3 Fire fighting instructions As in any fire, wear self-contained breathing apparatus pressure-demand
 Wear self-contained breathing apparatus for firefighting if necessary. □

6. ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures
 Avoid raising and breathing dust, and provide adequate ventilation.
 As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator, and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).

6.2 Environmental precautions

Do not let product enter drains. Take steps to avoid release into the environment, if safe to do so.

6.3 Methods and material for containment and cleaning up

Contain spill and collect, as appropriate.

Transfer to a chemical waste container for disposal in accordance with local regulations.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid prolonged or repeated exposure.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature 2 - 8 °C

Storage class (TRGS 510): Non Combustible Solids

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Exposure parameters:

CAS No.	Partial Chemical Name	Britain EH40	France VL	OSHA TWA	ACGIH TWA	Europe	Other Limits
481-74-3	Chrysophanol	No data	No data	No data	No data	No data	No data

8.2 Exposure controls

8.2.1 Engineering controls (Ventilation etc.):

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

8.2.2 Personal protection equipment:

Eye protection: Safety glasses with side-shields

Protective gloves: Compatible chemical-resistant gloves to avoid skin contact with this product.

Other protective clothing: Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory equipment (specify type): NIOSH approved respirator, as conditions warrant.

Work/Hygienic/Maintenance practices:

Do not take internally.

Facilities storing or utilizing this material should be equipped with eyewash and a safety shower.

Wash thoroughly after handling. No data available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical states:	Solid, yellow-orange crystalline powder
Odour:	Faint odour
Melting point:	194-198°C @ 760.00 mm Hg
Boiling point:	489.5°C @ 760.00 mm Hg (est)
Flash point :	No data.
Evaporation rate :	No applicable information available.
Explosive limits:	LEL: No data. UEL: No data.
Vapor pressure (vs. Air or mmHg):	No applicable information available.
Vapour density (vs. Air = 1):	No applicable information available.
Specific gravity (Water = 1):	1.476g/cm ³
Solubility in water:	Slightly, <0.1 g/100 mL at 18 °C
Solubility notes:	Freely soluble in boiling alcohol, benzene or acetone.
Autoignition Pt:	No applicable information available.
Percent volatile:	No applicable information available.
Molecular formula & weight:	C ₁₅ H ₁₀ O ₄ 254.24

10. STABILITY AND REACTIVITY

Reactivity :	No data available.
Chemical stability :	Stable.
Stability note(s):	Stable if stored in accordance with information listed on the product insert.
Polymerization:	Will not occur
Conditions to avoid:	No data available
Incompatible materials :	Strong oxidizing agents.
Hazardous decomposition or byproducts:	Carbon monoxide, Carbon dioxide

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

The toxicological effects of this product have not been thoroughly studied.

Acute toxicity	No data available
Skin corrosion/irritation	No data available
Serious eye damage/eye irritation	No data available
No data available	No data available
Respiratory or skin sensitization	No data available
Germ cell mutagenicity	No data available
Carcinogenicity	

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity No data available
Specific target organ toxicity - single exposure No data available
Specific target organ toxicity - repeated exposure No data available

Chronic toxicological effects: RTECS Number: CB6725000

12. ECOLOGICAL INFORMATION

Toxicity: Avoid release into the environment. Run off from fire control or dilution water may cause pollution
Persistence and degradability: No data available.
Bioaccumulative potential: No data available.
Mobility in Soil: No data available.
Results of PBT and vPvB assessment: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

13. DISPOSAL CONSIDERATIONS

Waste disposal method: Dispose in accordance with local, state, and federal regulations.

14. TRANSPORT INFORMATION

DOT Proper shipping name: Not dangerous goods.
DOT hazard class:
UN/NA number:
LAND TRANSPORT (European ADR/RID):
ADR/RID Shipping name: Not dangerous goods.
UN number:
Hazard class:
AIR TRANSPORT (ICAO/IATA):
ICAO/IATA shipping name: Not dangerous goods.
Additional transport: Transport in accordance with local, state, and federal regulations.

15. REGULATORY INFORMATION

This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC) No.1272/2008.
Safety, health and environmental regulations/legislation specific for the substance or mixture: Not available.
Chemical safety assessment: Not available.

16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.