

# Safety Data sheet for 003.04.040



## Material Safety Data Sheet

**Issue Date:** 22/1/2002      **Revision Number:** 1  
**Document Number:** 01-005-001  
**Material/Trade Name:** RiteLok Cyanoacrylates – EC, HT, MC, PR, RT, SF and SI Grades

### 1 - Substance Identification

**Material/Trade Name** : RiteLok Cyanoacrylates - EC, HT, MC, PR, RT, SF and SI Grades  
**Material type** : Cyanoacrylate adhesive  
**Company** : Chemence Limited  
**Address** : Princewood Road  
Corby  
Northants  
NN17 4XD  
**Telephone** : 01536 402600  
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### 2 - Composition

Substance		% Wt.	CAS No.	EC No.
Ethyl-2-cyanoacrylate	Xi: R36/37/38	86-99	7085-85-0	230-391-5
Polymethyl methacrylate	Xi: R36/37/38	1-14	9011-12-7	n/e (polymer)

### 3 - Hazard Identification

Danger Cyanoacrylate - Bonds skin and eyes in seconds. Keep out of the reach of children.  
**IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.**  
Avoid contact with skin and eyes.  
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
Wear suitable gloves.

### 4 - First-aid Measures

**Inhalation:** Remove to fresh air and rest  
If recovery is not rapid call for prompt medical attention

**Eyes:** Cyanoacrylates bond eyelids in seconds. Irrigate thoroughly with water for at least 15 minutes. Take care not to wash chemical from one eye to another. If the eyelid is bonded closed, do not force open. Cover with wet pad soaked in warm water. Get prompt medical attention, in case solid particles of cured cyanoacrylate trapped behind the eye cause any abrasive damage. Keep eye covered with wet pad until debonding is complete, usually 1-3 days. (Cyanoacrylate will bond to eye protein, causing a lachrymatory effect that aids debonding).

**Skin:** Do not pull bonded skin apart. Remove contaminated clothing. Wash with soap/cleanser and rinse with plenty of water. Any bonded skin should be gently peeled apart with the aid of a blunt object, preferably after soaking in warm, soapy water. If irritation persists, obtain medical attention. In the case of large spills on skin, superficial burns may occur – treat accordingly.

**Ingestion:** Ensure that breathing passages are not obstructed. Give plenty of water to drink. Do not induce vomiting. The product will polymerise immediately in the mouth, making it almost impossible to swallow. Saliva will separate the solidified product from the mouth over a period of hours. Seek medical attention.

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## 5 - Fire-fighting Measures

**Suitable Extinguishers:** Alcohol resistant foam. Dry powder. Carbon dioxide. Water spray/fog.

**Unsuitable Extinguishers:** Direct water jets

**Hazardous Decomposition:** Toxic fumes are produced in fire (CO, CO<sub>2</sub>, nitrogen oxides).

**Special Procedures:**  
 Do not breathe decomposition products and fumes  
 Use approved self-contained breathing apparatus  
 Wear fire retardant clothing. Wear eye protection  
 Use water spray to cool containers  
 Prevent runoff from fire control from entering waterways  
 Large fires should only be dealt with by trained personnel

## 6 - Accidental Release Measures

**Exposure Controls:** Refer to Section 8 – Personal Protection. Ventilate area. Evacuate personnel. Use approved self-contained breathing apparatus. Do not allow spill to enter drains and watercourses

**Personal Protection:** Wear suitable respiratory protection in confined spaces. Wear polythene gloves. Use eye protection such as goggles to BS EN 166 Chemical Grade

**Disposal Considerations:** Absorb in inert material such as sand or absorbent granules (do not use cloths) or polymerise slowly with water and then scrape up. Dispose in accordance with local regulations.

## 7 - Handling and Storage

**Handling:** Avoid skin and eye contact. Avoid inhalation of vapour. Ensure adequate ventilation – Local Exhaust Ventilation may be required. Wear eye protection and gloves. Ambient Relative Humidity should be >40% to minimise discomfort.

**Storage:** Store in tightly closed labelled containers. Store in a cool, dry, well-ventilated area.

## 8 - Exposure Controls

**Occupational Exposure Limit:** OES for ethyl cyanoacrylate is 0.3ppm = 1.5mg/m<sup>3</sup> (STEL 15min. TWA, as stated in EH40/2000)  
 Wear polythene gloves.  
 Wear suitable overalls or apron if usage is large and change if contaminated.  
 Wear suitable eye protection such as BS EN 166  
 Use in well-ventilated areas - Use mechanical ventilation if necessary to maintain vapour level below TLV. If excessive inhalation in a poorly ventilated area is likely then use a respirator with filter type P  
 After contact with skin wash off immediately



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**9 - Physical & Chemical Properties**

<b>Appearance</b>	: Clear and almost colourless liquid (3 black RT grades, 2 white RT)
<b>Odour</b>	: Sharp, pungent
<b>pH</b>	: n/e
<b>Boiling point/range</b>	: >150°C
<b>Melting point/range</b>	: n/e
<b>Flash point</b>	: >85°C (C.O.C.)
<b>Flammability</b>	: NON-FLAMMABLE
<b>Autoflammability</b>	: n/e
<b>Explosive properties</b>	: none
<b>Oxidising properties</b>	: None
<b>Vapour pressure</b>	: ~0.2mm
<b>Relative density</b>	: 1.04 – 1.10 depending on grade
<b>Solubility</b>	: polymerises in water (Note - soluble in acetone)
<b>Vapour Density</b>	: n/e
<b>Viscosity</b>	: Various – from 3cP (water-thin) to gel
<b>Evaporation rate (Bu Ac = 1)</b>	: n/e (n/e = not established)

**10 - Stability and Reactivity**

Stable at normal temperatures. Will polymerise rapidly on contact with water. Materials to avoid: strong oxidising agents, water, alkalis, amines, alcohols. Conditions to avoid: high temperature, moisture & direct sunlight. No hazardous decomposition products when stored and handled correctly.

**11 - Toxicological Information**

<b>Oral:</b>	LD50 oral-rat >5000mg/kg. Considered to have relatively low toxicity. Product is almost impossible to swallow, due to polymerisation in mouth.
<b>Skin:</b>	LD50 skin-rabbit >2000mg/kg.
<b>Inhalation:</b>	see section 8 for OES.

Acute effects: eye watering, irritation of nasal cavities and respiratory tract and irritation and redness at the site of skin contact. Repeated skin contact may possibly cause dermatitis in sensitive individuals. Prolonged and repeated over-exposure to high concentrations of vapours may lead to sensitising effects in sensitive individuals.

**12 - Ecological Information**

<b>Ecotoxicity:</b>	No specific data available, but expected to be very low.
<b>Persistence:</b>	No specific data available
<b>Bio-accumulative potential:</b>	No specific data available
<b>Mobility:</b>	No specific data available, but expected to be very low.

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**13 -Disposal Considerations**

Polymerise adhesive by adding slowly to water (~10:1, adhesive : water).  
 Add water to contaminated packaging and then dispose of.  
 Do not discharge into drains or watercourses  
 Dispose of in accordance with local regulations

**14 -Transport Information**

Not classified as hazardous for transport

**15 - Regulatory Information**



**a) Risk & Safety**

**Danger – cyanoacrylate. Bonds skin and eyes in seconds. Keep out of the reach of children**

R36/37/38 IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN

- S24/25 Avoid contact with skin and eyes
- S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S37 Wear suitable gloves.

**b) Other Regulations**

- Health & Safety at Work etc. Act 1974
- Control of Substances Hazardous to Health Regulations 1994
- Environmental Protection Act 1990
- Special Waste Regulations 1996

This Safety Data Sheet is compiled with reference to The Chemicals (Hazard Information and Packaging for Supply) Regulations 1994 (CHIP2), which implement the Council Directives 67/548/EEC (The Dangerous Substances Directive) and 88/379/EEC (The Dangerous Preparations Directive), and subsequent amending regulations, up to and including The Chemicals (Hazard Information and Packaging for Supply) Regulations 2000 (CHIP2000), which implements the 26<sup>th</sup> ATP of 67/548/EEC.

**16 - Other Information**

Not Applicable

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