

# SAFETY DATA SHEET



CircuitWorks® Overcoat Pen (UK - Great Britain)

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

### 1.1 Product identifier

**Product name** : CircuitWorks® Overcoat Pen (UK - Great Britain)  
**Product code** : CW3300 Blue  
**Product description** : Coating.  
**Product type** : Liquid.  
**Other means of identification** : CW3300 Blue  
Industrial/Professional use  
UFI: W3A8-90MU-800C-8XSM

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

#### Identified uses

Coating.

#### Uses advised against

Not applicable.

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

Manufacturer  
Chemtronics  
8125 Cobb Center Drive  
Kennesaw, GA 30152  
Tel. 770-424-4888 or toll free 800-645-5244

Distributor

Importer  
ITW Contamination Control BV  
Saffierlaan 5  
VZ-2132 Hoofddorp  
The Netherlands

Email: [info@itw-cc.com](mailto:info@itw-cc.com)

Tel: +31 88 1307 400  
FAX: +31 88 1307 499  
Website: [www.Chemtronicseu.com](http://www.Chemtronicseu.com)

**e-mail address of person responsible for this SDS** : Importer/Only Representative  
Bay 150  
Shannon Industrial Estate  
Shannon  
County Clare  
Ireland  
V14 DF82  
+353 61 771 500  
[customerservice.shannon@itwpp.com](mailto:customerservice.shannon@itwpp.com)

#### National contact

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

Chemtronics  
8125 Cobb Center Drive  
Kennesaw, GA 30152

Tel. 770-424-4888 or toll free 800-645-5244  
Website: www.Chemtronicseu.com

### 1.4 Emergency telephone number

#### National advisory body/Poison Centre

**Telephone number** : EMERGENCY HEALTH INFORMATION:  
United Kingdom (England or Wales) 0845 46 47 or Scotland 08454 24 24 24 (UK only)

#### Supplier

**Telephone number** : Chemtronics Product Information: 800-TECH-401 (800-832-4401)  
Chemtronics Customer Service: 800-645-5244

**Hours of operation** : 8:00 AM to 5:00 PM

**Information limitations** : EMERGENCY HEALTH INFORMATION:  
EMERGENCY SPILL INFORMATION:  
Transport information

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Product definition** : Mixture

#### Classification according to UK CLP/GHS

Flam. Liq. 2, H225  
Eye Irrit. 2, H319  
STOT SE 3, H336

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

**Ingredients of unknown toxicity** : 23 percent of the mixture consists of component(s) of unknown acute oral toxicity  
43 percent of the mixture consists of component(s) of unknown acute dermal toxicity  
88 percent of the mixture consists of component(s) of unknown acute inhalation toxicity

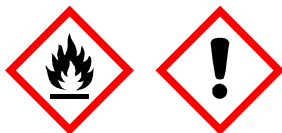
**Ingredients of unknown ecotoxicity** : Contains 53% of components with unknown hazards to the aquatic environment

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

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

### 2.2 Label elements

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : Highly flammable liquid and vapour.  
Causes serious eye irritation.  
May cause drowsiness or dizziness.

#### Precautionary statements

**Prevention** : Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid breathing vapour.

**Response** : IF INHALED: Call a POISON CENTER or doctor if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

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

**SECTION 2: Hazards identification**

- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Supplemental label elements** : FOR INDUSTRIAL USE ONLY  
For professional use only.
- Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Not applicable.
- 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

| Product/ingredient name         | Identifiers   | %         | Classification   | Type    |
|---------------------------------|---|-----------|--|---------|
| 2-methoxy-1-methylethyl acetate | EC: 203-603-9<br>CAS: 108-65-6<br>Index: 607-195-00-7 | ≥25 - ≤50 | Flam. Liq. 3, H226   | [2]     |
| propyl acetate                  | EC: 203-686-1<br>CAS: 109-60-4<br>Index: 607-024-00-6 | ≥10 - <25 | Flam. Liq. 2, H225<br>Eye Irrit. 2, H319<br>STOT SE 3, H336<br>Aquatic Chronic 3, H412<br>EUH066 | [1] [2] |
| butanone                        | EC: 201-159-0<br>CAS: 78-93-3<br>Index: 606-002-00-3  | ≥10 - ≤25 | Flam. Liq. 2, H225<br>Eye Irrit. 2, H319<br>STOT SE 3, H336<br>EUH066                            | [1] [2] |
| copper chlorophthalocyanine     | EC: 235-476-0<br>CAS: 12239-87-1                      | ≤5        | Not classified.  | [2]     |
|                                 |   |           | <b>See Section 16 for the full text of the H statements declared above.</b>                      |         |

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.

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** : 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. Get medical attention.
- Inhalation** : 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. Get medical attention. If necessary, call a poison center or physician. 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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : 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. Get medical attention. If necessary, call a poison center or 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.

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

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
 pain or irritation  
 watering  
 redness
- Inhalation** : Adverse symptoms may include the following:  
 nausea or vomiting  
 headache  
 drowsiness/fatigue  
 dizziness/vertigo  
 unconsciousness
- Skin contact** : Adverse symptoms may include the following:  
 irritation  
 redness  
 dryness  
 cracking
- Ingestion** : Adverse symptoms may include the following:  
 Ingestion Seek medical attention.

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

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

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

- Hazards from the substance or mixture** : Highly flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapour/gas is heavier than air and will spread along the ground. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.
- Hazardous combustion products** : Decomposition products may include the following materials:  
 carbon dioxide  
 carbon monoxide  
 nitrogen oxides  
 halogenated compounds  
 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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- 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.

## 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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing 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).

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

- Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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 (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## SECTION 6: Accidental release measures

**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). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. 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 a segregated and approved area. 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. Eliminate all ignition sources. Separate from oxidising materials. 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.

#### Seveso Directive - Reporting thresholds

##### Danger criteria

| Category | Notification and MAPP threshold | Safety report threshold |
|----------|---------------------------------|-------------------------|
| P5c      | 5000 tonne                      | 50000 tonne             |

### 7.3 Specific end use(s)

**Recommendations** : Not available.  
**Industrial sector specific solutions** : Not available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

| Product/ingredient name         | Exposure limit values  |
|---------------------------------|--|
| 2-methoxy-1-methylethyl acetate | <b>EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin.</b><br>STEL: 548 mg/m <sup>3</sup> 15 minutes.<br>STEL: 100 ppm 15 minutes.<br>TWA: 274 mg/m <sup>3</sup> 8 hours.<br>TWA: 50 ppm 8 hours. |
| propyl acetate                  | <b>EH40/2005 WELs (United Kingdom (UK), 1/2020).</b><br>STEL: 1060 mg/m <sup>3</sup> 15 minutes.<br>STEL: 250 ppm 15 minutes.<br>TWA: 849 mg/m <sup>3</sup> 8 hours.   |

## SECTION 8: Exposure controls/personal protection

|                             |  |
|-----------------------------|--|
| butanone                    | TWA: 200 ppm 8 hours.<br><b>EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin.</b><br>STEL: 899 mg/m <sup>3</sup> 15 minutes.<br>STEL: 300 ppm 15 minutes.<br>TWA: 600 mg/m <sup>3</sup> 8 hours.<br>TWA: 200 ppm 8 hours. |
| copper chlorophthalocyanine | <b>EH40/2005 WELs (United Kingdom (UK), 1/2020).</b><br>STEL: 2 mg/m <sup>3</sup> , (as Cu) 15 minutes. Form: Dusts and Mists<br>TWA: 1 mg/m <sup>3</sup> , (as Cu) 8 hours. Form: Dusts and Mists   |

### Biological exposure indices

No exposure indices known.

**Recommended monitoring procedures** : Reference should be made to appropriate monitoring standards. 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  |
|---------------------------------|------|-----------------------|-----------------------|--------------------|----------|
| 2-methoxy-1-methylethyl acetate | DNEL | Long term Oral        | 1.67 mg/kg bw/day     | General population | Systemic |
|                                 | DNEL | Long term Inhalation  | 33 mg/m <sup>3</sup>  | General population | Local    |
|                                 | DNEL | Long term Inhalation  | 33 mg/m <sup>3</sup>  | General population | Systemic |
|                                 | DNEL | Long term Dermal      | 54.8 mg/kg bw/day     | General population | Systemic |
|                                 | DNEL | Long term Dermal      | 153.5 mg/kg bw/day    | Workers            | Systemic |
|                                 | DNEL | Long term Inhalation  | 275 mg/m <sup>3</sup> | Workers            | Systemic |
| propyl acetate                  | DNEL | Short term Inhalation | 550 mg/m <sup>3</sup> | Workers            | Local    |
|                                 | DNEL | Long term Inhalation  | 149 mg/m <sup>3</sup> | General population | Local    |
|                                 | DNEL | Long term Inhalation  | 149 mg/m <sup>3</sup> | General population | Systemic |
|                                 | DNEL | Short term Inhalation | 298 mg/m <sup>3</sup> | General population | Local    |
|                                 | DNEL | Short term Inhalation | 298 mg/m <sup>3</sup> | General population | Systemic |
|                                 | DNEL | Long term Inhalation  | 420 mg/m <sup>3</sup> | Workers            | Local    |
| butanone                        | DNEL | Long term Inhalation  | 420 mg/m <sup>3</sup> | Workers            | Systemic |
|                                 | DNEL | Short term Inhalation | 840 mg/m <sup>3</sup> | Workers            | Local    |
|                                 | DNEL | Short term Inhalation | 840 mg/m <sup>3</sup> | Workers            | Systemic |
|                                 | DNEL | Long term Oral        | 31 mg/kg bw/day       | General population | Systemic |
|                                 | DNEL | Long term Inhalation  | 106 mg/m <sup>3</sup> | General population | Systemic |
|                                 | DNEL | Long term Dermal      | 412 mg/kg bw/day      | General population | Systemic |
| copper chlorophthalocyanine     | DNEL | Long term Inhalation  | 600 mg/m <sup>3</sup> | Workers            | Systemic |
|                                 | DNEL | Long term Dermal      | 1161 mg/kg bw/day     | Workers            | Systemic |
|                                 | DNEL | Long term Inhalation  | 4 mg/m <sup>3</sup>   | Workers            | Systemic |
|                                 | DNEL | Long term Oral        | 45 mg/kg bw/day       | General population | Systemic |
|                                 | DNEL | Long term Dermal      | 225 mg/kg             | General            | Systemic |

## SECTION 8: Exposure controls/personal protection

|  |      |                  |                               |                       |          |
|--|------|------------------|-------------------------------|-----------------------|----------|
|  | DNEL | Long term Dermal | bw/day<br>450 mg/kg<br>bw/day | population<br>Workers | Systemic |
|--|------|------------------|-------------------------------|-----------------------|----------|

### 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. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

### Individual protection measures

**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.

### 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. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

**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** : Black.  
**Odour** : Characteristic.  
**Odour threshold** : Not available.  
**Melting point/freezing point** : Not available.



**SECTION 9: Physical and chemical properties**

- Initial boiling point and boiling range** : 111°C (231.8°F)
- Flammability (solid, gas)** : Not available.
- Upper/lower flammability or explosive limits** : Lower: 1.7%  
Upper: 11%
- Flash point** : Closed cup: -1°C (30.2°F) [Tagliabue]
- Auto-ignition temperature** :

| Ingredient name                 | °C  | °F    | Method    |
|---------------------------------|-----|-------|-----------|
| 2-methoxy-1-methylethyl acetate | 333 | 631.4 | DIN 51794 |
| copper chlorophthalocyanine     | 339 | 642.2 |           |
| propyl acetate                  | 380 | 716   | DIN 51794 |
| butanone                        | 404 | 759.2 |           |

- Decomposition temperature** : Not available.
- pH** : Not available.
- Viscosity** : Not available.
- Solubility in water** : Not available.
- Partition coefficient: n-octanol/ water** : Not applicable.
- Vapour pressure** : 10.4 kPa (78 mm Hg)
- Evaporation rate** : >1 (butyl acetate = 1)
- Relative density** : 0.9
- Vapour density** : >1 [Air = 1]
- Explosive properties** : Not applicable
- Oxidising properties** : Not available.
- Particle characteristics**
- Median particle size** : Not applicable.

**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** : Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapour to accumulate in low or confined areas.
- 10.5 Incompatible materials** : Reactive or incompatible with the following materials:  
oxidising materials
- 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 toxicological effects****Acute toxicity**

| Product/ingredient name         | Result      | Species | Dose       | Exposure |
|---------------------------------|-------------|---------|------------|----------|
| 2-methoxy-1-methylethyl acetate | LD50 Dermal | Rabbit  | >5 g/kg    | -        |
| propyl acetate<br>butanone      | LD50 Oral   | Rat     | 8532 mg/kg | -        |
|                                 | LD50 Oral   | Rat     | 9370 mg/kg | -        |
|                                 | LD50 Dermal | Rabbit  | 6480 mg/kg | -        |
|                                 | LD50 Oral   | Rat     | 2737 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) |
|---------------------------------|--------------|----------------|--------------------------|-----------------------------|-------------------------------------|
| 2-methoxy-1-methylethyl acetate | 8532         | N/A            | N/A                      | N/A                         | N/A                                 |
| propyl acetate                  | 9370         | N/A            | N/A                      | N/A                         | N/A                                 |
| butanone                        | 2737         | 6480           | N/A                      | N/A                         | N/A                                 |

**Irritation/Corrosion**

| Product/ingredient name | Result                   | Species | Score | Exposure        | Observation |
|-------------------------|--------------------------|---------|-------|-----------------|-------------|
| propyl acetate          | Eyes - Mild irritant     | Rabbit  | -     | 24 hours 500 mg | -           |
| butanone                | Skin - Mild irritant     | Rabbit  | -     | 500 mg          | -           |
|                         | Skin - Mild irritant     | Rabbit  | -     | 24 hours 14 mg  | -           |
|                         | Skin - Moderate irritant | Rabbit  | -     | 24 hours 500 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    |
|-------------------------|------------|-------------------|------------------|
| propyl acetate          | Category 3 | -                 | Narcotic effects |
| butanone                | Category 3 | -                 | Narcotic effects |

**Specific target organ toxicity (repeated exposure)**

Not available.

**Aspiration hazard**

Not available.

**Information on likely routes of exposure** : Not available.

**Potential acute health effects**

**Eye contact** : Causes serious eye irritation.

## SECTION 11: Toxicological information

- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
- Skin contact** : May cause skin irritation.
- Ingestion** : Can cause central nervous system (CNS) depression.

### Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : Adverse symptoms may include the following:  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
dryness  
cracking
- Ingestion** : Adverse symptoms may include the following:  
Ingestion Seek medical attention.

### 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** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Reproductive toxicity** : No known significant effects or critical hazards.

**Other information** : Not available.

## SECTION 12: Ecological information

### 12.1 Toxicity

| Product/ingredient name | Result                               | Species                                       | Exposure |
|-------------------------|--------------------------------------|---|----------|
| propyl acetate          | Acute LC50 60000 µg/l Fresh water    | Fish - Fathead minnow - Pimephales promelas   | 96 hours |
| butanone                | Acute EC50 >500000 µg/l Marine water | Algae - Diatom - Skeletonema costatum         | 96 hours |
|                         | Acute EC50 5091000 µg/l Fresh water  | Daphnia - Water flea - Daphnia magna - Larvae | 48 hours |
|                         | Acute LC50 3220000 µg/l Fresh water  | Fish - Fathead minnow - Pimephales promelas   | 96 hours |

**Conclusion/Summary** : Not available.

**SECTION 12: Ecological information****12.2 Persistence and degradability****Conclusion/Summary** : Not available.**12.3 Bioaccumulative potential**

| Product/ingredient name         | LogP <sub>ow</sub> | BCF | Potential |
|---------------------------------|--------------------|-----|-----------|
| 2-methoxy-1-methylethyl acetate | 1.2                | -   | low       |
| propyl acetate                  | 1.4                | -   | low       |
| butanone                        | 0.3                | -   | low       |

**12.4 Mobility in soil****Soil/water partition coefficient (K<sub>oc</sub>)** : 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 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. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

**SECTION 14: Transport information**

CircuitWorks® Overcoat Pen (UK - Great Britain)

## SECTION 14: Transport information

|                                 | ADR/RID  | ADN  | IMDG  | IATA   |
|---------------------------------|--|--|---|--|
| 14.1 UN number                  | UN1263   | UN1263   | UN1263  | UN1263   |
| 14.2 UN proper shipping name    | PAINT  | PAINT  | PAINT   | PAINT  |
| 14.3 Transport hazard class(es) | 3<br> | 3<br> | 3<br> | 3<br> |
| 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 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

#### UK (GB)/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.

##### Ozone depleting substances

Not listed.

##### Prior Informed Consent (PIC)

Not listed.

##### Persistent Organic Pollutants

Not listed.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Not applicable.

#### Seveso Directive

This product is controlled under the Seveso Directive.

#### Danger criteria

Category

P5c

#### EU regulations

**SECTION 15: Regulatory information**

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

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

**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**: Not determined.  
**Japan** : **Japan inventory (CSCL)**: All components are listed or exempted.  
**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** : Not determined.  
**United States** : All components are active 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  
 GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019 No. 720 and amendments  
 DMEL = Derived Minimal Effect Level  
 DNEL = Derived No Effect Level  
 EUH statement = GB CLP-specific Hazard statement  
 N/A = Not available  
 PBT = Persistent, Bioaccumulative and Toxic  
 PNEC = Predicted No Effect Concentration  
 RRN = REACH Registration Number  
 SGG = Segregation Group  
 vPvB = Very Persistent and Very Bioaccumulative

**Procedure used to derive the classification**

CircuitWorks® Overcoat Pen (UK - Great Britain)

## SECTION 16: Other information

| Classification  | Justification   |
|---|---|
| Flam. Liq. 2, H225<br>Eye Irrit. 2, H319<br>STOT SE 3, H336 | On basis of test data<br>Calculation method<br>Calculation method |

### Full text of abbreviated H statements

|        |   |
|--------|---|
| H225   | Highly flammable liquid and vapour.                   |
| H226   | Flammable liquid and vapour.                          |
| H319   | Causes serious eye irritation.                        |
| H336   | May cause drowsiness or dizziness.                    |
| H412   | Harmful to aquatic life with long lasting effects.    |
| EUH066 | Repeated exposure may cause skin dryness or cracking. |

### Full text of classifications

|                   |   |
|-------------------|---|
| Aquatic Chronic 3 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3               |
| Eye Irrit. 2      | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2                |
| Flam. Liq. 2      | FLAMMABLE LIQUIDS - Category 2                                |
| Flam. Liq. 3      | FLAMMABLE LIQUIDS - Category 3                                |
| STOT SE 3         | SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3 |

**Date of printing** : 2/1/2023  
**Date of issue/ Date of revision** : 2/1/2023  
**Date of previous issue** : No previous validation  
**Version** : 1

### Notice to reader

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.