

# Material Safety Data Sheet

## Bondloc B493 CYANOACRYLATE ADHESIVE

Revised 03.08.10



### 1: IDENTIFICATION OF THE SUBSTANCE/ PREPARATION AND COMPANY / UNDERTAKING

**PRODUCT NAME:** Bondloc B493  
**MANUFACTURER:** Bondloc UK Limited,  
Bewdley,  
Worcestershire  
DY12 2TZ  
**Emergency Info:** +44 (0)1299 269 269

### 2: COMPOSITION / INFORMATION ON INGREDIENTS

| Substance                      | CAS       | EINEC     | Concentration |
|--------------------------------|-----------|-----------|---------------|
| Modified Ethyl-2-cyanoacrylate | 7085-85-0 | 230-391-5 | 80-100%       |

### 3: HAZARDS IDENTIFICATION

**Classification: Xi** Irritant  
Irritating to eyes, respiratory system and skin

Bonds skin and eyes in seconds, highly reactive to water.

### 4: FIRST-AID MEASURES

**Inhalation:** Remove to fresh air. If symptoms develop and persist, get medical attention.

**Skin contact:** Do not pull bonded skin apart. It may be gently peeled apart using a blunt object such as a spoon, preferably after soaking in warm soapy water. Cyanoacrylates give off heat on solidification. In rare cases a large drop will generate enough heat to cause a burn. Burns should be treated normally after the adhesive has been removed from the skin. If lips are accidentally stuck together apply warm water to the lips and encourage maximum wetting and pressure from saliva inside the mouth. Peel or roll lips apart. Do not try to pull the lips apart with direct opposing action.

**Eye contact:** If the eye is bonded closed, release eyelashes with warm water by covering with wet pad. Cyanoacrylate will bond to eye protein and will cause periods of weeping which will help to debond the adhesive. Keep eye covered until debonding is complete, usually within 1-3 days. Do not force eye open. Medical advice should be sought in case solid particles of cyanoacrylate trapped behind the eyelid cause any abrasive damage.

**Ingestion:** Ensure that breathing passages are not obstructed. The product will polymerise immediately in the mouth making it almost impossible to swallow. Saliva will slowly separate the solidified product from the mouth (several hours).

### 5: FIRE-FIGHTING MEASURES

Non flammable product ( flash point is greater than 80°C). If product is involved in fire extinguish with dry powder, foam or carbon dioxide. Trace amounts of toxic fumes may be released on incineration and the use of breathing apparatus is recommended.

### 6: ACCIDENTAL RELEASE MEASURES

Ventilate area. Do not use cloths for mopping up. Polymerise with water and scrape off floor.

**7: HANDLING AND STORAGE**

**Handling:** Ventilation (low level) is recommended when using large volumes. Use of dispensing equipment is recommended to minimise the risk of skin or eye contact.

**Storage:** For optimum shelf life store in original containers under refrigerated conditions at 2°C to 8°C.

**8. Exposure Controls/Personal Protection**

Exposure limits UK

| Source | Type | Value                      |
|--------|------|----------------------------|
| OEL    | STEL | 1.5mg.m-3, 15 min exposure |

Polyethylene or polypropylene gloves are recommended when using large volumes. Do not use PVC, rubber, nylon or cotton gloves. Eye protection should be used where there is any risk of splashing.

**9: PHYSICAL AND CHEMICAL PROPERTIES**

|                       |                            |
|-----------------------|----------------------------|
| Physical State        | Liquid                     |
| Colour                | Clear                      |
| Odor                  | Sharp, characteristic      |
| pH                    | N/A                        |
| Boiling point         | 150°C                      |
| Flash point           | 85°C                       |
| Specific Gravity      | 1.06 g/cm <sup>3</sup>     |
| Vapour pressure       | 0.293 mmHg                 |
| Solubility in water   | Insoluble, reacts in water |
| Solubility in acetone | Completely soluble         |
| Explosion limits      | N/A                        |

**10: STABILITY AND REACTIVITY**

Polymerisation will occur in the presence of moisture and other basic materials.

**11: TOXICOLOGICAL INFORMATION**

**Inhalation** In dry atmosphere with <50% humidity, vapours may irritate the eyes and respiratory system. Prolonged exposure to high concentrations of vapours may lead to chronic effects in sensitive individuals.

**Skin** Bonds skin in seconds. Considered to be of low toxicity, acute dermal LD50 (rabbit) >2000mg/kg. Due to polymerisation at the skin surface allergic reaction is not considered possible.

**Eyes** Liquid product will bond eyelids. In a dry atmosphere (RH<50%) vapours may cause irritation and lachrymatory effect.

**Ingestion** Cyanoacrylates are considered to have relatively low toxicity. Acute oral LD50 is >5000mg/kg (rat). It is almost impossible to swallow as it rapidly polymerises in the mouth.

**12: ECOLOGICAL INFORMATION**

Biodegradable product of low ecotoxicity. Does not contain any of the substances listed in RoHS and WEEE Directives.

### 13: DISPOSAL CONSIDERATIONS

Dispose of in accordance with local and national regulations. Polymerise by adding slowly to water (10:1). Dispose of as water insoluble non-toxic solid chemical in authorised landfill or incinerate under controlled conditions.

### 14: TRANSPORT INFORMATION

Not considered hazardous for the purposes of transportation.

### 15: REGULATORY INFORMATION

#### Symbol(s) & Indication(s) of DANGER



IRRITANT

#### Irritant

**General:** Cyanoacrylate Danger bonds skin and eyes in seconds. Keep out of reach of children.

#### Risk & Safety Phrases

R36/37/38 Irritating to eyes, respiratory system and skin

S23 Do not breath vapour

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.

### 16: OTHER INFORMATION

The information contained in this Safety Data Sheet does not constitute the user's own assessment of the workplace risks as required by other health & safety legislation.

The provisions of the Health & Safety at work etc. Act and the Control of Substances Hazardous to Health Regulations apply to the use of this product at work.

**PRECAUTIONS:** This product and the auxiliary materials normally combined with it are capable of producing adverse health effects ranging from minor skin irritation to serious systemic effects. None of these materials should be used, stored, or transported until the handling precautions and recommendations as stated in the Material Safety Data Sheets (MSDS) for this and all other products being used are understood by all persons who will work with the product.

**Warranty:** All products purchased from or supplied by Bondloc are subject to terms and conditions set out in the contract. Bondloc warrants only that its product will meet those specifications designated as such herein or in other publications. All other information supplied by Bondloc is considered accurate but is furnished upon the express condition the customer shall make its own assessment to determine the product's suitability for a particular purpose. Bondloc makes no other warranty, either express or implied, including those regarding such other information, the data upon which the same is based, or the results to be obtained from the use thereof; that any product shall be merchantable or fit for any particular purpose; or that the use of such other information or product will not infringe any patent.