

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 04.11.2022

Version number 5 (replaces version 4)

Revision: 04.11.2022

SECTION 1: Identification of the substance/mixture and of the company/undertaking

· 1.1 Product identifier

· Product name: Reference Standard Gardner Colour 5 / 8

· Catalog number: 134210, 134220

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

· Application of the substance / the preparation: Coloured Standard Solution for calibration purposes

· 1.3 Details of the supplier of the safety data sheet

· Supplier:

Tintometer GmbH
Schleefstraße 8-12
44287 Dortmund
www.lovibond.com

phone: +49 231 94510-0
e-mail: sales@tintometer.de

The Tintometer Limited
Lovibond® House
Sun Rise Way
Amesbury
Wiltshire SP4 7GR
United Kingdom
Made in UK

phone : +44 1980 664800
e-mail: SDS@tintometer.com

· Informing department:

e-mail: sds@lovibond.com
Product Safety Department

· 1.4 Emergency telephone number:

+44 1235 239670
Languages: English

SECTION 2: Hazards identification

· 2.1 Classification of the substance or mixture

· Classification according to Regulation (EC) No 1272/2008



GHS08 health hazard

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

· 2.2 Label elements

· Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the GB CLP regulation.

· Hazard pictograms



GHS08

· Signal word Danger

· Hazard-determining components of labelling:

paraffin highly liquid (white mineral oil)

· Hazard statements

H304 May be fatal if swallowed and enters airways.

· Precautionary statements

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

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P331 Do NOT induce vomiting.

- **2.3 Other hazards** No further relevant information available.

- **Results of PBT and vPvB assessment**

This mixture does not contain any substances that are assessed to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB), according to the criteria given in Annex XIII of Regulation (EC) No. 1907/2006.

- **Determination of endocrine-disrupting properties**


The product does not contain substances with endocrine disrupting properties.

SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**

- **Description:** Mixture contains organic compounds.

- **Dangerous components:**

CAS: 8042-47-5	paraffin highly liquid (white mineral oil)	 Asp. Tox. 1, H304	80-100%
EINECS: 232-455-8			

- **Additional information** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- **4.1 Description of first aid measures**

- **General information** Instantly remove any clothing soiled by the product.

- **After inhalation**

Supply fresh air or oxygen.

Call a doctor immediately.

- **After skin contact** Instantly wash with water and soap and rinse thoroughly.

- **After eye contact**

Rinse opened eye for several minutes (at least 15 min) under running water.

Seek medical treatment.

- **After swallowing**

Rinse out mouth and then drink 1-2 glasses of water.

Do not induce vomiting; instantly call for medical help.

- **4.2 Most important symptoms and effects, both acute and delayed:**

irritating effects possible
after swallowing and inhalation:

gastric or intestinal trouble

Danger of pulmonary oedema.

- **Danger** Danger of pneumonia.

- **4.3 Indication of any immediate medical attention and special treatment needed:**

If swallowed or in case of vomiting, danger of entering the lungs

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**

- **Suitable extinguishing agents** CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

- **For safety reasons unsuitable extinguishing agents** Water with a full water jet.

- **5.2 Special hazards arising from the substance or mixture**

combustible

Formation of toxic gases is possible during heating or in case of fire.

Can be released in case of fire:

Carbon monoxide (CO) and carbon dioxide (CO₂)

- **5.3 Advice for firefighters**

- **Protective equipment:**

Wear self-contained breathing apparatus.

Wear full protective suit.

- **Additional information**

Collect contaminated fire fighting water separately. It must not enter drains.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

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 Ambient fire may liberate hazardous vapours.

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SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
- **Advice for non-emergency personnel:**
 - Wear protective equipment. Keep unprotected persons away.
 - Avoid substance contact.
 - Ensure adequate ventilation
- **Advice for emergency responders:** Protective equipment: see section 8
- **6.2 Environmental precautions:** Do not allow product to reach sewage system or water bodies.
- **6.3 Methods and material for containment and cleaning up:**
 - Ensure adequate ventilation.
 - Absorb with liquid-binding material (sand, diatomite, universal binders).
 - Dispose of contaminated material as waste according to item 13.
- **6.4 Reference to other sections**
 - See Section 8 for information on personal protection equipment.
 - See Section 13 for information on disposal.

* SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
- **Advice on safe handling:**
 - Ensure good ventilation/exhaustion at the workplace.
 - Keep ignition sources away - Do not smoke.
- **Hygiene measures:**
 - Do not inhale gases / fumes / aerosols.
 - Take off immediately all contaminated clothing.
 - Wash hands during breaks and at the end of the work.
 - Do not eat, drink or smoke when using this product.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Requirements to be met by storerooms and containers:**
 - Store in cool location.
 - Keep only in original packaging.
- **Information about storage in one common storage facility:** Store away from oxidising agents.
- **Further information about storage conditions:**
 - Protect from heat and direct sunlight.
 - Protect from the effects of light.
 - Protect from humidity and keep away from water.
- **Recommended storage temperature:** 23°C +/- 5°C
- **7.3 Specific end use(s)** No further relevant information available.

* SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Components with limit values that require monitoring at the workplace:**
 - The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Recommended monitoring procedures:**
 - Methods for measurement of the workplace atmosphere have to correspond to the requirements of norms DIN EN 482 and DIN EN 689.
- **Additional information:** The lists that were valid during the compilation were used as basis.
- **8.2 Exposure controls**
- **Engineering measures:**
 - Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.
 - See item 7.
- **Individual protection measures, such as personal protective equipment**
 - Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled.

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· Eye/face protection

Safety glasses

Use safety glasses that have been tested and approved in accordance with government standards such as EN 166.

· Hand protection

Preventive skin protection by use of skin-protecting agents is recommended.

After use of gloves apply skin-cleaning agents and skin cosmetics.

· Material of gloves

nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.11 mm
· Penetration time of glove material

Value for the permeation: Level = 1 (< 10 min)

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Other skin protection (body protection): Protective work clothing.

· Breathing equipment: Use breathing protection against the effects of fumes/dust/aerosol.

· Recommended filter device for short term use: Combination filter A-P1

· Environmental exposure controls Do not allow product to reach sewage system or water bodies.

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties
· Physical state

Fluid

· Form:

Liquid

· Colour:

According to product specification

· Odour:

Characteristic

· Odour threshold:

Not determined.

· Melting point/Freezing point:

Not determined.

· Boiling point or initial boiling point and boiling range 218–800°C (CAS: 8042-47-5 paraffin highly liquid (white mineral oil))

· Flammability

combustible

· Explosive properties:

Product is not explosive. However, formation of explosive air/steam mixtures is possible.

· Lower and upper explosion limit
· Lower:

Not determined.

· Upper:

Not determined.

· Flash point:

>98°C (CAS: 64742-62-7 Residual oils (petroleum), solvent-dewaxed)

· Ignition temperature:

Not determined.

· Decomposition temperature:

Not determined.

· pH

Not determined.

· Kinematic viscosity at 40°C
<20.5 mm²/s
· Solubility
· Water:

Not miscible or difficult to mix

· Partition coefficient n-octanol/water (log value)

Not applicable (mixture).

· Vapour pressure:

Not determined.

· Density and/or relative density
· Density:

Not determined.

· Relative density:

Not determined.

· Relative gas density

Not determined.

· Particle characteristics

Not applicable (liquid).

· 9.2 Other information
· Information with regard to physical hazard classes
· Corrosive to metals

Void

· Other safety characteristics

none

· Oxidising properties:

none

· Additional information
· Solids content:

<0.1 %

· Solvent content:
· Organic solvents:

<0.1 %

· Water:

0 %

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SECTION 10: Stability and reactivity

- **10.1 Reactivity** Fumes can combine with air to form an explosive mixture.
- **10.2 Chemical stability** Stable at ambient temperature (room temperature).
- **10.3 Possibility of hazardous reactions**
Reacts with oxidizing agents
Explosion hazard with: Nitrates, chlorates, perchlorates
- **10.4 Conditions to avoid** Strong heating (decomposition)
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** see section 5

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

- **LD/LC50 values that are relevant for classification:**

CAS: 8042-47-5 paraffin highly liquid (white mineral oil)

Oral	LD50	>5000 mg/kg (rat)
Dermal	LD50.	>2000 mg/kg (rabbit)
Inhalative	LC50.	>5 mg/l4h (rat)

- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.

- **Information on components:**

CAS: 8042-47-5 paraffin highly liquid (white mineral oil)

Irritation of skin	OECD 404	(rabbit: no irritation)
Irritation of eyes	OECD 405	(rabbit: no irritation)

- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

- **Information on components:**

CAS: 8042-47-5 paraffin highly liquid (white mineral oil)

Sensitisation	OECD 406	(guinea pig: negative) (Magnusson / Klingman)
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- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.

- **Information on components:**

OECD 414: Teratogenicity testing
 OECD 473: Mutagenicity testing
 OECD 471, 474, 476, 487: Germ cell mutagenicity testing

CAS: 8042-47-5 paraffin highly liquid (white mineral oil)

OECD 471	(negative) (Bacterial Reverse Mutation Test - Ames test)
OECD 474	(negative) (Mammalian Erythrocyte Micronucleus Test)

- **STOT (specific target organ toxicity) -single exposure** Based on available data, the classification criteria are not met.
- **STOT (specific target organ toxicity) -repeated exposure** Based on available data, the classification criteria are not met.

- **Aspiration hazard** May be fatal if swallowed and enters airways.

- **11.2 Information on other hazards**

- **Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.

- **Other information**

Other dangerous properties can not be excluded.

According to the information available to us, the chemical, physical and toxicological properties of the substances mentioned in Chapter 3 have not been thoroughly investigated.

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SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

CAS: 8042-47-5 paraffin highly liquid (white mineral oil)

EC50 >100 mg/l/48h (Daphnia magna) (OECD 202)

IC50 ≥100 mg/l/72h (Pseudokirchneriella subcapitata) (OECD 201)

LC50 >1000 mg/l/96h (gold orfe) (OECD 203)

12.2 Persistence and degradability

CAS: 8042-47-5 paraffin highly liquid (white mineral oil)

OECD 301 F 31.3 % / 28 d (.)

12.3 Bioaccumulative potential

 No further relevant information available.

12.4 Mobility in soil

 No further relevant information available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB), according to the criteria given in Annex XIII of Regulation (EC) No. 1907/2006.

12.6 Endocrine disrupting properties

 The product does not contain substances with endocrine disrupting properties.

12.7 Other adverse effects

 Avoid transfer into the environment.

Water hazard:

Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Hand over to disposers of hazardous waste.

European waste catalogue

16 05 08* discarded organic chemicals consisting of or containing hazardous substances

Uncleaned packagings:

Recommendation:

 Disposal must be made according to official regulations.

SECTION 14: Transport information

14.1 UN number or ID number

ADR, IMDG, IATA

 Void

14.2 UN proper shipping name

ADR, IMDG, IATA

 Void

14.3 Transport hazard class(es)

ADR, IMDG, IATA

Class

 Void

14.4 Packing group

ADR, IMDG, IATA

 Void

14.5 Environmental hazards:

 Not applicable.

14.6 Special precautions for user

 Not applicable.

14.7 Maritime transport in bulk according to IMO instruments

 Not applicable.

Transport/Additional information:

 Not dangerous according to the above specifications.

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SECTION 15: Regulatory information

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

· **Regulation (EU) 2019/1148 on the marketing and use of explosives precursors** not regulated

· **Regulation (EU) No 649/2012 concerning the export and import of hazardous chemicals (PIC)**

None of the ingredients is listed.

· **Regulation (EC) No 1334/2000 setting up a Community regime for the control of exports of dual-use items and technology:**

None of the ingredients is listed.

· **Regulation (EC) No 273/2004 on drug precursors**

None of the ingredients is listed.

· **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

None of the ingredients is listed.

· **Regulation (EC) No 1005/2009 on substances that deplete the ozone layer:**

None of the ingredients is listed.

· **REGULATION (EU) 2019/1021 on persistent organic pollutants (POP)**

None of the ingredients is listed.

· **LIST OF SUBSTANCES SUBJECT TO AUTHORISATION (ANNEX XIV)**

None of the ingredients is listed.

· **Substances of very high concern (SVHC) according to REACH, Article 57**

This product does not contain any substances of very high concern above the legal concentration limit of $\geq 0.1\%$ (w / w).

· **Substances of very high concern (SVHC) according to UK REACH**

This product does not contain any substances of very high concern above the legal concentration limit of $\geq 0.1\%$ (w / w).

· **Directive 2012/18/EU (SEVESO III):**

· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

· **Information about limitation of use:** Not required.

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Training hints** Provide adequate information, instruction and training for operators.

· **Relevant phrases**

H304 May be fatal if swallowed and enters airways.

· **Abbreviations and acronyms:**

OECD: Organisation for Economic Co-operation and Development

STOT: specific target organ toxicity

SE: single exposure

RE: repeated exposure

EC50: half maximal effective concentration

IC50: half maximal inhibitory concentration

NOEL or NOEC: No Observed Effect Level or Concentration

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

Asp. Tox. 1: Aspiration hazard – Category 1

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- **Sources** Data arise from safety data sheets, reference works and literature.
 - * **Data compared to the previous version altered.**
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