

SAFETY DATA SHEET



Perma-Lock™ Medium Strength Threadlocker - Blue

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

1.1 Product identifier

Product name : Perma-Lock™ Medium Strength Threadlocker - Blue 13ML
UFI : WA15-E23H-0006-PPC5
Product code : 24213
Product description : Sealants and adhesives
Product type : Liquid.
Other means of identification : Not available.

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

Identified uses

Sealants

Uses advised against

Not applicable.

1.3 Details of the supplier of the safety data sheet

JRP Distribution Ltd.
Unit 10A, Business Park, City Fields Way
Tangmere , PO20 2FT, United Kingdom
info@jbweld.com
Tel: +44 1903 750355
Website: www.jbweld.com.eu

e-mail address of person responsible for this SDS : info@jbweld.com

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number : International: +1 (352) 323-3500 (INFOTRAC® INTL)
National Emergency Poison Centre (24hrs) : 111

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Eye Dam. 1, H318
Carc. 1B, H350
Aquatic Chronic 3, H412

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Ingredients of unknown toxicity : 3 percent of the mixture consists of component(s) of unknown acute dermal toxicity
6 percent of the mixture consists of component(s) of unknown acute inhalation toxicity

Ingredients of unknown ecotoxicity : Contains 3% of components with unknown hazards to the aquatic environment

See Section 16 for the full text of the H statements declared above.

SECTION 2: Hazards identification

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms :



Signal word :

Danger

Hazard statements :

Causes serious eye damage.
May cause cancer.
Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention :

Obtain special instructions before use. Wear protective gloves, protective clothing, eye protection, face protection, or hearing protection. Avoid release to the environment. Avoid breathing vapour. Wash thoroughly after handling.

Response :

IF exposed or concerned: Get medical advice or attention. IF INHALED: Call a POISON CENTER or doctor if you feel unwell. Take off contaminated clothing and wash it before reuse. IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

Storage :

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

Disposal :

Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements :

Contains methyl methacrylate. May produce an allergic reaction.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles :

Restricted to professional users.

Special packaging requirements

Containers to be fitted with child-resistant fastenings :

Not applicable.

Tactile warning of danger :

Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII :

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification :

None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures :

Mixture

Perma-Lock™ Medium Strength Threadlocker - Blue

SECTION 3: Composition/information on ingredients

| Product/ingredient name | Identifiers | % | Classification | Specific Conc. Limits, M-factors and ATEs | Type |
|---------------------------------------------------|-------------------------------------------------------|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| α , α -dimethylbenzyl hydroperoxide | EC: 201-254-7 CAS: 80-15-9 Index: 617-002-00-8 | ≤5 | Org. Perox. E, H242 Acute Tox. 4, H302 Acute Tox. 3, H311 Acute Tox. 2, H330 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335 STOT RE 2, H373 Aquatic Chronic 2, H411 | ATE [Oral] = 382 mg/kg ATE [Dermal] = 500 mg/kg ATE [Inhalation (gases)] = 220 ppm Skin Corr. 1B, H314: C ≥ 10% Skin Irrit. 2, H315: 3% ≤ C < 10% Eye Dam. 1, H318: C ≥ 3% Eye Irrit. 2, H319: 1% ≤ C < 3% STOT SE 3, H335: C ≥ 1% | [1] |
| propane-1,2-diol | EC: 200-338-0 CAS: 57-55-6 | ≤5 | Skin Irrit. 2, H315 Eye Irrit. 2, H319 | - | [1] [2] |
| cumene | EC: 202-704-5 CAS: 98-82-8 Index: 601-024-00-X | <1 | Flam. Liq. 3, H226 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Carc. 1B, H350 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 | ATE [Oral] = 1400 mg/kg | [1] [2] |
| methanol | EC: 200-659-6 CAS: 67-56-1 Index: 603-001-00-X | <1 | Flam. Liq. 2, H225 Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 3, H331 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 1, H370 | ATE [Oral] = 100 mg/kg ATE [Dermal] = 300 mg/kg ATE [Inhalation (vapours)] = 3 mg/l STOT SE 1, H370: C ≥ 10% STOT SE 2, H371: 3% ≤ C < 10% | [1] [2] |
| methyl methacrylate | EC: 201-297-1 CAS: 80-62-6 Index: 607-035-00-6 | <1 | Flam. Liq. 2, H225 Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT SE 3, H335 | - | [1] [2] |
| N,N-dimethyl-o-toluidine | EC: 210-199-8 CAS: 609-72-3 Index: 612-056-00-9 | <1 | Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 3, H331 STOT RE 2, H373 Aquatic Chronic 3, H412 See Section 16 for the full text of the H statements declared above. | ATE [Oral] = 100 mg/kg ATE [Dermal] = 300 mg/kg ATE [Inhalation (vapours)] = 3 mg/l | [1] |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

SECTION 3: Composition/information on ingredients

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

- Eye contact** : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Ingestion** : Adverse symptoms may include the following:
stomach pains

SECTION 4: First aid measures

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous combustion products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
metal oxide/oxides

5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

- : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and material for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

SECTION 6: Accidental release measures

- Large spill** : Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.
- 6.4 Reference to other sections** : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

- Recommendations** : Not available.
- Industrial sector specific solutions** : Professional uses

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

SECTION 8: Exposure controls/personal protection

| Product/ingredient name | Exposure limit values |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| propane-1,2-diol | EH40/2005 WELs (United Kingdom (UK), 1/2020). TWA: 10 mg/m ³ 8 hours. Form: Particulate TWA: 474 mg/m ³ 8 hours. Form: total vapour and particulates TWA: 150 ppm 8 hours. Form: total vapour and particulates |
| cumene | EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin. STEL: 250 mg/m ³ 15 minutes. STEL: 50 ppm 15 minutes. TWA: 25 ppm 8 hours. TWA: 125 mg/m ³ 8 hours. |
| methanol | EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin. STEL: 333 mg/m ³ 15 minutes. STEL: 250 ppm 15 minutes. TWA: 266 mg/m ³ 8 hours. TWA: 200 ppm 8 hours. |
| methyl methacrylate | EH40/2005 WELs (United Kingdom (UK), 1/2020). STEL: 416 mg/m ³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 208 mg/m ³ 8 hours. TWA: 50 ppm 8 hours. |

Biological exposure indices

No exposure indices known.

Recommended monitoring procedures : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

| Product/ingredient name | Type | Exposure | Value | Population | Effects |
|-----------------------------------|------|-----------------------|------------------------|--------------------|----------|
| α, α-dimethylbenzyl hydroperoxide | DNEL | Long term Inhalation | 6 mg/m ³ | Workers | Systemic |
| propane-1,2-diol | DNEL | Long term Inhalation | 10 mg/m ³ | General population | Local |
| | DNEL | Long term Inhalation | 10 mg/m ³ | Workers | Local |
| cumene | DNEL | Long term Inhalation | 50 mg/m ³ | General population | Systemic |
| | DNEL | Long term Inhalation | 168 mg/m ³ | Workers | Systemic |
| | DNEL | Long term Dermal | 1.2 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Oral | 5 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 15.4 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 16.6 mg/m ³ | General population | Systemic |
| | DNEL | Long term Inhalation | 100 mg/m ³ | Workers | Systemic |
| methanol | DNEL | Short term Inhalation | 250 mg/m ³ | Workers | Local |
| | DNEL | Short term Oral | 4 mg/kg | General | Systemic |

SECTION 8: Exposure controls/personal protection

| | | | | | |
|---------------------|------|-----------------------|-----------------------------|-----------------------|----------|
| methyl methacrylate | DNEL | Long term Oral | bw/day 4 mg/kg | population General | Systemic |
| | DNEL | Short term Dermal | bw/day 4 mg/kg | population General | Systemic |
| | DNEL | Long term Dermal | bw/day 4 mg/kg | population General | Systemic |
| | DNEL | Short term Dermal | bw/day 20 mg/kg | population Workers | Systemic |
| | DNEL | Long term Dermal | bw/day 20 mg/kg | Workers | Systemic |
| | DNEL | Short term Inhalation | 26 mg/m ³ | General population | Local |
| | DNEL | Long term Inhalation | 26 mg/m ³ | General population | Local |
| | DNEL | Short term Inhalation | 26 mg/m ³ | General population | Systemic |
| | DNEL | Long term Inhalation | 26 mg/m ³ | General population | Systemic |
| | DNEL | Short term Inhalation | 130 mg/m ³ | Workers | Local |
| | DNEL | Long term Inhalation | 130 mg/m ³ | Workers | Local |
| | DNEL | Short term Inhalation | 130 mg/m ³ | Workers | Systemic |
| | DNEL | Long term Inhalation | 130 mg/m ³ | Workers | Systemic |
| | DNEL | Short term Dermal | 1.5 mg/cm ² | General population | Local |
| | DNEL | Long term Dermal | 1.5 mg/cm ² | General population | Local |
| | DNEL | Short term Dermal | 1.5 mg/cm ² | Workers | Local |
| | DNEL | Long term Dermal | 1.5 mg/cm ² | Workers | Local |
| | DNEL | Long term Oral | 8.2 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 8.2 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 13.67 mg/ kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 74.3 mg/m ³ | General population | Systemic |
| | DNEL | Long term Inhalation | 104 mg/m ³ | General population | Local |
| | DNEL | Short term Inhalation | 208 mg/m ³ | General population | Local |
| | DNEL | Long term Inhalation | 208 mg/m ³ | Workers | Local |
| | DNEL | Long term Inhalation | 348.4 mg/ m ³ | Workers | Systemic |
| | DNEL | Short term Inhalation | 416 mg/m ³ | Workers | Local |

PNECs

No PNECs available

8.2 Exposure controls

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures

SECTION 8: Exposure controls/personal protection

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

- Physical state** : Liquid.
- Colour** : Blue.
- Odour** : Mild.
- Odour threshold** : Not available.
- Melting point/freezing point** : Not available.
- Initial boiling point and boiling range** : >200°C (>392°F)
- Flammability** : Not available.
- Lower and upper explosion limit** : Not available.
- Flash point** : Closed cup: >93.3°C (>199.9°F)
- Auto-ignition temperature** :

SECTION 9: Physical and chemical properties

| Ingredient name | °C | °F | Method |
|-----------------------------------|--------|-------|-----------|
| α, α-dimethylbenzyl hydroperoxide | 148.85 | 299.9 | |
| propane-1,2-diol | 371 | 699.8 | |
| methyl methacrylate | 400 | 752 | DIN 51794 |
| cumene | 424 | 795.2 | |
| methanol | 455 | 851 | DIN 51794 |

- Decomposition temperature** : Not available.
pH : Not available.
Viscosity : Dynamic: 1000 to 1200 mPa·s
Solubility in water : Not available.
Partition coefficient: n-octanol/ water : Not applicable.
Vapour pressure :

| Ingredient name | Vapour Pressure at 20°C | | | Vapour pressure at 50°C | | |
|-----------------------------------|-------------------------|------|--------|-------------------------|-----|--------|
| | mm Hg | kPa | Method | mm Hg | kPa | Method |
| methanol | 126.96329 | 16.9 | | | | |
| methyl methacrylate | 27.75236 | 3.7 | | | | |
| cumene | 3.72032 | 0.5 | | | | |
| propane-1,2-diol | 0.15 | 0.02 | EU A.4 | | | |
| α, α-dimethylbenzyl hydroperoxide | 0 | 0 | | | | |

- Relative density** : 1 to 1.5
Vapour density : Not available.
Particle characteristics
Median particle size : Not applicable.

9.2.1 Information with regard to physical hazard classes

- Explosive properties** : Not available.
Oxidising properties : Not available.

9.2.2 Other safety characteristics

- Miscible with water** : No.

SECTION 10: Stability and reactivity

- 10.1 Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability : The product is stable.
10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid : No specific data.
10.5 Incompatible materials : No specific data.
10.6 Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|-----------------------------------|------------------------|---------|-------------------------|----------|
| α, α-dimethylbenzyl hydroperoxide | LC50 Inhalation Gas. | Rat | 220 ppm | 4 hours |
| | LD50 Dermal | Rat | 500 mg/kg | - |
| | LD50 Oral | Rat | 382 mg/kg | - |
| propane-1,2-diol | LD50 Dermal | Rabbit | 20800 mg/kg | - |
| | LD50 Oral | Rat | 20 g/kg | - |
| cumene | LC50 Inhalation Vapour | Rat | 39000 mg/m ³ | 4 hours |
| | LD50 Oral | Rat | 1400 mg/kg | - |
| methanol | LC50 Inhalation Gas. | Rat | 145000 ppm | 1 hours |
| | LC50 Inhalation Gas. | Rat | 64000 ppm | 4 hours |
| | LD50 Dermal | Rabbit | 15800 mg/kg | - |
| methyl methacrylate | LD50 Oral | Rat | 5600 mg/kg | - |
| | LC50 Inhalation Vapour | Rat | 78000 mg/m ³ | 4 hours |
| | LD50 Dermal | Rabbit | >5 g/kg | - |
| | LD50 Oral | Rat | 7872 mg/kg | - |

Conclusion/Summary : Not available.

Acute toxicity estimates

| Product/ingredient name | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapours) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|-------------------------------------------------|--------------|----------------|--------------------------|-----------------------------|-------------------------------------|
| Perma-Lock™ Medium Strength Threadlocker - Blue | 5304.1 | 10344.8 | 7333.3 | 272.7 | N/A |
| α, α-dimethylbenzyl hydroperoxide | 382 | 500 | 220 | N/A | N/A |
| propane-1,2-diol | 20000 | 20800 | N/A | N/A | N/A |
| cumene | 1400 | N/A | N/A | 39 | N/A |
| methanol | 100 | 300 | 64000 | 3 | N/A |
| methyl methacrylate | 7872 | N/A | N/A | 78 | N/A |
| N,N-dimethyl-o-toluidine | 100 | 300 | N/A | 3 | N/A |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|-----------------------------------|--------------------------|---------|-------|-------------------|-------------|
| α, α-dimethylbenzyl hydroperoxide | Skin - Mild irritant | Rabbit | - | 500 mg | - |
| | propene-1,2-diol | Rabbit | - | 100 mg | - |
| propane-1,2-diol | Eyes - Mild irritant | Rabbit | - | 24 hours 500 mg | - |
| | Eyes - Mild irritant | Rabbit | - | 24 hours 500 mg | - |
| | Skin - Mild irritant | Human | - | 168 hours 500 mg | - |
| | Skin - Mild irritant | Woman | - | 96 hours 30 % | - |
| | Skin - Moderate irritant | Child | - | 96 hours 30 % C | - |
| | Skin - Moderate irritant | Human | - | 72 hours 104 mg l | - |
| cumene | Eyes - Mild irritant | Rabbit | - | 24 hours 500 mg | - |
| | Eyes - Mild irritant | Rabbit | - | 86 mg | - |
| | Skin - Mild irritant | Rabbit | - | 24 hours 10 mg | - |
| methanol | Skin - Moderate irritant | Rabbit | - | 24 hours 100 mg | - |
| | Eyes - Moderate irritant | Rabbit | - | 24 hours 100 mg | - |
| | Eyes - Moderate irritant | Rabbit | - | 40 mg | - |

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SECTION 11: Toxicological information

| | | | | | |
|--|--------------------------|--------|---|----------------|---|
| | Skin - Moderate irritant | Rabbit | - | 24 hours 20 mg | - |
|--|--------------------------|--------|---|----------------|---|

Conclusion/Summary : Not available.

Sensitisation

Conclusion/Summary : Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|-----------------------------------|------------|-------------------|------------------------------|
| α, α-dimethylbenzyl hydroperoxide | Category 3 | - | Respiratory tract irritation |
| cumene | Category 3 | - | Respiratory tract irritation |
| methanol | Category 1 | - | - |
| methyl methacrylate | Category 3 | - | Respiratory tract irritation |

Specific target organ toxicity (repeated exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|-----------------------------------|------------|-------------------|---------------|
| α, α-dimethylbenzyl hydroperoxide | Category 2 | - | - |
| N,N-dimethyl-o-toluidine | Category 2 | - | - |

Aspiration hazard

| Product/ingredient name | Result |
|-------------------------|--------------------------------|
| cumene | ASPIRATION HAZARD - Category 1 |

Information on likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : Harmful if inhaled. May cause respiratory irritation.

Skin contact : Causes skin irritation.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
pain
watering
redness

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing

SECTION 11: Toxicological information

- Skin contact** : Adverse symptoms may include the following:
 pain or irritation
 redness
 blistering may occur
- Ingestion** : Adverse symptoms may include the following:
 stomach pains

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Potential chronic health effects

Not available.

- Conclusion/Summary** : Not available.
- General** : No known significant effects or critical hazards.
- Carcinogenicity** : May cause cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenicity** : No known significant effects or critical hazards.
- Reproductive toxicity** : No known significant effects or critical hazards.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

| Product/ingredient name | Result | Species | Exposure |
|----------------------------------------------------|--------------------------------------|----------------------------------------------|----------|
| α, α-dimethylbenzyl hydroperoxide propane-1,2-diol | Acute LC50 12.7 mg/l Fresh water | Fish - <i>Pimephales promelas</i> - Larvae | 96 hours |
| | Acute EC50 >110 ppm Fresh water | Daphnia - <i>Daphnia magna</i> | 48 hours |
| | Acute LC50 1020000 µg/l Fresh water | Crustaceans - <i>Ceriodaphnia dubia</i> | 48 hours |
| cumene | Acute LC50 710000 µg/l Fresh water | Fish - <i>Pimephales promelas</i> | 96 hours |
| | Acute EC50 7.4 mg/l Marine water | Crustaceans - <i>Artemia sp.</i> - Nauplii | 48 hours |
| | Acute EC50 10.6 mg/l Fresh water | Daphnia - <i>Daphnia magna</i> - Neonate | 48 hours |
| methanol | Acute LC50 2700 µg/l Fresh water | Fish - <i>Oncorhynchus mykiss</i> | 96 hours |
| | Acute EC50 16.912 mg/l Marine water | Algae - <i>Ulva pertusa</i> | 96 hours |
| | Acute LC50 2500000 µg/l Marine water | Crustaceans - <i>Crangon crangon</i> - Adult | 48 hours |
| | Acute LC50 3289 mg/l Fresh water | Daphnia - <i>Daphnia magna</i> - Neonate | 48 hours |
| methyl methacrylate | Acute LC50 290 mg/l Fresh water | Fish - <i>Danio rerio</i> - Egg | 96 hours |
| | Chronic NOEC 9.96 mg/l Marine water | Algae - <i>Ulva pertusa</i> | 96 hours |
| | Acute LC50 130000 µg/l Fresh water | Fish - <i>Pimephales promelas</i> - Adult | 96 hours |

SECTION 12: Ecological information

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Conclusion/Summary : Not available.

12.3 Bioaccumulative potential

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|-----------------------------------|--------------------|-------|-----------|
| α, α-dimethylbenzyl hydroperoxide | 1.6 | 9 | Low |
| propane-1,2-diol | -1.07 | - | Low |
| cumene | 3.55 | 35.48 | Low |
| methanol | -0.77 | <10 | Low |
| methyl methacrylate | 1.38 | - | Low |
| N,N-dimethyl-o-toluidine | 2.85 | - | Low |

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

Not available.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : The classification of the product may meet the criteria for a hazardous waste.

Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers.

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SECTION 14: Transport information

| | ADR/RID | ADN | IMDG | IATA |
|---------------------------------|----------------|----------------|----------------|----------------|
| 14.1 UN number or ID number | Not regulated. | Not regulated. | Not regulated. | Not regulated. |
| 14.2 UN proper shipping name | - | - | - | - |
| 14.3 Transport hazard class(es) | - | - | - | - |
| 14.4 Packing group | - | - | - | - |
| 14.5 Environmental hazards | No. | No. | No. | No. |

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Maritime transport in bulk according to IMO instruments : Not available.

SECTION 15: Regulatory information

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

[EU Regulation \(EC\) No. 1907/2006 \(REACH\)](#)

[Annex XIV - List of substances subject to authorisation](#)

[Annex XIV](#)

None of the components are listed.

[Substances of very high concern](#)

None of the components are listed.

[Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles](#)

| Product/ingredient name | % | Designation [Usage] |
|-------------------------------------------------|-----|---------------------|
| Perma-Lock™ Medium Strength Threadlocker - Blue | ≥90 | 3 28 |
| cumene | <1 | 28 |
| methanol | <1 | 69 |

Labelling : Restricted to professional users.

[Other EU regulations](#)

Industrial emissions (integrated pollution prevention and control) - Air : Not listed

Industrial emissions (integrated pollution prevention and control) - Water : Not listed

Explosive precursors : Not applicable.

[Ozone depleting substances \(1005/2009/EU\)](#)

SECTION 15: Regulatory information

Not listed.

[Prior Informed Consent \(PIC\) \(649/2012/EU\)](#)

Not listed.

[Persistent Organic Pollutants](#)

Not listed.

[Seveso Directive](#)

This product is not controlled under the Seveso Directive.

[International regulations](#)

[Chemical Weapon Convention List Schedules I, II & III Chemicals](#)

Not listed.

[Montreal Protocol](#)

Not listed.

[Stockholm Convention on Persistent Organic Pollutants](#)

Not listed.

[Rotterdam Convention on Prior Informed Consent \(PIC\)](#)

Not listed.

[UNECE Aarhus Protocol on POPs and Heavy Metals](#)

Not listed.

[Inventory list](#)

| | |
|--------------------------------|------------------------------------------------------------------------------------------------------|
| Australia | : All components are listed or exempted. |
| Canada | : All components are listed or exempted. |
| China | : All components are listed or exempted. |
| Eurasian Economic Union | : Russian Federation inventory : All components are listed or exempted. |
| Japan | : Japan inventory (CSCL) : Not determined. Japan inventory (ISHL) : Not determined. |
| New Zealand | : All components are listed or exempted. |
| Philippines | : All components are listed or exempted. |
| Republic of Korea | : All components are listed or exempted. |
| Taiwan | : All components are listed or exempted. |
| Thailand | : Not determined. |
| Turkey | : All components are listed or exempted. |
| United States | : All components are listed or exempted. |
| Viet Nam | : All components are listed or exempted. |

15.2 Chemical safety assessment : This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

✔ Indicates information that has changed from previously issued version.

| | |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Abbreviations and acronyms | : ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement N/A = Not available PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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SECTION 16: Other information

SGG = Segregation Group
vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

| Classification | Justification |
|-------------------------|--------------------|
| Eye Dam. 1, H318 | Calculation method |
| Carc. 1B, H350 | Calculation method |
| Aquatic Chronic 3, H412 | Calculation method |

Full text of abbreviated H statements

| | |
|------|--------------------------------------------------------------------|
| H225 | Highly flammable liquid and vapour. |
| H226 | Flammable liquid and vapour. |
| H242 | Heating may cause a fire. |
| H301 | Toxic if swallowed. |
| H302 | Harmful if swallowed. |
| H304 | May be fatal if swallowed and enters airways. |
| H311 | Toxic in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H330 | Fatal if inhaled. |
| H331 | Toxic if inhaled. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H350 | May cause cancer. |
| H370 | Causes damage to organs. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H411 | Toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |

Full text of classifications [CLP/GHS]

| | |
|-------------------|-----------------------------------------------------------------|
| Acute Tox. 2 | ACUTE TOXICITY - Category 2 |
| Acute Tox. 3 | ACUTE TOXICITY - Category 3 |
| Acute Tox. 4 | ACUTE TOXICITY - Category 4 |
| Aquatic Chronic 2 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 |
| Aquatic Chronic 3 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3 |
| Asp. Tox. 1 | ASPIRATION HAZARD - Category 1 |
| Carc. 1B | CARCINOGENICITY - Category 1B |
| Eye Dam. 1 | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 |
| Eye Irrit. 2 | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 |
| Flam. Liq. 2 | FLAMMABLE LIQUIDS - Category 2 |
| Flam. Liq. 3 | FLAMMABLE LIQUIDS - Category 3 |
| Org. Perox. E | ORGANIC PEROXIDES - Type E |
| Skin Corr. 1B | SKIN CORROSION/IRRITATION - Category 1B |
| Skin Irrit. 2 | SKIN CORROSION/IRRITATION - Category 2 |
| Skin Sens. 1 | SKIN SENSITISATION - Category 1 |
| STOT RE 2 | SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2 |
| STOT SE 1 | SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 1 |
| STOT SE 3 | SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3 |

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Notice to reader

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SECTION 16: Other information

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained 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.