

SAFETY DATA SHEET B454

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

1.1. Product identifier

Product name B454
Product No. 454 GEL
Container size 20g

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

Identified uses Adhesive

1.3. Details of the supplier of the safety data sheet

Supplier BONDLOC UK LTD
 UNIT 2 BEWDLEY BUSINESS PARK
 LONG BANK
 BEWDLEY
 WORCESTERSHIRE
 DY12 2TZ
 01299 269269
 01299 269210
 sales@bondloc.co.uk

1.4. Emergency telephone number

+44 (0)1299 269269 Monday - Friday 09:00-17:00 hrs

National Emergency Telephone Number

+44 (0)1299 269269 Mon-Fri 09:00-17:00hrs

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards	Not classified.
Human health	Skin Irrit. 2 - H315; Eye Irrit. 2 - H319; STOT SE 3 - H335
Environment	Not classified.

Classification (1999/45/EEC) Xi; R36/37/38.

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

2.2. Label elements

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



Signal Word Warning

Hazard Statements

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

Precautionary Statements

P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P313	Get medical advice/attention.
P501	Dispose of contents/container in accordance with local regulations.

Supplementary Precautionary Statements

P261	Avoid breathing vapour/spray.
P264	Wash contaminated skin thoroughly after handling.
P321	Specific treatment (see medical advice on this label).
P302+352	IF ON SKIN: Wash with plenty of soap and water.
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P332+313	If skin irritation occurs: Get medical advice/attention.
P337	If eye irritation persists:
P362	Take off contaminated clothing and wash before reuse.
P403+233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

2.3. Other hazards

None if used properly

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

ETHYL 2-CYANOACRYLATE	60-100%
CAS-No.: 7085-85-0	EC No.: 230-391-5
Classification (EC 1272/2008) Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H335	Classification (67/548/EEC) Xi;R36/37/38

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****Inhalation**

Move to fresh air. Consult doctor if symptoms persist.

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)

Skin contact

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 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 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

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

4.2. Most important symptoms and effects, both acute and delayed**Inhalation.**

Irritation, coughing, shortness of breath, chest tightness

Skin contact

Redness, inflammation

Eye contact

Irritation, conjunctivitis

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

See section: Description of first aid measures

SECTION 5: FIREFIGHTING MEASURES**5.1. Extinguishing media**

Extinguishing media

Foam, extinguishing powder, carbon dioxide

5.2. Special hazards arising from the substance or mixture**Hazardous combustion products**

Trace amounts of toxic fumes may be released on incineration and the use of breathing apparatus is recommended

5.3. Advice for firefighters**Protective equipment for fire-fighters**

Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA)

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures**

Provide adequate ventilation.

6.2. Environmental precautions

Do not let product enter drains

6.3. Methods and material for containment and cleaning up

Do not use cloths for mopping up. Flood with water to complete polymerization and scrape off the floor. Cured material can be disposed of as non-hazardous waste.

6.4. Reference to other sections

See advice in section 8

SECTION 7: HANDLING AND STORAGE**7.1. Precautions for safe 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 Good industrial hygiene practices should be observed Do not eat, drink or smoke when using the product. Wash hands before work breaks and after finishing work.

7.2. Conditions for safe storage, including any incompatibilities

For optimum shelf life store in original containers under refrigerated conditions at 2-8 C

7.3. Specific end use(s)

Adhesive

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters**

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
ETHYL 2-CYANOACRYLATE	WEL			0.3 ppm	1.5 mg/m ³	

WEL = Workplace Exposure Limit.

8.2. Exposure controls**Respiratory equipment**

Ensure adequate ventilation

Hand protection

Polyethylene or polypropylene gloves are recommended when using in large volumes. Do not use PVC, rubber or nylon gloves If signs of wear and tear are noticed then the gloves should be replaced

Eye protection

Wear approved safety goggles.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

Appearance	Liquid
Colour	Colourless.
Odour	Sharp Characteristic.
Solubility	Polymerises in presence of water Soluble in: Acetone
Initial boiling point and boiling range	150 C

Melting point (°C)

No information available.

Vapour density (air=1)

Not available.

Vapour pressure

0.293 mm Hg

Evaporation rate

No information available.

pH-Value, Conc. Solution

Not applicable.

Viscosity

No information available.

Decomposition temperature (°C)

No information available.

Odour Threshold, Lower

No information available.

Odour Threshold, Upper

No information available.

Flash point

85

Auto Ignition Temperature (°C)

No information available.

Flammability Limit - Lower(%)

No information available.

Flammability Limit - Upper(%)

No information available.

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

Not available.

Explosive properties

No information available.

Oxidising properties

Not available.

9.2. Other information

No data available / Not applicable

SECTION 10: STABILITY AND REACTIVITY**10.1. Reactivity**

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

10.2. Chemical stability

Stable under recommended storage conditions

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

Stable under normal conditions of storage and use

10.5. Incompatible materials**Materials To Avoid**

Rapid exothermic polymerization will occur in the presence of water, amines, alkalis and alcohols

10.6. Hazardous decomposition products

No data available

SECTION 11: TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects****Toxicological information**

See section 3

Inhalation

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

Ingestion

Cyanoacrylates are considered to have relatively low toxicity. It is almost impossible to swallow as it rapidly polymerises in the mouth. Acute oral LD50 is >2000mg/kg (rabbit).

Skin contact

Irritating to skin. Considered to be low toxicity: acute dermal LD50 (rabbit) >2000mg/kg. Due to polymerisation at the skin surface, allergic reaction is unlikely to occur.

Eye contact

Irritating to eyes. Liquid product will bond eyelids. In dry atmosphere (RH<50%) vapours may cause irritation and lachrymatory effect.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Do not empty into drains / surface water / ground water.

12.1. Toxicity

Low ecotoxicity.

12.2. Persistence and degradability

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

12.3. Bioaccumulative potential**Bioaccumulative potential**

No data available on bioaccumulation.

Partition coefficient

Not available.

12.4. Mobility in soil**Mobility:**

Cured adhesives are immobile.

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

Not available.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

Waste to be treated as controlled waste. Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority.

13.1. Waste treatment methods

Cured adhesive: Dispose of as water insoluble non-toxic solid chemical in authorised landfill or incinerate under control conditions. Dispose of in accordance with local and national regulations. Contribution of this product to waste is very insignificant in comparison to article in which it is used. After use, tubes, cartons and bottles containing residue product should be disposed of as chemically contaminated waste in a authorised legal land fill site or incinerated.

Waste Class

08 04 09 waste adhesives and sealants containing organic solvents and other dangerous substances.

SECTION 14: TRANSPORT INFORMATION

Road Transport Notes Not Classified

Rail Transport Notes Not classified.

Sea Transport Notes Not classified.

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

No.

14.6. Special precautions for user

No information required.

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

Not applicable.

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.

Health and Environmental Listings

VOC content <3, 00% (1999/13/EC)

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Revision Date 07/11/2012

Risk Phrases In Full

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

Hazard Statements In Full

H319 Causes serious eye irritation.

H315 Causes skin irritation.

H335 May cause respiratory irritation.

Disclaimer

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