

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product form : Mixture
Product name : 4000-RTB
Type of product : ethyl 2-cyanoacrylate
Product group : End product

1.2. Relevant identified uses of the substance or mixture and uses advised against**1.2.1. Relevant identified uses**

Intended for general public
Main use category : Industrial use, Professional use, Consumer use
Use of the substance/mixture : Adhesives, binding agents
Function or use category : Adhesives, binding agents

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Cyanotec Limited
Bay 2, Building 62,
Third Avenue, Pensnett Trading Estate,
Kingswinford DY6 7XT
T +44 (0)1834 294 753
sales@cyanotec.com

1.4. Emergency telephone number

Emergency number : +44 (0)1834 294 753
Office hours 0900-1700hrs
(Monday-Thursday)

Country/Area	Organisation	Emergency number
United Kingdom	National Poisons Information Service (Birmingham Centre). City Hospital. Dudley Road B18 7QH.	0344 892 0111 Only for healthcare professionals

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification according to GB CLP (SI 2019:720 as amended)**

Skin corrosion/irritation, Category 2 H315
Serious eye damage/eye irritation, Category 2 H319
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation H335
Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

May cause respiratory irritation. Causes skin irritation. Causes serious eye irritation.

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According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law.

2.2. Label elements

Labelling according to GB CLP (SI 2019:720 as amended)

Hazard pictograms (GB CLP)



GHS07

Signal word (GB CLP)

: Warning

Contains

: ETHYL-2-CYANOACRYLATE

Hazard statements (GB CLP)

: H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

H335 - May cause respiratory irritation.

Precautionary statements (GB CLP)

: P101 - If medical advice is needed, have product container or label at hand.

P261 - Avoid breathing vapours.

P271 - Use only outdoors or in a well-ventilated area.

P280 - Wear eye protection, protective gloves.

P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

EUH-statements (GB CLP)

: EUH202 - Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children.

2.3. Other hazards

Results of PBT and vPvB assessment

Component	
Substance(s) not meeting the PBT criteria of UK REACH regulation, in accordance with Annex XIII	ETHYL-2-CYANOACRYLATE (7085-85-0), CARBON BLACK (1333-86-4)
Substance(s) not meeting the vPvB criteria of UK REACH regulation, in accordance with Annex XIII	ETHYL-2-CYANOACRYLATE (7085-85-0), CARBON BLACK (1333-86-4)

Results of Endocrine Disruptor assessment

Component	
Substance(s) not considered as endocrine disrupting. They are not included in the list established in accordance with Article 59(1) of UK REACH for having endocrine disrupting properties, nor identified as having endocrine disrupting properties in accordance with the criteria set out in GB BPR and GB PPP	ETHYL-2-CYANOACRYLATE(7085-85-0), CARBON BLACK(1333-86-4)

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to GB CLP (SI 2019:720 as amended)
ETHYL-2-CYANOACRYLATE substance with workplace exposure limit(s)	CAS-No.: 7085-85-0 EC-No.: 230-391-5 UK Index-No.: 607-236-00-9 UK REACH-No: UK-01-0847871764-1	> 50 – < 100	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335

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According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law.

Name	Product identifier	%	Classification according to GB CLP (SI 2019:720 as amended)
CARBON BLACK substance with workplace exposure limit(s)	CAS-No.: 1333-86-4 EC-No.: 215-609-9	0.1	Not classified

Specific concentration limits:		
Name	Product identifier	Specific concentration limits (%)
ETHYL-2-CYANOACRYLATE	CAS-No.: 7085-85-0 EC-No.: 230-391-5 UK Index-No.: 607-236-00-9 UK REACH-No: UK-01-0847871764-1	(10 ≤ C ≤ 100) STOT SE 3; H335

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention. Exothermic reaction on contact with : skin.
First-aid measures after eye contact	: 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/attention.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after inhalation	: May cause irritation to the respiratory tract, sneezing, coughing, burning sensation of throat with constricting sensation of the larynx and difficulty in breathing. May cause respiratory irritation.
Symptoms/effects after skin contact	: Irritation.
Symptoms/effects after eye contact	: Eye irritation.
Symptoms/effects after ingestion	: None under normal conditions.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: No fire hazard.
Explosion hazard	: No direct explosion hazard.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

5.3. Advice for firefighters

Firefighting instructions	: Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Clean up any spills as soon as possible, using an absorbent material to collect it.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area. Avoid breathing vapours. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Ventilate area. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.
Methods for cleaning up : Take up liquid spill into absorbent material.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.
Precautions for safe handling : Use only outdoors or in a well-ventilated area. Avoid breathing vapours. Avoid contact with skin and eyes. Wear personal protective equipment.
Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ensure adequate ventilation, especially in confined areas.
Storage conditions : Store locked up. Store in a well-ventilated place. Keep container tightly closed.
Incompatible products : Strong bases.
Incompatible materials for storage : Do not allow contact with water.
Packaging materials : Always store product in container of same material as original container.

7.3. Specific end use(s)

adhesives.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

ETHYL-2-CYANOACRYLATE (7085-85-0)	
United Kingdom - Occupational Exposure Limits	
Local name	Ethyl cyanoacrylate
WEL STEL (OEL STEL)	1.5 mg/m ³

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ETHYL-2-CYANOACRYLATE (7085-85-0)	
	0.3 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
CARBON BLACK (1333-86-4)	
United Kingdom - Occupational Exposure Limits	
Local name	Carbon black
WEL TWA (OEL TWA)	3.5 mg/m ³
WEL STEL (OEL STEL)	7 mg/m ³
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

ETHYL-2-CYANOACRYLATE (7085-85-0)	
DNEL/DMEL (Workers)	
Acute - systemic effects, inhalation	9.25 mg/m ³
Acute - local effects, inhalation	9.25 mg/m ³
Long-term - systemic effects, inhalation	9.25 mg/m ³
Long-term - local effects, inhalation	9.25 mg/m ³
DNEL/DMEL (General population)	
Acute - systemic effects, inhalation	9.25 mg/m ³
Acute - local effects, inhalation	9.25 mg/m ³
Long-term - systemic effects, inhalation	9.25 mg/m ³
Long-term - local effects, inhalation	9.25 mg/m ³

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

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Eye protection			
Type	Field of application	Characteristics	Standard
Safety glasses	Droplet	With side shields	EN 166

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Skin and body protection	
Type	Standard
Protective clothing	EN 14605

Hand protection:

Protective gloves

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Chemically resistant protective gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	>0.4		EN ISO 374

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Respiratory protection			
Device	Filter type	Condition	Standard
Full face mask	Filter A1/B1, Type A - High-boiling (>65 °C) organic compounds		EN 14387

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear. Colourless liquid.
Colour	: Black.
Odour	: sharp. Irritating.
Odour threshold	: Not available
pH	: Not available
Melting point	: Not applicable
Freezing point	: Not available
Boiling point	: > 214 °C
Flash point	: 80 – 93.4 °C Closed cup
Flammability	: Not available
Explosive limits	: Not available
Vapour pressure	: 0.27 mbar
Vapour pressure at 50°C	: 0.7 bar
Relative vapour density at 20°C	: Not available
Relative density	: Not available

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According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law.

Density	: ≈ 1.05 g/ml
Solubility	: Soluble in acetone.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
Viscosity, kinematic	: Not available
Viscosity, dynamic	: 2500 – 3500 mPa·s
Explosive properties	: Not available

9.2. Other information

Critical temperature	: No data available
VOC content	: < 3 %
Particle characteristics	: Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Polymerizes on exposure to water (moisture).

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 (oral)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: Not classified (Based on available data, the classification criteria are not met)

ETHYL-2-CYANOACRYLATE (7085-85-0)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method)
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Animal sex: male, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
CARBON BLACK (1333-86-4)	
LD50 oral rat	> 8000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)

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According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law.

Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure : May cause respiratory irritation.

ETHYL-2-CYANOACRYLATE (7085-85-0)

STOT-single exposure	May cause respiratory irritation.
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STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)

CARBON BLACK (1333-86-4)

LOAEC (inhalation, rat, dust/mist/fume, 90 days)	0.0071 mg/l air Animal: rat, Animal sex: male
NOAEL (oral, rat, 90 days)	> 1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEC (inhalation, rat, dust/mist/fume, 90 days)	0.0011 mg/l air Animal: rat, Animal sex: male

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

Other information

Endocrine disrupting properties

No additional information available

Other information

Potential adverse human health effects and symptoms : No data available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute) : Not classified (Based on available data, the classification criteria are not met)
Hazardous to the aquatic environment, long-term (chronic) : Not classified (Based on available data, the classification criteria are not met)

CARBON BLACK (1333-86-4)

EC50 72h - Algae [1]	> 10000 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 72h - Algae [2]	> 10000 mg/l Test organisms (species):

12.2. Persistence and degradability

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Persistence and degradability	Not rapidly degradable
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ETHYL-2-CYANOACRYLATE (7085-85-0)

Persistence and degradability	Not rapidly degradable
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CARBON BLACK (1333-86-4)

Persistence and degradability	Not rapidly degradable
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12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

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According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law.

12.5. Results of PBT and vPvB assessment

Component	
ETHYL-2-CYANOACRYLATE (7085-85-0)	This substance does not meet the PBT criteria of UK REACH regulation, annex XIII This substance does not meet the vPvB criteria of UK REACH regulation, annex XIII
CARBON BLACK (1333-86-4)	This substance does not meet the PBT criteria of UK REACH regulation, annex XIII This substance does not meet the vPvB criteria of UK REACH regulation, annex XIII

12.6. Other adverse effects

Ozone : Not classified (Based on available data, the classification criteria are not met)

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Disposal must be done according to official regulations.
Additional information : Do not re-use empty containers.
European List of Waste (LoW, EC 2000/532) : 08 04 09* - waste adhesives and sealants containing organic solvents or other dangerous substances

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not regulated	Not regulated	UN 3334	Not regulated	Not regulated
14.2. UN proper shipping name				
Not regulated	Not regulated	Aviation regulated liquid, n.o.s. (Contains cyanoacrylate)	Not regulated	Not regulated
Transport document description				
Not regulated	Not regulated	UN 3334 Aviation regulated liquid, n.o.s. (Contains cyanoacrylate), 9, III	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	9	Not regulated	Not regulated
Not regulated	Not regulated		Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	III	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Dangerous for the environment: No	Not regulated	Not regulated
No supplementary information available				

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According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law.

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y964
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 964
PCA max net quantity (IATA)	: 100L
CAO packing instructions (IATA)	: 964
CAO max net quantity (IATA)	: 220L
Special provisions (IATA)	: A27
ERG code (IATA)	: 9A

Inland waterway transport

Not regulated

Rail transport

Not regulated

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. National regulations

UK REACH Annex XVII (Restriction List)

This product contains no substance(s) listed on UK REACH Annex XVII (Restriction List) equal to or above the level of SDS disclosure

UK REACH Annex XIV (Authorisation List)

This product contains no substance(s) listed on UK REACH Annex XIV (Authorisation List) equal to or above the 0.1% level of disclosure

UK REACH Candidate List (SVHC)

This product contains no substance(s) listed on the UK REACH Candidate List (SVHC).

GB PIC Regulation (Prior Informed Consent)

This product contains no substance(s) listed on the GB PIC List equal to or above the level of SDS disclosure

POP Regulation (Persistent Organic Pollutants)

This product contains no substance(s) listed on the GB POP List equal to or above the level of SDS disclosure

Ozone Regulation (S.I. No. 168 of 2015)

This product contains no substance(s) listed on the GB Ozone Depletion List equal to or above the level of SDS disclosure

Control of Poisons and Explosives Precursors Act

This product contains no substance(s) listed on the Control of Poisons and Explosives Precursors Regulations equal to or above the level of SDS disclosure

Drug Precursors Regulation (EC 273/2004)

This product contains no substance(s) listed on the GB Drug Precursors List equal to or above the level of SDS disclosure

15.1.2. Other Information

VOC content : < 3 %

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According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law.

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Indication of changes (UK)		
Section	Changed item	Comments
2.2	Precautionary statements (GB CLP)	Modified
Abbreviations and acronyms:		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
COD	Chemical oxygen demand (COD)	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC-No.	European Community number	
EC50	Median effective concentration	
EN	European Standard	
IARC	International Agency for Research on Cancer	
IATA	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
OEL	Occupational Exposure Limit	
PBT	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
STP	Sewage treatment plant	
ThOD	Theoretical oxygen demand (ThOD)	
TLM	Median Tolerance Limit	
VOC	Volatile Organic Compounds	

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According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law.

Indication of changes (UK)		
Section	Changed item	Comments
CAS-No.	Chemical Abstracts Service number	
N.O.S.	Not Otherwise Specified	
vPvB	Very Persistent and Very Bioaccumulative	
ED	Endocrine disruptor	

Full text of H- and EUH-statements:	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
EUH202	Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children.

Safety Data Sheet (SDS), UK

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.