Materials Safety Data Sheet

CP0200 / 1

Cyanoacrylate Adhesives

Stock Numbers: 159-1456, 159-3929, 159-3935, 159-3963, 159-3979, 159-4023, 692-738

Section 1. Identification of the Substance/Preparation and Company

Product Name: Cyanoacrylate Adhesives.

Supplier: RS Components Ltd.,
P.O.Box 99, Corby, Northants., NN17 9RS
(+44) 01536-402888

Section 2. Composition/Information on Ingredients

Ingredient	%range	Sym/let	Risk Phrases
Ethylcyanoacrylate	<98	—	—
Polyalkylmethacrylate	<10	—	—
Fillers / stabilisers, etc.	<10	—	—

Section 3. Hazards Identification

Bonds skin and eyes in seconds. Highly reactive to water.

Section 4. First Aid Measures

Inhalation: Remove patient to fresh air.

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.

Eye Contact: If the eye is bonded closed, release eyelashes with warm water by covering with wet pad. Cyanoacrylate will bond to eye protein causing lachrymatory effect which will help to debond adhesive. Keep eye covered with wet pad 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).

Section 5. Fire-Fighting Measures

Suitable Extinguishing Media: Dry powder, foam, carbon dioxide.

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

Protective Measures: Breathing apparatus is considered necessary where large quantities are involved.

Section 6. Accidental Release Measures

Personal precautions: Refer to Section 8: Personal Protection.

Environmental precautions: Refer to Section 13; Disposal.

Methods of clearing up: Ventilate area. Do not use cloths for mopping up. Polymerise with water and scrape up.

Section 7. Handling and Storage

Handling:	Ventilation (low level) is recommended when using large volumes or where odour becomes apparent (odour threshold value is approximately 1-2ppm). Use of dispensing equipment is recommended to minimise the risk of skin or eye contact.
Storage:	Store in original containers at 5°C-28°C and do not return residual materials to containers as contamination may reduce the shelf life of the bulk product.

Section 8. Exposure Controls/Personal Protection

Engineering Measures:	Adequate ventilation required.
Personal protection:	Polyethylene or polypropylene gloves are recommended when using large volumes. Do not use PVC, rubber or nylon gloves. Eye protection should be used where there is risk of splashing. The TLV for the closely related methyl Cyanoacrylate is 2ppm (ACGIH, TWA).

Section 9. Physical and Chemical Properties

Appearance/Colour:	Clear colourless liquid	Vapour Pressure @ 25°C :	0.2-0.5mmHg
Odour:	Characteristic	pH/Concentration:	7
Boiling Point/Range °C:	>100	Melting Point °C:	>-10
Flash Point °C:	>80	Solubility/Miscibility:	Immiscible.
Specific Gravity @ 20°C:	1.1g / ml approx	Vapour Density (air=1):	3.0 approx.

Section 10. Stability and Reactivity

Materials to Avoid:	Water.
Hazardous Polymerisation:	Adhesives will polymerise in water.

Section 11. Toxicological Information

Toxic effects arising from exposure based on experimental/non experimental data

In dry atmosphere with <50% relative humidity, vapours may irritate the eyes and respiratory system. Prolonged exposure to high concentrations of vapours may lead to chronic effects in sensitive individuals.
Bonds skin in seconds. Considered to be of low toxicity: Due to polymerisation at the skin surface allergic reaction is not considered possible.
Liquid product will bond eyelids. In a dry atmosphere (RH <50%) vapours may cause irritation and lachrymatory effect.
Cyanoacrylates are considered to have relatively low toxicity. It is almost impossible to swallow as it rapidly polymerises in the mouth.

LD_{50} (Oral Rat):	>5000mg / kg.
LD_{50} (Dermal Rabbit):	>2000mg / kg.

Section 12. Ecological Information

Possible environmental effects and behaviour/ODP/aquatic toxicity

Adhesive is biodegradable and is of low ecotoxicity.
Does not contain substances listed in the Montreal Protocol.

Section 13. Disposal Considerations

Safe disposal of product, its residues and packaging materials:

Polymerise adhesive by adding slowly to water (10:1 Adhesive : water).
Dispose of according to Local Regulations.
See also Sections 7 & 8 for handling precautions and personal protection where applicable.

Section 14. Transport Information

Not restricted for transportation.

Section 15.	Regulatory Information

Labelling Information

Indication of Danger:	—
Contains:	Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children.

Section 16	Other Information

Recommended uses and restrictions:	Use only as directed.
Publication refs:	Compiled in accordance with CHIP Regulations 1993. HSC Approved Code of Practice, Document L37.

Section 17.	Section Revision and Dates

Section:	
Change:	
Date:	
Legend:	N.A.=Not Applicable or Not Available. N.D.=Not Determined or Not Determinable. Est.=Estimated.

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