

Page: 1 Compilation date: 15/04/2014 Revision date: 08/02/2018 Revision No: 3

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: KRYLEX KB224 INSTANT ADHESIVE

Index number: 01-005-1429

Product code: KB224

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

Use of substance / mixture: Cyanoacrylate adhesive

1.3. Details of the supplier of the safety data sheet

Company name:	Chemence Ltd
	Princewood Road
	Earlstree Industrial Estate
	Corby
	Northants
	NN17 4XD
	United Kingdom
Tel:	+44 (0) 1536 402 600
Fax:	+44 (0) 1536 400 266
Email:	technical@chemence.com

1.4. Emergency telephone number

Emergency tel: +44 (0) 1536 402 600 (9am - 5.30pm)

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: STOT SE 3: H335; Eye Irrit. 2: H319; Skin Irrit. 2: H315; -: EUH202 Most important adverse effects: Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children.

2.2. Label elements

Label elements:

Hazard statements:	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.	[cont

Page: 2

Hazard pictograms:GHS07: Exclamation markSignal words:WarningPrecautionary statements:P261: Avoid breathing vapours.P271: Use only outdoors or in a well-ventilated area.P280: Wear protective gloves.P302+P352: IF ON SKIN: Wash with plenty of water.P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Removecontact lenses, if present and easy to do. Continue rinsing.P337+P313: If eye irritation persists: Get medical advice/attention.2.3. Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

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3.2. Mixtures
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* Hazardous ingredients:

ETHYL-2-CYANOACRYLATE - REACH registered number(s): 01-2119527766-29-0012

EINECS	CAS	PBT / WEL	CLP Classification	Percent
230-391-5	7085-85-0	- Eye Irrit. 2: H319; STOT SE 3: H335 Skin Irrit. 2: H315		>80%
HYDROQUIN	ONE - REACH re	gistered number(s): 01-2119524016-	51	
204-617-8	123-31-9	-	Carc. 2: H351; Muta. 2: H341; Acute	<0.1%
			Tox. 4: H302; Eye Dam. 1: H318; Skin	
			Sens. 1: H317; Aquatic Acute 1: H400	

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact:	Do not pull bonded skin apart. Remove all contaminated clothes and footwear
	immediately unless stuck to skin. Wash immediately with plenty of soap and water. Any
	bonded skin should be gently peeled apart, preferably after soaking in warm, soapy
	water. In the case of large spills on the skin, superficial burns may occur - treat
	accordingly. If irritation persists, obtain medical attention.

Eye contact: Bathe the eye with running water for 15 minutes. If the eyelid is bonded closed, do not force open. Cover with wet pad soaked in warm water. Get prompt medical attention, in case solid particles of cured cyanoacrylate trapped behind the eye cause any abrasive damage. Keep eye covered with wet pad until debonding is complete, usually 1-3 days. (Cyanoacrylate will bond to eye protein, causing a lachrymatory effect that aids debonding). Transfer to hospital for specialist examination.

	doctor.
	exposure ensuring one's own safety whilst doing so. If symptoms persist, Consult a
minalation.	Move to fresh air in case of accidental inhalation of vapours. Remove casualty from
Inhalation	Move to fresh air in case of accidental inhelation of vanours. Domove casualty from
	hours. Consult a doctor.
	obstructed. Saliva will separate the solidined product from the modifi over a period of
	obstructed. Saliva will separate the solidified product from the mouth over a period of
	swallow, but beware of possible choking hazard. Ensure breathing passages are not
Ingestion:	The product will polymerise immediately in the mouth, making it almost impossible to
Indestion.	The product will polymorice immediately in the mouth, making it almost impossible to

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

- Skin contact: Cyanoacrylates bond skin in seconds. In the case of large spills on the skin, superficial burns may occur treat accordingly. There may be irritation and redness at the site of contact.
- Eye contact: Cyanoacrylates bond eyelids in seconds. There may be irritation and redness. The eyes may water profusely.
 - Ingestion: There may be soreness and redness of the mouth and throat. The product will polymerise immediately in the mouth, making it almost impossible to swallow, but beware of possible choking hazard.
 - Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. Exposure may cause coughing or wheezing.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

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

Immediate / special treatment: Eye bathing equipment should be available on the premises.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Alcohol resistant foam. Dry chemical powder. Carbon dioxide. Use water spray to cool containers.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes. In combustion emits toxic fumes of carbon dioxide / carbon monoxide. In combustion emits toxic fumes of nitrogen oxides.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Evacuate the area immediately. Refer to section 8 of SDS for personal protection details. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Turn leaking containers leak-side up to prevent the escape of liquid.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. (do not use cloths). Transfer to a closable, labelled salvage container for disposal by an appropriate method. Or polymerise slowly with water (~10:1, adhesive : water) and then scrape up.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of mists in the air. Ambient humidity should be >35% to minimise discomfort.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area. Keep away from direct sunlight. Keep container tightly closed. Keep away from sources of ignition. Refrigerated storage (2 - 8oC) is recommended for optimum shelf-life.

Suitable packaging: Must only be kept in original packaging.

7.3. Specific end use(s)

Specific end use(s): Adhesive

Section 8: Exposure controls/personal protection

8.1. Control parameters

Hazardous ingredients:

ETHYL-2-CYANOACRYLATE

Workplace exposure limits:

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	-	1.5 mg/m3	-	-

Respirable dust

HYDROQUINONE

UK	0.5 mg/m3	-	-	-

DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls	
Engineering measures:	Ensure there is sufficient ventilation of the area. Ensure all engineering measures
	mentioned in section 7 of SDS are in place.
Respiratory protection:	If WEL is likely to be exceeded, respiratory protective equipment will be needed.
	Gas/vapour filter, type A: organic vapours (EN141). Self-contained breathing apparatus
	must be available in case of emergency.
Hand protection:	Nitrile gloves. Breakthrough time of the glove material > 1 hour. (thickness 0.15mm).
	Viton gloves.
Eye protection:	Safety glasses with side-shields. Ensure eye bath is to hand.
Skin protection:	Protective clothing.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State:	Liquid		
Colour:	Colourless		
Odour:	Acrid		
Evaporation rate:	Negligible		
Oxidising:	Non-oxidising (by EC criteria)		
Solubility in water:	Reacts with water.		
Also soluble in:	Acetone.		
Viscosity:	Viscous		
Kinematic viscosity:	2500 cPs		
Viscosity test method:	Rotational viscometer		
Boiling point/range°C:	>150	Flash point°C:	>85
Part.coeff. n-octanol/water:	est.<1	Vapour pressure:	~0.04mmHg @25oC
Relative density:	1.04		

9.2. Other information

Other information: No data available.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions. Polymerises rapidly with water.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions. Polymerisation may occur on exposure to conditions or materials listed below. Polymerisation can be rapid.

10.4. Conditions to avoid

Conditions to avoid: Heat. Direct sunlight. Moist air. Humidity.

10.5. Incompatible materials

Materials to avoid: Water. Alkalis. Amines. Alcohols. Strong oxidising agents.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes. In combustion emits toxic fumes of carbon dioxide / carbon monoxide. In combustion emits toxic fumes of nitrogen oxides.

Section 11: Toxicological information

11.1. Information on toxicological effects

Hazardous ingredients:

ETHYL-2-CYANOACRYLATE

ORL	RAT	LD50	>5	ml/ka
-				J

HYDROQUINONE

ORL	MUS	LD50	150	mg/kg
ORL	RAT	LD50	720	mg/kg
SCU	RAT	LDLO	300	mg/kg

Relevant hazards for product:

Hazard	Route	Basis
Skin corrosion/irritation	DRM	Hazardous: calculated
Serious eye damage/irritation	OPT	Hazardous: calculated
STOT-single exposure	INH	Hazardous: calculated

Symptoms / routes of exposure

Skin contact:	Cyanoacrylates bond skin in seconds. In the case of large spills on the skin, superficial
	burns may occur - treat accordingly. There may be irritation and redness at the site of
	contact.
Eye contact:	Cyanoacrylates bond eyelids in seconds. There may be irritation and redness. The eyes
	may water profusely.
Ingestion:	There may be soreness and redness of the mouth and throat. The product will
	polymerise immediately in the mouth, making it almost impossible to swallow, but
	beware of possible choking hazard.
Inhalation:	There may be irritation of the throat with a feeling of tightness in the chest. Exposure may
	cause coughing or wheezing.
Delayed / immediate effects:	Immediate effects can be expected after short-term exposure.

Page: 7

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values: No data available.

12.2. Persistence and degradability

Persistence and degradability: No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

12.4. Mobility in soil

Mobility: Considered to be very low due to rapid polymerisation with water.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: Negligible ecotoxicity.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations:	Transfer to a suitable container and arrange for collection by specialised disposal	
	company. Or polymerise slowly with water (10:1, adhesive : water). Hardened product	
	can be disposed of in land-fill sites by licensed contractors.	
Waste code number:	08 04 09	
Disposal of packaging:	Dispose of in a regulated landfill site or other method for hazardous or toxic wastes.	
NB:	The user's attention is drawn to the possible existence of regional or national regulations	
	regarding disposal.	
A A Transmission of the formation		

Section 14: Transport information

14.1. UN number

UN number: UN3334

14.2. UN proper shipping name

Shipping name: AVIATION REGULATED LIQUID, N.O.S.

(ETHYL-2-CYANOACRYLATE)

14.3. Transport hazard class(es)

Transport class: 9

Marine pollutant: No

14.4. Packing group

Packing group: III

14.5. Environmental hazards

Environmentally hazardous: No

14.6. Special precautions for user

Special precautions: No special precautions.

Section 15: Regulatory information

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

Specific regulations: Not applicable.

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information

Other information:	* This safety data sheet is prepared in accordance with Commission Regulation (EU) No
	2015/830.
	- The Classification, Labelling and Packaging Regulations (The "CLP" Regulations)
	* indicates text in the SDS which has changed since the last revision.
Phrases used in s.2 and s.3:	EUH202: Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the
	reach of children.
	H302: Harmful if swallowed.
	H315: Causes skin irritation.
	H317: May cause an allergic skin reaction.
	H318: Causes serious eye damage.
	H319: Causes serious eye irritation.
	H335: May cause respiratory irritation.
	H341: Suspected of causing genetic defects ({{{0 message= <state exposure="" if="" it<="" of="" route="" td=""></state>
	is conclusively proven that no other routes of exposure cause the hazard> filter=(_)?
	EXP_ROUTE+}}}).
	H351: Suspected of causing cancer ({{{0 message= <state exposure="" if="" is<="" it="" of="" route="" td=""></state>
	conclusively proven that no other routes of exposure cause the hazard> filter=(_)?
	EXP_ROUTE+}}}).
	H400: Very toxic to aquatic life.
Legal disclaimer:	The above information is believed to be correct but does not purport to be all inclusive
	and shall be used only as a guide. The information contained in this safety data sheet

Page: 9

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