



## SAFETY DATA SHEET CYCLO® BATTERY PROTECTOR

According to Regulation (EC) No 1907/2006

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1. Product identifier

Product name CYCLO® BATTERY PROTECTOR  
Product No. C121

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

Identified uses Sealant protector for batteries.

#### 1.3. Details of the supplier of the safety data sheet

Supplier Tri Continental  
Streliska 150/A  
2000 Maribor,  
Slovenia  
011 386 2 3200100  
E mail Address ehs@cyclo.com

#### 1.4. Emergency telephone number

001 312 906 6194

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1. Classification of the substance or mixture

##### Classification (EC 1272/2008)

|                               |   |
|-------------------------------|---|
| Physical and Chemical Hazards | Flam. Aerosol 1 - H222+H229                             |
| Human health                  | Skin Irrit. 2 - H315; Repr. 2 - H361d; STOT RE 2 - H373 |
| Environment                   | Not classified.   |

##### Classification (1999/45/EEC)

Xn; R48/20, R65. Repr. Cat. 3; R63. F+; R12.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

##### Human health

Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping. Inhalation of vapour or mist may cause lung oedema.

##### Environment

The product contains a substance which is harmful to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

##### Physical and Chemical Hazards

Aerosol containers can explode when heated, due to excessive pressure build-up. The product is extremely flammable, and explosive vapour/air mixtures may be formed even at normal room temperatures.

#### 2.2. Label elements

Contains TOLUENE

Label In Accordance With (EC) No. 1272/2008

## CYCLO® BATTERY PROTECTOR



|   |           |  |
|---|-----------|--|
| <b>Signal Word</b>                            | Danger    |  |
| <b>Hazard Statements</b>                      | H222+H229 | Extremely flammable aerosol.   |
|   | H315      | Pressurized container: May burst if heated.  |
|   | H361d     | Causes skin irritation.  |
|   | H373      | Suspected of damaging the unborn child.  |
|   |           | May cause damage to organs through prolonged or repeated exposure.                             |
| <b>Precautionary Statements</b>               | P102      | Keep out of reach of children.   |
|   | P210      | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
|   | P280      | Wear protective gloves/protective clothing/eye protection/face protection.                     |
|   | P211      | Do not spray on an open flame or other ignition source.  |
|   | P251      | Pressurized container: Do not pierce or burn, even after use.                                  |
|   | P308+313  | IF exposed or concerned: Get medical advice/attention.   |
|   | P410+412  | Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.                    |
|   | P501      | Dispose of contents/container in accordance with international regulations.                    |
| <b>Supplementary Precautionary Statements</b> | P202      | Do not handle until all safety precautions have been read and understood.                      |
|   | P260      | Do not breathe vapour/spray.   |
|   | P264      | Wash contaminated skin thoroughly after handling.  |
|   | P321      | Specific treatment (see medical advice on this label).   |
|   | P332+313  | If skin irritation occurs: Get medical advice/attention.                                       |
|   | P362      | Take off contaminated clothing and wash before reuse.  |
|   | P405      | Store locked up.   |

**2.3. Other hazards**

This product does not contain any PBT or vPvB substances.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.2. Mixtures**

|  |  |               |
|--|--|---------------|
| <b>STODDARD SOLVENT (&lt;0.1% BENZENE)</b>                                 |  | <b>10-30%</b> |
| <b>CAS-No.: 8052-41-3</b>  | <b>EC No.: 232-489-3</b>                       |               |
| Classification (EC 1272/2008)<br>Flam. Liq. 3 - H226<br>Asp. Tox. 1 - H304 | Classification (67/548/EEC)<br>Xn;R65.<br>R10. |               |
| <b>BUTANE</b>  |  | <b>10-30%</b> |
| <b>CAS-No.: 106-97-8</b>   | <b>EC No.: 203-448-7</b>                       |               |
| Classification (EC 1272/2008)<br>Flam. Gas 1 - H220                        | Classification (67/548/EEC)<br>F+;R12          |               |

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|   |  |               |
|---|--|---------------|
| <b>TOLUENE</b>  |  | <b>10-30%</b> |
| <b>CAS-No.: 108-88-3</b>  | <b>EC No.: 203-625-9</b>   |               |
| Classification (EC 1272/2008)<br>Flam. Liq. 2 - H225<br>Skin Irrit. 2 - H315<br>Repr. 2 - H361d<br>STOT SE 3 - H336<br>STOT RE 2 - H373<br>Asp. Tox. 1 - H304 | Classification (67/548/EEC)<br>F;R11<br>Repr. Cat. 3;R63<br>Xn;R48/20,R65<br>Xi;R38<br>R67 |               |
| <b>SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC</b>   |  | <b>5-10%</b>  |
| <b>CAS-No.: 64742-89-8</b>  | <b>EC No.: 265-192-2</b>   |               |
| Classification (EC 1272/2008)<br>Asp. Tox. 1 - H304   | Classification (67/548/EEC)<br>Xn;R65.   |               |

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

#### **General information**

Move the exposed person to fresh air at once. Get medical attention if any discomfort continues. NOTE! Keep affected person away from heat, sparks and flames!

#### **Inhalation**

Move the exposed person to fresh air at once. Perform artificial respiration if breathing has stopped. Keep the affected person warm and at rest. Get prompt medical attention.

#### **Ingestion**

NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Rinse mouth thoroughly. Get medical attention if any discomfort continues.

#### **Skin contact**

Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention if any discomfort continues.

#### **Eye contact**

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention promptly if symptoms occur after washing.

### 4.2. Most important symptoms and effects, both acute and delayed

#### **General information**

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

#### **Inhalation**

Congestion of the lungs may occur producing severe shortness of breath.

#### **Ingestion**

May cause stomach pain or vomiting.

#### **Skin contact**

Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping.

#### **Eye contact**

Prolonged contact may cause redness and/or tearing.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat Symptomatically.

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### SECTION 5: FIREFIGHTING MEASURES

#### **5.1. Extinguishing media**

##### **Extinguishing media**

Use: Water spray, foam, dry powder or carbon dioxide.

#### **5.2. Special hazards arising from the substance or mixture**

##### **Unusual Fire & Explosion Hazards**

Aerosol cans may explode in a fire. Vapours are heavier than air and may spread near ground to sources of ignition.

##### **Specific hazards**

Fire creates: Toxic gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

#### **5.3. Advice for firefighters**

##### **Special Fire Fighting Procedures**

Containers close to fire should be removed immediately or cooled with water. Use water to keep fire exposed containers cool and disperse vapours. Keep run-off water out of sewers and water sources. Dike for water control.

##### **Protective equipment for fire-fighters**

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

#### **6.1. Personal precautions, protective equipment and emergency procedures**

Wear protective clothing as described in Section 8 of this safety data sheet.

#### **6.2. Environmental precautions**

Avoid discharge to the aquatic environment.

#### **6.3. Methods and material for containment and cleaning up**

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Absorb in vermiculite, dry sand or earth and place into containers. Provide ventilation and confine spill. Do not allow runoff to sewer.

#### **6.4. Reference to other sections**

Wear protective clothing as described in Section 8 of this safety data sheet. See section 11 for additional information on health hazards.

### SECTION 7: HANDLING AND STORAGE

#### **7.1. Precautions for safe handling**

Provide good ventilation. Avoid inhalation of vapours and spray mists. Persons with impaired lung functions should not handle this preparation. Keep away from heat, sparks and open flame. Pregnant women should not work with the product, if there is the least risk of exposure.

#### **7.2. Conditions for safe storage, including any incompatibilities**

Aerosol cans: Must not be exposed to direct sunlight or temperatures above 50°C. Do not store near heat sources or expose to high temperatures.

#### **7.3. Specific end use(s)**

The identified uses for this product are detailed in Section 1.2.

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **8.1. Control parameters**

## CYCLO® BATTERY PROTECTOR

| Name    | STD | TWA - 8 Hrs |                        | STEL - 15 Min |                        | Notes |
|---------|-----|-------------|------------------------|---------------|------------------------|-------|
|         |     |             |                        |               |                        |       |
| BUTANE  | WEL | 600 ppm     | 1450 mg/m <sup>3</sup> | 750 ppm       | 1810 mg/m <sup>3</sup> |       |
| TOLUENE | WEL | 50 ppm      | 191 mg/m <sup>3</sup>  | 100 ppm       | 384 mg/m <sup>3</sup>  | Sk    |

WEL = Workplace Exposure Limit.

Sk = Can be absorbed through skin.

## 8.2. Exposure controls

### Protective equipment



### Engineering measures

Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of vapours.

### Respiratory equipment

No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit. In case of inadequate ventilation use suitable respirator. Chemical respirator with organic vapour cartridge.

### Hand protection

Use suitable protective gloves if risk of skin contact. Use protective gloves made of: Viton rubber (fluor rubber).

### Eye protection

Wear approved chemical safety goggles where eye exposure is reasonably probable.

### Other Protection

Wear appropriate clothing to prevent any possibility of skin contact.

### Hygiene measures

No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

|  |                            |
|--|----------------------------|
| <b>Appearance</b>                                      | Aerosol.                   |
| <b>Solubility</b>                                      | Slightly soluble in water. |
| <b>Initial boiling point and boiling range</b><br>(°C) | (-42.2°C)-(-190°C)         |
| <b>Melting point (°C)</b>                              | Not available.             |
| <b>Relative density</b>                                | 0.71 @ 20 (°C)             |
| <b>Bulk Density</b>                                    | Not available.             |
| <b>Vapour density (air=1)</b>                          | >1                         |
| <b>Vapour pressure</b>                                 | Not available.             |
| <b>Evaporation rate</b>                                | Not available.             |
| <b>Evaporation Factor</b>                              | Not available.             |
| <b>pH-Value, Conc. Solution</b>                        | Not available.             |
| <b>pH-Value, Diluted Solution</b>                      | Not available.             |
| <b>Viscosity</b>                                       | Not available.             |

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### Solubility Value (G/100G H<sub>2</sub>O@20°C)

Not available.

### Decomposition temperature (°C)

Not available.

### Odour Threshold, Lower

Not available.

### Odour Threshold, Upper

Not available.

Flash point (°C) -104°C

### Auto Ignition Temperature (°C)

Not available.

Flammability Limit - Lower(%) 0.7

Flammability Limit - Upper(%) 9.5

### Partition Coefficient (N-Octanol/Water)

Not available.

Comments Information given concerns the concentrated solution.

## 9.2. Other information

Not known.

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

There are no known reactivity hazards associated with this product.

### 10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

### 10.3. Possibility of hazardous reactions

#### Hazardous Polymerisation

Will not polymerise.

### 10.4. Conditions to avoid

Avoid exposing aerosol containers to high temperatures or direct sunlight. Avoid heat, flames and other sources of ignition.

### 10.5. Incompatible materials

#### Materials To Avoid

Strong oxidising substances.

### 10.6. Hazardous decomposition products

Fire creates: Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

#### Other Health Effects

Toxic to Reproductive Health Category 3.

#### Inhalation

Harmful: danger of serious damage to health by prolonged exposure through inhalation. Prolonged inhalation of high concentrations may damage respiratory system.

#### Ingestion

May cause discomfort if swallowed. May cause stomach pain or vomiting.

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### **Skin contact**

Liquid may irritate skin.

### **Eye contact**

Spray and vapour in the eyes may cause irritation and smarting.

### **Health Warnings**

Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.

### **Route of entry**

Inhalation.

### **Specific effects**

Contains a substance/a group of substances which may cause harm to the unborn child.

### **Toxicological information on ingredients.**

**CYCLO® BATTERY PROTECTOR**  
**TOLUENE (CAS: 108-88-3)**

**Acute toxicity:**

**Acute Toxicity (Oral LD50)**

> 5000 mg/kg Rat

REACH dossier information

Based on available data the classification criteria are not met.

**Acute Toxicity (Dermal LD50)**

> 5000 mg/kg Rabbit

REACH dossier information

Based on available data the classification criteria are not met.

**Acute Toxicity (Inhalation LC50)**

28.1 mg/L air Rat 4 hours

REACH dossier information

Based on available data the classification criteria are not met.

**Skin Corrosion/Irritation:**

**Dose**

Rabbit

**Erythema/Eschar score**

Well defined erythema (2).

**Oedema score**

Very slight oedema -barely perceptible (1).

Estimated Value REACH dossier information

Irritating.

**Serious eye damage/irritation:**

Not Irritating.

**Respiratory or skin sensitisation:**

**Respiratory sensitisation**

Data lacking.

REACH dossier information

Conclusive data but not sufficient for classification.

**Skin sensitisation**

Guinea pig maximization test (GPMT): Guinea Pig

REACH dossier information

Not Sensitising.

**Germ cell mutagenicity:**

**Genotoxicity - In Vitro**

Gene Mutation:

REACH dossier information

Negative.

This substance has no evidence of mutagenic properties.

**Genotoxicity - In Vivo**

Chromosome aberration:

REACH dossier information

Negative.

**Carcinogenicity:**

**Carcinogenicity**

NOAEC 1200 ppm Inhalation. Rat

REACH dossier information

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No evidence of carcinogenicity in animal studies

### Reproductive Toxicity:

#### **Reproductive Toxicity - Fertility**

Two-generation study: NOAEC 500 ppm Inhalation. Rat F1

REACH dossier information

#### **Reproductive Toxicity - Development**

Developmental toxicity: NOAEC 600 ppm Inhalation. Rat

REACH dossier information

### Specific target organ toxicity - repeated exposure:

#### **STOT - Repeated exposure**

LOAEC 625 ppm Inhalation. Rat

REACH dossier information

Not classified as a specific target organ toxicant after repeated exposure.

### Aspiration hazard:

#### **Viscosity**

Kinematic viscosity <= 20.5 mm<sup>2</sup>/s.

REACH dossier information

## SECTION 12: ECOLOGICAL INFORMATION

### **Ecotoxicity**

The product contains a substance which is harmful to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

### **12.1. Toxicity**

#### Ecological information on ingredients.

#### TOLUENE (CAS: 108-88-3)

##### **Acute Toxicity - Fish**

LC50 96 hours 5.5 mg/l Freshwater fish

REACH dossier information

##### **Acute Toxicity - Aquatic Invertebrates**

EC50 48 hours 3.78 mg/l Freshwater invertebrates

REACH dossier information

##### **Acute Toxicity - Aquatic Plants**

EC50 3 hours 134 mg/l Freshwater algae

REACH dossier information

##### **Acute Toxicity - Microorganisms**

IC50 24 hours 84 mg/l Activated sludge

REACH dossier information

##### **Acute Toxicity - Terrestrial**

NOEC 28 days < 50 mg/kg Soil Microorganisms

Estimated Value REACH dossier information

### **12.2. Persistence and degradability**

#### **Degradability**

The degradability of the product has not been stated.

## CYCLO® BATTERY PROTECTOR

Ecological information on ingredients.TOLUENE (CAS: 108-88-3)**Degradability**

The product is biodegradable.

**Phototransformation**

Air. DT50 2.59 days

Estimated Value REACH dossier information

**Stability (Hydrolysis)**

Scientifically unjustified.

REACH dossier information

**Biodegradation**

Degradation (69%) ~ 5 days

Estimated Value REACH dossier information

**12.3. Bioaccumulative potential****Bioaccumulative potential**

No data available on bioaccumulation.

**Partition coefficient**

Not available.

Ecological information on ingredients.TOLUENE (CAS: 108-88-3)**Bioaccumulative potential**

Bioaccumulation is unlikely to be significant because of the low water solubility of this product.

**Bioaccumulation factor**

BCF 90 Freshwater fish

REACH dossier information

**Partition coefficient**

log Pow 2.73

REACH dossier information

**12.4. Mobility in soil****Mobility:**

The product is partly soluble in water. May spread in the aquatic environment.

Ecological information on ingredients.TOLUENE (CAS: 108-88-3)**Mobility:**

Volatile

**Adsorption/Desorption Coefficient**

Soil Koc < 120

Estimated Value REACH dossier information

**Surface tension**

27.73 mN/m @ 25°C

Estimated Value REACH dossier information

**12.5. Results of PBT and vPvB assessment**

This product does not contain any PBT or vPvB substances.

Ecological information on ingredients.TOLUENE (CAS: 108-88-3)

Not Classified as PBT/vPvB by current EU criteria.

**12.6. Other adverse effects**

None known.

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Ecological information on ingredients.TOLUENE (CAS: 108-88-3)

None known.

**SECTION 13: DISPOSAL CONSIDERATIONS****General information**

When handling waste, consideration should be made to the safety precautions applying to handling of the product. Do not puncture or incinerate even when empty.

**13.1. Waste treatment methods**

Make sure containers are empty before discarding (explosion risk). Empty containers must not be burned because of explosion hazard. Dispose of waste and residues in accordance with local authority requirements.

**SECTION 14: TRANSPORT INFORMATION****14.1. UN number**

|                      |      |
|----------------------|------|
| UN No. (ADR/RID/ADN) | 1950 |
| UN No. (IMDG)        | 1950 |
| UN No. (ICAO)        | 1950 |

**14.2. UN proper shipping name**

|                      |          |
|----------------------|----------|
| Proper Shipping Name | AEROSOLS |
|----------------------|----------|

**14.3. Transport hazard class(es)**

|                     |                |
|---------------------|----------------|
| ADR/RID/ADN Class   | 2              |
| ADR/RID/ADN Class   | Class 2: Gases |
| ADR Label No.       | 2.1            |
| IMDG Class          | 2.1            |
| ICAO Class/Division | 2.1            |
| Transport Labels    |                |

**14.4. Packing group**

|                           |     |
|---------------------------|-----|
| ADR/RID/ADN Packing group | N/A |
| IMDG Packing group        | N/A |
| ICAO Packing group        | N/A |

**14.5. Environmental hazards**

Environmentally Hazardous Substance/Marine Pollutant

No.

**14.6. Special precautions for user**

## CYCLO® BATTERY PROTECTOR

EMS F-D, S-U

Tunnel Restriction Code (D)

### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not relevant No information required.

## SECTION 15: REGULATORY INFORMATION

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

#### EU Legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

#### National Regulations

Workplace Exposure Limits 2005 (EH40) The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

### 15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

## SECTION 16: OTHER INFORMATION

Revision Date October 2013

Revision 2

Supersedes date July 2012

Date October 2010

#### Risk Phrases In Full

R12 Extremely flammable.  
 R10 Flammable.  
 R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.  
 R65 Harmful: may cause lung damage if swallowed.  
 R11 Highly flammable  
 R38 Irritating to skin.  
 R63 Possible risk of harm to the unborn child.  
 R67 Vapours may cause drowsiness and dizziness.

#### Hazard Statements In Full

H220 Extremely flammable gas.  
 H222+H229 Extremely flammable aerosol.  
 Pressurised container: May burst if heated.  
 H225 Highly flammable liquid and vapour.  
 H226 Flammable liquid and vapour.  
 H304 May be fatal if swallowed and enters airways.  
 H315 Causes skin irritation.  
 H336 May cause drowsiness or dizziness.  
 H361d Suspected of damaging the unborn child.  
 H373 May cause damage to organs <<Organs>> through prolonged or repeated exposure.

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