Lovibond® Water Testing

Tintometer® Group



Safety Data Sheet acc. to OSHA HCS (HazCom 2012)

Reviewed on 05/23/2023 Printing date 05/23/2023

1 Identification

- · Product identifier
- · Trade name: Reference Standard Saybolt Colour +25
- Catalogue number: 134070
- · Application of the substance / the mixture: Coloured Standard Solution for calibration purposes
- · Manufacturer/Supplier:

Tintometer Inc. 6456 Parkland Drive Sarasota, FL 34243 USA

phone: (941) 756-6410 fax: (941) 727-9654 www.lovibond.us Made in UK

· Emergency telephone number: + 1 866 928 0789 (English, French, Spanish)

2 Hazard(s) identification

· Classification of the substance or mixture



GHS08 Health hazard

Aspiration Hazard 1 H304 May be fatal if swallowed and enters airways.



Skin Irritation 2 H315 Causes skin irritation.

Flammable Liquids 4 H227 Combustible liquid.

- · Label elements
- · GHS label elements The product is classified and labeled according to the Hazard Communication Standard (HCS).
- · Hazard pictograms





GHS07 GHS08

· Signal word Danger

· Hazard-determining components of labeling:

Kerosine: distillates, hydrotreated light

(D94/69 p1249) 4

· Hazard statements H227 Combustible liquid.

H315 Causes skin irritation.

H304 May be fatal if swallowed and enters airways.

· Precautionary statements

Wear protective gloves. P280

P264 Wash contaminated body parts thoroughly after handling. P301+P310 If swallowed: Immediately call a poison center/doctor.

P331 Do NOT induce vomiting.

P501 Dispose of contents/container to an approved waste disposal plant.

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· Other hazards No further relevant information available.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of organic compounds
- Composition and Information on Ingredients:

Percent ranges are used due to the confidential product information.

| CAS: 64742-47-8 | Kerosine : distillates, hydrotreated light | 80-100% |
|--|---|---------|
| EINECS: 265-149-8 | (D94/69 p1249) 4 | |
| Index number: 649-422-00-2 | 🕸 Aspiration Hazard 1, H304; 🕦 Skin Irritation 2, H315; Flammable Liquids 4, H227 | |
| CAS: 1330-20-7 | xylene, mixed isomers, pure | <0.1% |
| EINECS: 215-535-7 Index number: 601-022-00-9 RTECS: ZE 2100000 | Flammable Liquids 3, H226; Aquatic Acute 1, H400 (M=1); Acute Toxicity - Dermal 4, H312; Acute Toxicity - Inhalation 4, H332; Skin Irritation 2, H315 | |

· Additional information: For the wording of the listed hazard phrases refer to section 16.

4 First-aid measures

- · Description of first aid measures
- · General information:

Personal protection for the First Aider.

Immediately remove any clothing soiled by the product.

After inhalation:

Supply fresh air or oxygen.

Call a doctor immediately.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation or rash occurs: Get medical advice/attention.

· After eye contact: Rinse opened eye for several minutes (at least 15 min) under running water. Then consult a doctor.

· After swallowing:

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

Do not induce vomiting; immediately call for medical help.

Most important symptoms and effects, both acute and delayed

irritations

after swallowing and inhalation:

breathing difficulty

coughing

dizziness

gastric or intestinal disorders

· Danger:

Danger of pneumonia.

Danger of pulmonary edema.

Indication of any immediate medical attention and special treatment needed:

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

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

Use fire fighting measures that suit the environment.

Water, Carbon dioxide (CO₂), Foam, Fire-extinguishing powder

CO₂, extinguishing powder or water spray. Fight larger fire with alcohol resistant foam.

For safety reasons unsuitable extinguishing agents:

Water with full jet

Large Fire: Use of water spray when fighting fire may be inefficient.

Special hazards arising from the substance or mixture

Can burn in fire.

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

In case of fire, the following can be released:

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Carbon monoxide (CO) and carbon dioxide (CO2)

Advice for firefighters

Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

Additional information

Collect contaminated fire fighting water separately. It must not enter the sewage system.

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

Ambient fire may liberate hazardous vapours.

6 Accidental release measures

· 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

Environmental precautions:

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up:

Ensure adequate ventilation.

Absorb with liquid-binding material (sand, diatomite, universal binders).

Dispose contaminated material as waste according to section 13.

Reference to other sections

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

· 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.

Avoid contact with the skin.

Take off immediately all contaminated clothing.

Wash hands before breaks and at the end of work.

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

- · Conditions for safe storage, including any incompatibilities
- · Requirements to be met by storerooms and receptacles: Store in a cool location.
- Information about storage in one common storage facility: Store away from oxidizing agents.
- Further information about storage conditions:

Protect from heat and direct sunlight.

Protect from exposure to the light.

Protect from humidity and water.

- · Recommended storage temperature: 20°C +/- 5°C (approx. 68°F)
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Control parameters
- Components with limit values that require monitoring at the workplace:

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

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CAS: 64742-47-8 Kerosine : distillates, hydrotreated light

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EL (Canada) Long-term value: 200 mg/m³

Skin

· Additional information: The lists that were valid during the creation were used as basis.

Engineering measures:

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. See item 7.

· Personal protective equipment:

Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled.

- · Breathing equipment: Use respiratory protective device against the effects of fume/dust/aerosol.
- · Recommended filter device for short term use: Filter A
- · Protection of hands:

Protective gloves

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 \leq 1 (10 min)

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

· Eye protection:

Safety glasses

Use protective goggles that have been tested and approved in accordance with government standards (like NIOSH).

Body protection: Protective work clothing

· Limitation and supervision of exposure into the environment:

Do not allow product to reach sewage system or any water course.

9 Physical and chemical properties

· Information on basic physical and chemical properties

· Appearance:

Form / Physical state:
Color:
Odor:
Characteristic
Odor threshold:
Not determined.

• **pH-value:** Mixture is non-soluble (in water).

· Melting point/freezing point: -60°C (-76°F)

· Initial boiling point and boiling range: 192–256°C (377.6–492.8°F) (CAS: 64742-47-8 Kerosine : distillates,

hydrotreated light (D94/69 p1249) 4)

• Flash point: 77°C (170.6°F) (CAS: 64742-47-8 Kerosine : distillates, hydrotreated

light

(D94/69 p1249) 4)

Flammability (solid, gas): Can burn in fire.

• Auto igniting: 225°C (437°F) (CAS: 64742-47-8 Kerosine : distillates, hydrotreated light

(D94/69 p1249) 4) Not determined.

• Auto-ignition temperature: Product is not self-igniting.

Danger of explosion: Product is not explosive. However, formation of explosive air/vapor

mixtures are possible.

· Flammability or explosive limits:

· Decomposition temperature:

Lower: 0.5 Vol % (CAS: 64742-47-8 Kerosine : distillates, hydrotreated light

(D94/69 p1249) 4)

Upper: 6.5 Vol % (CAS: 64742-47-8 Kerosine : distillates, hydrotreated light

(D94/69 p1249) 4)

· Oxidizing properties: none

· Vapor Pressure: Not determined.

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Density at 20°C (68°F): >0.62-<0.97 g/cm³ (>5.17-<8.09 lbs/gal)

Relative density:
 Vapor density:
 Evaporation rate:
 Not determined.
 Not determined.

Solubility(ies)

• Water: Not miscible or difficult to mix. • Partition coefficient (n-octanol/water): Not applicable (mixture).

· Viscosity:

• Kinematic at 40°C (104°F): <20.5 mm²/s

· Other information

Solids content: 0 %
Solvent content:
Organic solvents: <0.1 %

· Information with regard to physical hazard classes

· Corrosive to metals none

10 Stability and reactivity

- · Reactivity Fumes can combine with air to form an explosive mixture.
- · Chemical stability Stable at ambient temperature (room temperature).
- · Possibility of hazardous reactions Reacts with acids, alkalis and oxidizing agents.
- · Conditions to avoid Strong heating (decomposition)
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: see section 5

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity: Based on available data, the classification criteria are not met.

| · LD/LC50 v | · LD/LC50 values that are relevant for classification: | | | |
|-------------|--|---|--|--|
| CAS: 6474 | CAS: 64742-47-8 Kerosine : distillates, hydrotreated light (D94/69 p1249) 4 | | | |
| Oral | | >5000 mg/kg (rat) (IUCLID) | | |
| Dermal | | >2000 mg/kg (rabbit) (IUCLID) | | |
| Inhalative | LC50 | >5.28 mg/l /4h (rat) (ECHA: vapour; no test animals died during exposure or the post-exposure observation period.) | | |

- · Primary irritant effect:
- on the skin: Causes skin irritation.
- on the eye: Based on available data, the classification criteria are not met.

| · Information on | · Information on components: | | |
|--------------------|---|--|--|
| CAS: 64742-47- | CAS: 64742-47-8 Kerosine : distillates, hydrotreated light (D94/69 p1249) 4 | | |
| Irritation of skin | | (rabbit: irritation) ECHA: migrated information: read-across based on grouping of substances (category approach) | |
| Irritation of eyes | | (rabbit: no irritation) ECHA: migrated information: read-across based on grouping of substances (category approach) | |

- · Sensitization: Based on available data, the classification criteria are not met.
- · Carcinogenic categories

| • | ARC (International Agency for Research on Cancer) | |
|---|---|---|
| | CAS: 1330-20-7 xylene, mixed isomers, pure | 3 |

· NTP (National Toxicology Program)

None of the ingredients is listed.

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· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

- · Other information: see section 8 / 15
- · Synergistic Products: None
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction): The following statements refer to the mixture:
- · 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.
- · 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.
- · Additional toxicological information:

CAS: 64742-47-8 Kerosine : distillates, hydrotreated light (D94/69 p1249) 4

. (source: GESTIS)

Main toxic effects of Petroleum in analogy:

acute: degreasing and irritating effect on the skin,

Lung damage when inhaling highly concentrated aerosols (aspiration). Depression of the central nervous system, gastrointestinal complaints and renal dysfunction after massive oral intake

chronic: skin changes

After inhalation/oral uptake of high doses, the systemic effects set in quickly: headache, dizziness, euphoria, followed by drunkenness, accelerated pulse, tremor, cyanosis, spasms, deep anaesthesia, lack of reflexes -> circulatory failure and respiratory paralysis. Recovery in the course of the symptom sequence with a timely stop of exposure.

· Other information Other dangerous properties can not be excluded.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- Persistence and degradability No further relevant information available.
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Other adverse effects Avoid transfer into the environment.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Hand over to hazardous waste disposers.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

14 Transport information

| . 11 | INI | Mii | mha | |
|------|-----|-----|-----|--|

· DOT, IMDG, IATA

none

· UN proper shipping name

· DOT, IMDG, IATA

none

· Transport hazard class(es)

· DOT, IMDG, IATA

Class

none

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| (Oonia. or page |
|--|
| |
| none |
| Not applicable. |
| Not applicable. |
| RPOL73/78 |
| Not applicable. |
| Not dangerous according to the above specifications. |
| |

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara
- · Section 355 (Extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

· Hazardous Air Pollutants

CAS: 1330-20-7 xylene, mixed isomers, pure

- · Proposition 65
- · Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

New Jersey Right-to-Know List:

CAS: 1330-20-7 xylene, mixed isomers, pure

New Jersey Special Hazardous Substance List:

CAS: 1330-20-7 xylene, mixed isomers, pure

Pennsylvania Right-to-Know List:

CAS: 1330-20-7 xylene, mixed isomers, pure

Pennsylvania Special Hazardous Substance List:

CAS: 1330-20-7 xylene, mixed isomers, pure

CAS: 1330-20-7 xylene, mixed isomers, pure

· EPA (Environmental Protection Agency)

NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

- · Information about limitation of use: Not required.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H226 Flammable liquid and vapor.

F3

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Ι

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H227 Combustible liquid.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H332 Harmful if inhaled.

H400 Very toxic to aquatic life.

· Version number / date of revision: 5 / 05/23/2023

· 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

c.c.: closed cup

•ACGIH* - American Conference of Governmental Industrial Hygienists
•A1 - Confirmed human carcinogen

•A2 - Suspected human carcinogen

•A3 - Confirmed animal carcinogen with unknown relevance to humans

•A4 - Not classifiable as a human carcinogen

•A5 - Not suspected as a human carcinogen IARC - International Agency for Research on Cancer •Group 1 - Carcinogenic to humans

•Group 2A - Probably carcinogenic to humans

•Group 2B - Possibly carcinogenic to humans
•Group 3 - Not classifiable as to carcinogenicity to humans
•Group 4 - Probably not carcinogenic to humans
NTP - National Toxicology Program, U.S. Department of Health and Human Services
•Group K - Known to be Human Carcinogens

•Group R - Reasonably Anticipated to be Human Carcinogens

IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation

IATA: International Air Transport Association

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

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Flammable Liquids 3: Flammable liquids - Category 3

Flammable Liquids 4: Flammable liquids - Category 4

Acute Toxicity - Dermal 4: Acute toxicity - Category 4 Skin Irritation 2: Skin corrosion/irritation - Category 2

Aspiration Hazard 1: Aspiration hazard – Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard - Category 1

Data arise from safety data sheets, reference works and literature.

IUCLID (International Uniform Chemical Information Database)

ECHA: European CHemicals Agency http://echa.europa.eu

GESTIS- Stoffdatenbank (Substance Database, Germany) * Data compared to the previous version altered.