

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 08.12.2022

Version number 5 (replaces version 4)

Revision: 08.12.2022

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

1.1 Product identifier

Trade name:	Akefix 100 High Tech CA-Adhesive
Article number:	30320
CAS Number:	7085-85-0
EC number:	230-391-5
Index number:	607-236-00-9
Registration number	01-2119527766-29-xxxx
UFI:	SF44-C0AX-H00P-EC7N

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

No further relevant information available.

Application of the substance / the mixture

Adhesives

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:	AKEMI chemisch technische Spezialfabrik GmbH Lechstrasse 28 D 90451 Nürnberg	Tel. +49(0)911-642960 Fax. +49(0)911-644456 e-mail info@akemi.de
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Further information obtainable from:

Laboratory

1.4 Emergency telephone number:

Product Safety Department AKEMI chemisch technische Spezialfabrik GmbH
Tel. +49(0)911-64296-59
Reachable during the following office hours:
Monday – Thursday from 07:30 a.m. to 16:30 p.m.
Friday from 07:30 a.m. to 13:30 p.m.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms

The substance is classified and labelled according to the CLP regulation.



GHS07

Signal word

Warning

Hazard-determining components of labelling:

ethyl 2-cyanoacrylate

Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Precautionary statements

P101

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

P102

Keep out of reach of children.

P103

Read carefully and follow all instructions.

P261

Avoid breathing vapours.

P271

Use only outdoors or in a well-ventilated area.

P280

Wear protective gloves / eye protection.

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P302+P352 IF ON SKIN: Wash with plenty of 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.
 P312 Call a POISON CENTER/doctor if you feel unwell.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· Additional information: 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

· PBT: Not applicable.

· vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

· **3.1 Substances**

· CAS No. Description 7085-85-0 ethyl 2-cyanoacrylate
 · Identification number(s)
 · EC number: 230-391-5
 · Index number: 607-236-00-9
 · Specific concentration limits STOT SE 3; H335: C ≥ 10 %
 · Description: Mixture: consisting of the following components.

· Dangerous components:

CAS: 123-31-9	1,4-dihydroxybenzene	<1%
EINECS: 204-617-8	Muta. 2, H341; Carc. 2, H351	
Index number: 604-005-00-4	Eye Dam. 1, H318	
Reg.nr.: 01-2119524016-51	Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=10) Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317	

· Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· **4.1 Description of first aid measures**

· General information: Immediately remove any clothing soiled by the product.
 · After inhalation: Supply fresh air; consult doctor in case of complaints.
 In case of unconsciousness place patient stably in side position for transportation.
 · After skin contact: Immediately wash with water and soap and rinse thoroughly.
 · After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
 · After swallowing: Do not induce vomiting; call for medical help immediately.

· **4.2 Most important symptoms and effects, both acute and delayed**

Allergic reactions
 Headache
 Breathing difficulty
 Coughing
 Nausea

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· **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**

· Suitable extinguishing agents:

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· For safety reasons unsuitable extinguishing agents:

Water with full jet

· **5.2 Special hazards arising from the substance or mixture**

Can form explosive gas-air mixtures.
Formation of toxic gases is possible during heating or in case of fire.
Nitrogen oxides (NO_x)
Carbon monoxide (CO)

· **5.3 Advice for firefighters**

· Protective equipment:

Wear self-contained respiratory protective device.
Wear fully protective suit.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation
Use respiratory protective device against the effects of fumes/dust/aerosol.
Wear protective equipment. Keep unprotected persons away.

· **6.2 Environmental precautions:**

Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.

· **6.3 Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Ensure adequate ventilation.

Dispose of the material collected according to regulations.

· **6.4 Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.

· Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

· **7.2 Conditions for safe storage, including any incompatibilities**

· Storage:

· Requirements to be met by storerooms and receptacles:

Store only in the original receptacle.
Store in a cool location.

· Information about storage in one common storage facility:

Store away from oxidising agents.

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- Further information about storage conditions: Protect from frost.
Keep container tightly sealed.
- Storage class: 10
- **7.3 Specific end use(s)** No further relevant information available.


SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- Ingredients with limit values that require monitoring at the workplace: Not required.

· **DNELs****7085-85-0 ethyl 2-cyanoacrylate**

Inhalative	DNEL (Kurzzeit-akut)	9.25 mg/m ³ Air (ARB)
		9.25 mg/m ³ Air (BEV)
	DNEL (Langzeit-wiederholt)	9.25 mg/m ³ Air (ARB)
		9.25 mg/m ³ Air (BEV)

- Additional information: The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- Appropriate engineering controls No further data; see item 7.
- Individual protection measures, such as personal protective equipment
- General protective and hygienic measures:
 - Keep away from foodstuffs, beverages and feed.
 - Immediately remove all soiled and contaminated clothing
 - Wash hands before breaks and at the end of work.
 - Do not inhale gases / fumes / aerosols.
 - Avoid contact with the eyes and skin.
- Respiratory protection: In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
Filter A/P2
- Hand protection



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- Penetration time of glove material The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- For the permanent contact gloves made of the following materials are suitable: Butyl rubber, BR
- As protection from splashes gloves made of the following materials are suitable:
 - Butoject (KCL, Art_No. 897, 898)
 - Butyl rubber, BR

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- Not suitable are gloves made of the following materials:
- Eye/face protection

Nitrile rubber, NBR



Tightly sealed goggles

- Body protection:

Light weight protective clothing

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

- General Information
- Colour: Colourless
- Odour: Pungent
- Odour threshold: Not determined.
- Melting point/freezing point: Undetermined.
- Boiling point or initial boiling point and boiling range 60 °C
- Flammability: Not applicable.
- Lower and upper explosion limit
- Lower: Not determined.
- Upper: Not determined.
- Flash point: ≤93 °C
- Decomposition temperature: Not determined.
- pH: Not determined.
- Viscosity:
- Kinematic viscosity: Not determined.
- Dynamic: Not determined.
- Solubility
- water: Not miscible or difficult to mix.
- Partition coefficient n-octanol/water (log value): Not determined.
- Vapour pressure: Not determined.
- Density and/or relative density
- Density at 20 °C: 1.05 g/cm³
- Relative density: Not determined.
- Vapour density: Not determined.

· 9.2 Other information

- Appearance:
- Form: Fluid
- Important information on protection of health and environment, and on safety.
- Auto-ignition temperature: Product is not selfigniting.
- Explosive properties: Product does not present an explosion hazard.
- Molecular weight: 125.13 g/mol
- Change in condition
- Evaporation rate: Not determined.

· Information with regard to physical hazard classes

- Explosives: Void
- Flammable gases: Void
- Aerosols: Void

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| · <u>Oxidising gases</u> | Void |
| · <u>Gases under pressure</u> | |
| | Void |
| · <u>Flammable liquids</u> | |
| | Void |
| · <u>Flammable solids</u> | |
| | Void |
| · <u>Self-reactive substances and mixtures</u> | |
| | Void |
| · <u>Pyrophoric liquids</u> | |
| | Void |
| · <u>Pyrophoric solids</u> | |
| | Void |
| · <u>Self-heating substances and mixtures</u> | |
| | Void |
| · <u>Substances and mixtures, which emit flammable gases in contact with water</u> | |
| | Void |
| · <u>Oxidising liquids</u> | |
| | Void |
| · <u>Oxidising solids</u> | |
| | Void |
| · <u>Organic peroxides</u> | |
| | Void |
| · <u>Corrosive to metals</u> | |
| | Void |
| · <u>Desensitised explosives</u> | |
| | Void |

SECTION 10: Stability and reactivity

- | | |
|--|---|
| · 10.1 Reactivity | No further relevant information available. |
| · 10.2 Chemical stability | |
| · <u>Thermal decomposition / conditions to be avoided:</u> | No decomposition if used according to specifications. |
| · 10.3 Possibility of hazardous reactions | Danger of polymerisation.
Reacts with acids, alkalis and oxidising agents. |
| · 10.4 Conditions to avoid | No further relevant information available. |

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- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** Carbon monoxide and carbon dioxide
Nitrogen oxides (NO_x)

SECTION 11: Toxicological information· **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

- Acute toxicity Based on available data, the classification criteria are not met.

- LD/LC50 values relevant for classification:

7085-85-0 ethyl 2-cyanoacrylate

Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)

- Skin corrosion/irritation Causes skin irritation.
- Serious eye damage/irritation Causes serious eye irritation.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- Germ cell mutagenicity Based on available data, the classification criteria are not met.
- Carcinogenicity Based on available data, the classification criteria are not met.
- Reproductive toxicity Based on available data, the classification criteria are not met.
- STOT-single exposure May cause respiratory irritation.
- STOT-repeated exposure Based on available data, the classification criteria are not met.
- Aspiration hazard Based on available data, the classification criteria are not met.

· **11.2 Information on other hazards**

- Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information· **12.1 Toxicity**

- Aquatic toxicity: No further relevant information available.

· **12.2 Persistence and degradability**

biodegradable

· **12.3 Bioaccumulative potential**

No further relevant information available.

· **12.4 Mobility in soil**

No further relevant information available.

· **12.5 Results of PBT and vPvB assessment**

- PBT: Not applicable.

- vPvB: Not applicable.

· **12.6 Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

· **12.7 Other adverse effects**

- Additional ecological information:

- General notes: Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water

SECTION 13: Disposal considerations· **13.1 Waste treatment methods**

- Recommendation Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- European waste catalogue

08 00 00	WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS
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08 04 00	wastes from MFSU of adhesives and sealants (including waterproofing products)
08 04 09*	waste adhesives and sealants containing organic solvents or other hazardous substances

· Uncleaned packaging:

· Recommendation:

Disposal must be made according to official regulations.

SECTION 14: Transport information

· 14.1 UN number or ID number	
· ADR, ADN, IMDG	Void
· IATA	UN3334
· 14.2 UN proper shipping name	
· ADR, ADN, IMDG	Void
· IATA	Aviation regulated liquid, n.o.s. (ethyl 2-cyanoacrylate)
· 14.3 Transport hazard class(es)	
· ADR, ADN, IMDG	
· Class	Void
· IATA	
	
· Class	9 Miscellaneous dangerous substances and articles.
· Label	9
· 14.4 Packing group	
· ADR, IMDG	Void
· IATA	III
· 14.5 Environmental hazards:	
· Marine pollutant:	No
· 14.6 Special precautions for user	Not applicable.
· 14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	Void

SECTION 15: Regulatory information

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

1967/548 (1999/45); 1991/689 (2001/118); 1999/13; 2004/42; 648/2004; 1907/2006 (REACH); 1272/2008; 75/324/EEG (2008/47/EG); 453/2010/EG

· Directive 2012/18/EU

· Named dangerous substances - ANNEX I

Substance is not listed.

· REGULATION (EC) No 1907/2006 ANNEX XVII

Conditions of restriction: 3

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· DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

· REGULATION (EU) 2019/1148

· Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

· Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

· Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

· National regulations:

· Information about limitation of use: Employment restrictions concerning juveniles must be observed.

· Waterhazard class: Water hazard class 1 (Assessment by list): slightly hazardous for water.

· Substances of very high concern (SVHC) according to REACH, Article 57

None of the ingredients is listed.

· VOC EU 20.0 g/l

· **15.2 Chemical safety assessment:**

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing SDS: Laboratory
 · Contact: Elke Hake
 Fon ++49 (0)911 64296-59
 @mail E.Hake@akemi.de
 08.12.2022

· Date of previous version:

· Version number of previous version:

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· Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 DNEL: Derived No-Effect Level (REACH)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 SVHC: Substances of Very High Concern
 vPvB: very Persistent and very Bioaccumulative
 Acute Tox. 4: Acute toxicity – Category 4
 Skin Irrit. 2: Skin corrosion/irritation – Category 2
 Eye Dam. 1: Serious eye damage/eye irritation – Category 1
 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
 Skin Sens. 1: Skin sensitisation – Category 1
 Muta. 2: Germ cell mutagenicity – Category 2
 Carc. 2: Carcinogenicity – Category 2

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STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

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