SAFETY DATA SHEET

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

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SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Classification (1999/45/EEC)

Physical and Chemical HazardsNot classified.Human healthSkin Irrit. 2 - H315;Eye Irrit. 2 - H319;STOT SE 3 - H335EnvironmentNot classified.Xi;R36/37/38.Skin Irrit. 2 - H319;STOT SE 3 - H335

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 to
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	
HYDROQUINONE			< 1%
CAS-No.: 123-31-9	EC No.: 204-617-8		
Classification (EC 1272/2008) Acute Tox. 4 - H302		Classification (67/548/EEC) Carc. Cat. 3;R40	
Eye Dam. 1 - H318		Muta. Cat. 3;R68	
Skin Sens. 1 - H317		Xn;R22	
Muta. 2 - H341		Xi;R41	
Carc. 2 - H351		R43	
Aquatic Acute 1 - H400		N;R50	

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

Do not pull bonded skin apart. It may be fgently peeled aparty 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 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. Kepp eye covered until debonding is complete, usually within 1-3 days Do not force eye open. Medical advice should be sough 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

See section: Description of first aid measures

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Foam, extinguishing powder, cardon dioxide **5.2. Special hazards arising from the substance or mixture**

Hazardous combustion products

Oxides of carbon, oxides of nitrogen, irritating organic vapors

5.3. Advice for firefighters

Protective equipment for fire-fighters

Fire fighthers 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 rise 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/m3	
HYDROQUINONE	WEL		0.5 mg/m3			

WEL = Workplace Exposure Limit.

8.2. Exposure controls

Respiratory equipment

Ensure adequate ventilation

Hand protection

The use of chemical resistant gloves such as Nitrile is recommended Polyethylene or polypropylene gloves are recommended when susing in large volumes. Do not use PVC, rubber or nylon gloves Please note that in practice the working life of the chemical resistance gloves may be considerably reduced as a result of influencing factors (e.g. temperature). Suitable rish assessment should be carried out by the end user. 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	Irritating.
Solubility	Polymerises in presence of water Soluble in: Acetone
Initial boiling point and boiling range	>149 C
Melting point (°C)	
No information available.	
Vapour density (air=1)	1, 07 g/cm3
Vapour pressure	<3 mbar
Evaporation rate	
No information available.	
pH-Value, Conc. Solution	
No information available.	
Viscosity	
No information available.	
Decomposition temperature (°C)	
No information available.	
Odour Threshold, Lower	
No information available.	
Odour Threshold, Upper	
No information available.	
Flash point	80 - 93, 3 C TCC (Tag closed cup).
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

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

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 occure in the presence of water, amines, alkalis and alcohols

10.6. Hazardous decomposition products

No data avaliable

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological information

The preparation is classified based on the conventional method outlined in Article 6(1)(a) of Directive 1999/45/EC. Relevant available heath/ecological information for the substanes listed under Section 3 is provided in the following

Acute toxicity:

Acute Toxicity (Oral LD50)

> 5000 mg/kg Rat

Acute Toxicity (Dermal LD50)

< 2000 mg/kg Rabbit

Inhalation

Irritating to respiratory system. Prolonged exposure to high concentraions 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 Acute oral LD50 is >5000mg/kg (rat) It is almost impossible to swallow as it rapidly polymerises in the mouth

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

No Information avaliable

12.2. Persistence and degradability

No further relevant information available

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

SECTION 13: DISPOSAL CONSIDERATIONS

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 comparision 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.	
<u>14.1. UN number</u>		
UN No. (ICAO)	3334	
14.2. UN proper shipping name		
Proper Shipping Name	Aviation regulated liquid, n.o.s. (Cyanoacrylate ester), Primary packs containing less than 500ml are unregulated by this mode of transport and may be shipped unrestricted	
14.3. Transport hazard class(es)		
ICAO Class/Division	9	
14.4. Packing group		
ICAO Packing group	III	
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**

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

Risk Phrases In Full	
R22	Harmful if swallowed.
R36/37/38	Irritating to eyes, respiratory system and skin.
R40	Limited evidence of a carcinogenic effect.
R43	May cause sensitisation by skin contact.
R68	Possible risk of irreversible effects.
R41	Risk of serious damage to eyes.
R50	Very toxic to aquatic organisms.
Hazard Statements In Full	
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H341	Suspected of causing genetic defects.
H400	Very toxic to aquatic life.