

|                           |                 |              |
|---------------------------|-----------------|--------------|
| Date of issue: 09/01/2017 | Trade name:     | Page: 1/8    |
| Reviewed on:              | <b>STUDLOCK</b> | Version: 1.0 |

**1. Section 1. Identification of the substance/mixture and of the company/undertaking:**

- 1.1. Product identifier:  
Trade name: **STUDLOCK**  
Product code: **R 34701**
- 1.2. Relevant identified uses of the substance or mixture and uses advised against:  
Uses of the mixture: Anaerobic threadlocker.  
For professional and industrial use only.  
Uses advised against: Not known.
- 1.3. Details of the supplier of the safety data sheet:  
Identification of manufacturer/Supplier:  
RETECH, s.r.o.  
Vackova 1541/4  
150 00 Praha 5 - Stodůlky  
Telephone number/Fax: +420 327 596 128, +420 327 596 428  
E-mail: info@retech.cz
- 1.4. Emergency telephone number: RETECH, Suchdol 212, 285 02 Suchdol u Kutné Hory, Czech Republic  
Telephone number: +420 327 596 128 (7.30-16.00 hour)  
Toxikologické informační středisko (Toxicology information centre),  
Na bojišti 1, 128 08 PRAHA 2, Czech Republic  
Telephone number: +420 224 919 293, +420 224 915 402 (24 hours a day)

**2. Section 2. Hazard identification:**

- 2.1. Classification of the substance or mixture:  
Classification according to Regulation (EC) No 1272/2008 [CLP]:  
Skin Irrit. 2 H315 Causes skin irritation.  
Skin Sens. 1 H317 May cause an allergic skin reaction.  
Eye Irrit. 2 H319 Causes serious eye irritation.  
STOT SE 3 H335 May cause respiratory irritation.

- 2.2. Label elements:  
Labelling according to Regulation (EC) No 1272/2008 [CLP]:



Signal Word: Warning

## Hazard Statements:

H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.

## Precautionary Statements:

P102 Keep out of reach of children.  
P261 Avoid breathing vapours.  
P271 Use only outdoors or in a well-ventilated area.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P302+P352 IF ON SKIN: Wash with plenty of water and soap.  
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
P501 Dispose of contents/container in accordance with national regulation.

|                           |                 |              |
|---------------------------|-----------------|--------------|
| Date of issue: 09/01/2017 | Trade name:     | Page: 2/8    |
| Reviewed on:              | <b>STUDLOCK</b> | Version: 1.0 |

Contained dangerous substances:  
27813-02-1 2-hydroxypropylmethacrylate (mixture of isomers);  
114-83-0 2'-phenylacetohydrazide

Labelling of packages where the contents do not exceed 125 ml (section 1.5 of Annex I to CLP)



Signal Word: Warning

Hazard Statements:  
H317 May cause an allergic skin reaction.

Precautionary Statements:  
P102 Keep out of reach of children.  
P261 Avoid breathing vapours.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P302+P352 IF ON SKIN: Wash with plenty of water and soap.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

Contained dangerous substances:  
27813-02-1 2-hydroxypropylmethacrylate (mixture of isomers);  
114-83-0 2'-phenylacetohydrazide

- 2.3. Other hazards:  
Results of PBT and vPvB assessment:  
This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**3. Section 3. Composition/information on ingredients:**

3.2. Mixtures:

Description of the mixture: Mixture of active ingredients

Hazardous ingredients:

|   |   |          |
|---|---|----------|
| CAS: 27813-02-1<br>EINECS: 248-666-3<br>Reg.nr.: 01-2119490226-37 | 2-Hydroxypropylmethacrylate (mixture of isomers)<br>Eye Irrit. 2, H319; Skin Sens. 1, H317  | 5 - 10 % |
| CAS: 79-10-7<br>EINECS: 201-177-9<br>Reg.nr.: 01-2119452449-31    | Acrylic acid<br>Flam. Liq. 3, H226; Acute Tox. 4, H332, H312, H302;<br>Skin Corr. 1A, H314; Aquatic Acute 1, H400                   | 1 - 3 %  |
| CAS: 80-15-9<br>EINECS: 201-524-7<br>Reg.nr.: 01-2119475796-19    | Cumene hydroperoxide<br>Org. Perox. EF, H242; Acute Tox. 3, H331; Acute Tox. 4,<br>H312, H302; STOT RE 2, H373; Skin Corr. 1B, H314 | 1 - 3 %  |
| CAS: 99-97-8<br>EINECS: 202-805-4<br>Reg.nr.: 01-2119937766-23    | N,N-dimethyl-p-toluidine<br>Acute Tox. 3, H331; Acute Tox. 3, H311; Acute Tox. 3,<br>H301; STOT RE 2, H373; Aquatic Chronic 3, H412 | < 1 %    |
| CAS: 114-83-0<br>EINECS: 204-055-3                                | 2'-Phenylacetohydrazide<br>Acute Tox. 3, H301; Skin Irrit. 2, H315; STOT SE 3, H335;<br>Eye Irrit. 2, H319; Skin Sens. 1, H317      | < 1 %    |

For full text of H-statements: see SECTION 16.

**4. Section 4. First aid measures:**

4.1. Description of first aid measures:

General notes: When in doubt or if symptoms are observed, get medical advice.

## Safety Data Sheet

According to Regulation (EC) No 1907/2006 of the European Parliament and of the Council

|                           |                 |              |
|---------------------------|-----------------|--------------|
| Date of issue: 09/01/2017 | Trade name:     | Page: 3/8    |
| Reviewed on:              | <b>STUDLOCK</b> | Version: 1.0 |

|  |  |
|--|--|
| <p>After inhalation:<br/>After skin contact:</p> <p>After eye contact:</p> <p>After swallowing:</p> <p>4.2. Most important symptoms and effects, both acute and delayed:<br/>After inhalation:<br/>After skin contact:<br/>After eye contact:<br/>After swallowing:<br/>Delayed/immediate effects:</p> <p>4.3. Indication of any immediate medical attention and special treatment needed:</p>   | <p>Move affected person to fresh air ensuring one's own safety whilst doing so.</p> <p>Remove all contaminated clothes and footwear immediately unless stuck to skin.<br/>Wash immediately with plenty of water and soap and rinse thoroughly.<br/>Get medical attention if any discomfort continues.</p> <p>Rinse opened eyes cautiously with water for several minutes.<br/>Remove contact lenses, if present and easy to do.<br/>Consult a doctor.</p> <p>Do not induce vomiting.<br/>Rinse mouth immediately and drink large quantities of water.<br/>Consult a doctor.</p> <p>There may be irritation of the throat with a feeling of tightness in the chest.</p> <p>There may be irritation and redness at the site of contact.<br/>An itchy rash may occur at the site of contact.</p> <p>There may be irritation and redness.<br/>The eyes may water profusely.</p> <p>There may be soreness and redness of the mouth and throat.<br/>Nausea and stomach pain may occur.</p> <p>Immediate effects can be expected after short-term exposure.</p> <p>Eye bathing equipment should be available on the premises.</p> |
| <p><b>5. Section 5. Fire fighting measures:</b></p> <p>5.1. Extinguishing media:<br/>Suitable extinguishing agents: Alcohol resistant foam, dry chemical powder, carbon dioxide.<br/>For safety reasons unsuitable extinguishing agents:<br/>Do not use water.</p> <p>5.2. Special hazards arising from the substance or mixture:<br/>In combustion emits toxic fumes of carbon dioxide/carbon monoxide, nitrogen oxides.</p> <p>5.3. Advice for firefighters:<br/>Wear protective clothing and self-contained breathing apparatus.<br/>Cool endangered receptacles with water spray.</p>  |  |
| <p><b>6. Section 6. Accidental release measures:</b></p> <p>6.1. Personal precautions, protective equipment and emergency procedures:<br/>Wear protective equipment see Section 8.<br/>Keep away from ignition sources.<br/>Keep unprotected persons away.<br/>Turn leaking containers leak-side up to prevent the escape of liquid.</p> <p>6.2. Environmental precautions:<br/>Do not discharge into drains or rivers.<br/>Contain the spillage using bunding.<br/>Inform respective authorities in case of seepage into water course or sewage system.</p> <p>6.3. Methods and material for containment and cleaning up:<br/>Ensure adequate ventilation.<br/>Absorb into dry earth or sand.<br/>Transfer to a closable, labelled salvage container for disposal by an appropriate method.<br/>Dispose contaminated material as waste according to Section 13.</p> <p>6.4. Reference to other sections:<br/>See Section 7 for information on safe handling.<br/>See Section 8 for information on personal protection equipment.<br/>See Section 13 for disposal information.</p> |  |
| <p><b>7. Section 7. Handling and storage:</b></p> <p>7.1. Precautions for safe handling:<br/>Protective measures: Wear protective equipment see Section 8.</p>   |  |

## Safety Data Sheet

According to Regulation (EC) No 1907/2006 of the European Parliament and of the Council

|                           |                 |              |
|---------------------------|-----------------|--------------|
| Date of issue: 09/01/2017 | Trade name:     | Page: 4/8    |
| Reviewed on:              | <b>STUDLOCK</b> | Version: 1.0 |

|   |  |
|---|--|
| <p>7.2. Measures to prevent fire:</p> <p>Conditions for safe storage including any incompatibilities:</p> <p>Requirements for storage rooms and vessels:</p> <p>Technical measures and storage conditions:</p> <p>Further information on storage conditions:</p> <p>7.3. Specific end use(s):</p> | <p>Avoid contact with skin and eyes.</p> <p>Ensure good ventilation/exhaustion at the workplace.</p> <p>Do not handle in a confined space.</p> <p>Avoid the formation or spread of mists in the air.</p> <p>Keep away from ignition sources.</p> <p>Store in a cool, well-ventilated place.</p> <p>Keep only in the original container.</p> <p>Keep receptacle tightly sealed.</p> <p>Store in a cool, well-ventilated place.</p> <p>Keep away from direct sunlight.</p> <p>No further relevant information available.</p> |
|---|--|

|  |  |
|--|--|
| <p><b>8. Section 8. Exposure controls/personal protection:</b></p> |  |
| <p>8.1. Control parameters:</p> <p>8.2. Exposure controls:</p>     | <p>Components with limit values that require monitoring at the workplace:</p> <p>WEL (United Kingdom): EH40/2005</p> <p>Contains no substances with occupational exposure limit values.</p> <p>OEL (EU): 2000/39/EG, 2006/15/EG, 2009/161/EG</p> <p>Contains no substances with occupational exposure limit values.</p> <p>Additional information: The lists that were valid during the compilation were as basis.</p> <p>Measures to prevent exposure: Ensure good ventilation/exhaustion at the workplace.</p> <p>Ensure eye bath is to hand.</p> <p>General protective measures: The usual precautionary measures should be adhered to general rules for handling chemicals.</p> <p>Personal protection equipment:</p> <p>Breathing equipment: Respiratory protection usually not required with adequate ventilation.</p> <p>In case of high vapours concentration, use a mask with a filter against organic vapours A.</p> <p>Self-contained breathing apparatus must be available in case of emergency.</p> <p>Eye protection: Safety goggles.</p> <p>Protection of hands: Protective gloves.</p> <p>Recommended material of gloves: neoprene, nitrile.</p> <p>Do not use PVC gloves, as they absorb (meth)acrylates.</p> <p>Protection of skin: Protective clothing.</p> |

|  |  |
|--|--|
| <p><b>9. Section 9. Physical and chemical properties:</b></p>      |  |
| <p>9.1. Information on basic physical and chemical properties:</p> | <p>Form: Liquid.</p> <p>Colour: Green.</p> <p>Odour: Characteristic.</p> <p>Odour threshold: Not determined.</p> <p>Value pH at 20 °C: ~ 5</p> <p>Melting point/freezing point: Not determined.</p> <p>Initial boiling point/boiling range: Not determined.</p> <p>Flash point: &gt; 100 °C</p> <p>Evaporation rate: Negligible.</p> <p>Flammability (solid, gas): Not determined.</p> <p>Explosive properties: Not determined.</p> <p>Explosive limits:</p> <p>– lower: Not determined.</p> |

|                           |                 |              |
|---------------------------|-----------------|--------------|
| Date of issue: 09/01/2017 | Trade name:     | Page: 5/8    |
| Reviewed on:              | <b>STUDLOCK</b> | Version: 1.0 |

|  |   |
|--|---|
| – upper:                                 | Not determined.   |
| Vapour pressure at 20°C:                 | ~ 0.1 mm Hg   |
| Vapour density at 20 °C:                 | Not determined.   |
| Density at 20°C:                         | Not determined.   |
| Relative density:                        | ~ 1.04  |
| Solubility in/miscibility with:          | Water: Insoluble.<br>Also soluble in: Acetone.  |
| Partition coefficient (n-octanol/water): | Not determined.   |
| Ignition temperature:                    | Not determined.   |
| Decomposition temperature:               | Not determined.   |
| Self-igniting:                           | Not determined.   |
| Viscosity:                               | Non-viscous.<br>~ 500 cPs<br>Viscosity test method: Kinematic viscosity in 10 <sup>-6</sup> m <sup>2</sup> /s at 40 °C (ISO 3104/3105). |
| Oxidising properties:                    | Non-oxidising (by EC criteria).   |
| 9.2. Other information:                  | No further relevant information available.  |

**10. Section 10. Stability and reactivity:**

|   |  |
|---|--|
| 10.1. Reactivity:                         | Stable under recommended transport or storage conditions.  |
| 10.2. Chemical stability:                 | Stable under normal conditions.  |
| 10.3. Possibility of hazardous reactions: | Hazardous reactions will not occur under normal transport or storage conditions.<br>Decomposition may occur on exposure to conditions or materials listed below. |
| 10.4. Conditions to avoid:                | Heat, direct sunlight, sources of ignition.  |
| 10.5. Incompatible materials:             | Strong oxidising agents, strong acids, free-radical initiators, copper.  |
| 10.6. Hazardous decomposition products:   | In combustion emits toxic fumes of carbon dioxide/carbon monoxide, nitrogen oxides.  |

**11. Section 11. Toxicological information:**

|   |   |
|---|---|
| 11.1. Information on toxicological effects: | Acute toxicity: Based on available data, the classification criteria are not met. |
|---|---|

Relevant hazards for substance:  
27813-02-1 2-Hydroxypropylmethacrylate (mixture of isomers)

|      |      |       |            |
|------|------|-------|------------|
| Oral | LD50 | mouse | 7964 mg/kg |
|------|------|-------|------------|

79-10-7 Acrylic acid

|                 |      |       |            |
|-----------------|------|-------|------------|
| Intraperitoneal | LD50 | rat   | 22 mg/kg   |
| Oral            | LD50 | mouse | 830 mg/kg  |
|                 | LD50 | rat   | 1250 mg/kg |
| Subcutaneous    | LD50 | mouse | 1590 mg/kg |

80-15-9 Cumene hydroperoxide

|              |         |       |           |
|--------------|---------|-------|-----------|
| Oral         | LDLo    | mouse | 5 mg/kg   |
|              | LD50    | rat   | 382 mg/kg |
| Subcutaneous | LD50    | rat   | 382 mg/kg |
| Vapours      | LC50/4h | rat   | 220 ppm   |

99-97-8 N,N-dimethyl-p-toluidine

|                 |      |       |           |
|-----------------|------|-------|-----------|
| Intraperitoneal | LD50 | mouse | 212 mg/kg |
|-----------------|------|-------|-----------|

Relevant effects for mixture:

| Hazard          | Route                          | Basis                 |
|-----------------|--------------------------------|-----------------------|
| Irritation      | Ophthalmic, inhalative, dermal | Hazardous: calculated |
| Sensibilisation | Dermal                         | Hazardous: calculated |

|                                |                                |
|--------------------------------|--------------------------------|
| Skin corrosion/irritation:     | Causes skin irritation.        |
| Serious eye damage/irritation: | Causes serious eye irritation. |

## Safety Data Sheet

According to Regulation (EC) No 1907/2006 of the European Parliament and of the Council

|                           |                 |              |
|---------------------------|-----------------|--------------|
| Date of issue: 09/01/2017 | Trade name:     | Page: 6/8    |
| Reviewed on:              | <b>STUDLOCK</b> | Version: 1.0 |

|                                    |  |
|------------------------------------|--|
| Respiratory or skin sensitization: | May cause an allergic skin reaction.   |
| 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-single exposure:              | May cause respiratory irritation.  |
| STOT-repeated exposure:            | Based on available data, the classification criteria are not met.  |
| Aspiration hazard:                 | Based on available data, the classification criteria are not met.  |
| Other information:                 |  |
| After inhalation:                  | There may be irritation of the throat with a feeling of tightness in the chest.                                |
| After skin contact:                | There may be irritation and redness at the site of contact.<br>An itchy rash may occur at the site of contact. |
| After eye contact:                 | There may be irritation and redness.<br>The eyes may water profusely.  |
| After swallowing:                  | There may be soreness and redness of the mouth and throat.<br>Nausea and stomach pain may occur.               |
| Delayed/immediate effects:         | Immediate effects can be expected after short-term exposure.   |

### 12. Section 12. Ecological information:

|   |   |
|---|---|
| 12.1. Toxicity:                           |   |
| Aquatic toxicity:                         | No further relevant information available.  |
| 12.2. Persistence and degradability:      | Biodegradable.  |
| 12.3. Bioaccumulative potential:          | No bioaccumulation potential.   |
| 12.4. Mobility in soil:                   | Non-volatile. Heavier than water.   |
| 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. Other adverse effects:              | No further relevant information available.  |

### 13. Section 13. Disposal considerations:

|                                 |   |
|---------------------------------|---|
| 13.1. Waste treatment methods:  |   |
| Product disposal:               | Transfer to a suitable container and arrange for collection by specialised disposal company.<br>Do not allow product to reach sewage system.<br>European Waste Catalogue:<br>08 04 09* waste adhesives and sealants containing organic solvents or other hazardous substances<br>(*hazardous waste) |
| Packagings disposal:            | Disposal must be made according to official regulations.<br>European Waste Catalogue:<br>15 01 10* packaging containing residues of or contaminated by hazardous substances<br>(*hazardous waste)   |
| Other disposal recommendations: | Disposal must be made according to official regulations.<br>The final decisions on the appropriate waste management method, in line with regional, national and European legislation, and possible adaptation to local conditions, remains the responsibility of the waste treatment operator.      |

### 14. Section 14. Transport information:

|                                   |   |
|-----------------------------------|---|
| 14.1. UN number:                  |   |
| ADR/RID, IMDG, IATA               | This product does not require a classification for transport. |
| 14.2. UN proper shipping name:    |   |
| ADR/RID, IMDG, IATA               | Not applicable.   |
| 14.3. Transport hazard class(es): |   |
| ADR/RID, IMDG, IATA               | Not applicable.   |

## Safety Data Sheet

According to Regulation (EC) No 1907/2006 of the European Parliament and of the Council

|                           |                 |              |
|---------------------------|-----------------|--------------|
| Date of issue: 09/01/2017 | Trade name:     | Page: 7/8    |
| Reviewed on:              | <b>STUDLOCK</b> | Version: 1.0 |

- 14.4. Packing group:  
ADR/RID, IMDG, IATA Not applicable.
- 14.5. Environmental hazards: Not applicable.
- 14.6. Special precautions for user: Not applicable.
- 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code:  
Not applicable.

### 15. Section 15. Regulatory information:

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

Used legislation:

Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals, as amended (REACH)

Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures, as amended (CLP)

Regulation (EC) No 648/2004 of the European Parliament and of the Council on detergents, as amended  
Commission Decision 2000/532/EC establishing a list of wastes, as amended

Council Directive 89/686/EEC on the approximation of the laws of the Member States relating to personal protective equipment, as amended

Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work, as amended

Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values

Commission Directive 2006/15/EC establishing a second list of indicative occupational exposure limit values

Commission Directive 2009/161/EU establishing a third list of indicative occupational exposure limit values

Directive 2004/42/CE of the European Parliament and of the Council on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC, as amended

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

### 16. Section 16. Other information:

Relevant H-statements (Section 3):

H226 Flammable liquid and vapour.

H242 Heating may cause a fire.

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H311 Toxic in contact with skin.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H331 Toxic if inhaled.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H373 May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

H400 Very toxic to aquatic life.

H412 Harmful to aquatic life with long lasting effects.

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

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

EINECS: European Inventory of Existing Commercial Chemical Substances

## Safety Data Sheet

According to Regulation (EC) No 1907/2006 of the European Parliament and of the Council

|                           |                 |              |
|---------------------------|-----------------|--------------|
| Date of issue: 09/01/2017 | Trade name:     | Page: 8/8    |
| Reviewed on:              | <b>STUDLOCK</b> | Version: 1.0 |

IATA: International Air Transport Association  
IMDG: International Maritime Code for Dangerous Goods  
LC50: Median concentration lethal to 50 % of a test population  
LD50: Median dose lethal to 50 % of a test population  
LDLo: Lowest detected lethal dose  
OEL: Occupational Exposure Limit  
PBT: Persistent, Bioaccumulative, Toxic  
Reg.nr.: Registration number  
vPvB: Very Persistent, Very Bioaccumulative  
WEL: Workplace exposure limits  
Acute Tox. 4: Acute toxicity, category 4  
Aquatic Acute 1: Hazardous to the aquatic environment, category 1  
Aquatic Chronic 3: Hazardous to the aquatic environment, category 3  
Eye Irrit. 2: Serious eye irritation, category 2  
Flam. Liq. 3: Flammable liquid, category 3  
Org. Perox. E: Organic peroxide, category E  
Skin Corr. 1: Skin corrosion, category 1  
Skin Irrit. 2: Skin irritation, category 2  
Skin. Sens. 1: Skin sensitization, category 1  
STOT RE 2: Specific target organ toxicity — repeated exposure, category 2  
STOT SE 3: Specific target organ toxicity — single exposure, category 3

The information contained herein is based on our best knowledge and the present legislation. Further, the Safety Data Sheet has been elaborated on the basis of the original Safety Data Sheet provided by the manufacturer. 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.

**\*Compared to the last version the data has been changed.**