Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2020/878

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

1.1. **Product identifier**

Article No. (manufacturer/supplier): 2 08213 00000
Trade name/designation: epple-bond 8213
Adhesive
UFI: KH30-X02C-V00Q-X10A

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

Relevant identified uses:
Cyanacrylat adhesive for the gluing of different substrates

1.3. **Details of the supplier of the safety data sheet**

supplier (manufacturer/importer/downstream user/distributor)

E. Epple & Co. GmbH
Hertzstr. 8
71083 Herrenberg

Telephone: +49 7032 / 9771-17
Telefax: +49 7032 / 9771-60
www.epple-chemie.de

Department responsible for information:
laboratory
E-mail (competent person): labor@epple-chemie.de

1.4. **Emergency telephone number**
Information center against poisoning Bonn: +49 (0) 228 / 19 240 (Advice in German)

SECTION 2: Hazards identification

2.1. **Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008 [CLP]

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

Skin Irrit. 2 / H315	Skin corrosion/irritation	Causes skin irritation.
Eye Irrit. 2 / H319	Serious eye damage/eye irritation	Causes serious eye irritation.
STOT SE 3 / H335	STOT-single exposure	May cause respiratory irritation.

2.2. **Label elements** *

The product is classified and labelled according to EC directives or corresponding national laws.

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms

Warning

Hazard statements

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

Precautionary statements

P261	Avoid breathing vapours.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P501	Dispose of contents / container to a certified waste management company.

Hazard components for labelling
ethyl 2-cyanoacrylate

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

2.3. **Other hazards**

No information available.

SECTION 3: Composition/information on ingredients

3.2. **Mixtures**

Description cyanacrylate adhesive

Hazardous ingredients

Classification according to Regulation (EC) No 1272/2008 [CLP]

EC No. CAS No. Index No.	REACH No. Designation classification: // Remark	weight-%
230-391-5 7085-85-0 607-236-00-9	01-2119527766-29 ethyl 2-cyanoacrylate Eye Irrit. 2 H319 / STOT SE 3 H335 / Skin Irrit. 2 H315 Specific concentration limit (SCL): STOT SE 3 H335 >= 10	74,9 - 100
204-617-8 123-31-9 604-005-00-4	1,4-dihydroxybenzene Carc. 2 H351 / Muta. 2 H341 / Acute Tox. 4 H302 / Eye Dam. 1 H318 / Skin Sens. 1 H317 / Aquatic Acute 1 H400 (M = 10)	< 0,1

Additional information
Full text of classification: see section 16

SECTION 4: First aid measures

4.1. **Description of first aid measures**

General information

In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

In case of inhalation
Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.

Following skin contact
Take off immediately all contaminated clothing. After contact with skin, wash immediately with plenty of water and soap. Do nor pull bonded skin apart. It may be gently peeled apart using a blunt object such as a spoon, prerably after soaking in war 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 the adhesive has been removed from the skin.

After 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.Keep eye covered until debonding is complete, usually within 1-3 days. Do not force eye open. Medical advice should be sought.

Following 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).If lips are accidentally stuck together apply warmwater 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.

4.2. **Most important symptoms and effects, both acute and delayed**
In all cases of doubt, or when symptoms persist, seek medical advice.Dyspnoea

4.3. **Indication of any immediate medical attention and special treatment needed**
First Aid, decontamination, treatment of symptoms.

Symptoms
Dyspnoea In the case of lung irritation: Primary treatment using corticoide spray, eg. Auxiloson spray, Pulmicort-dosage-spray. (Auxiloson and Pulmicort are registered trademarks.)

SECTION 5: Firefighting measures

5.1. **Extinguishing media**

Suitable extinguishing media
alcohol resistant foam, carbon dioxide, Powder, spray mist, (water)

Unsuitable extinguishing media
strong water jet

5.2. **Special hazards arising from the substance or mixture**
Dense black smoke occurs during fire. Inhaling hazardous decomposing products can cause serious health damage.

5.3. **Advice for firefighters**
Provide a conveniently located respiratory protective device. Do not allow water used to extinguish fire to enter drains, ground or waterways. Cool closed containers that are near the source of the fire.

SECTION 6: Accidental release measures

6.1. **Personal precautions, protective equipment and emergency procedures**
Keep away from sources of ignition. Ventilate affected area. Do not breathe vapours.

6.2. **Environmental precautions**
Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

6.3. **Methods and material for containment and cleaning up**
Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13). Clean using cleansing agents. Do not use solvents.

6.4. **Reference to other sections**
Observe protective provisions (see section 7 and 8).

SECTION 7: Handling and storage

7.1. **Precautions for safe handling**

Advices on safe handling

Avoid contact with skin, eyes and clothes. When using do not eat, drink or smoke. Personal protection equipment: refer to section 8. Follow the legal protection and safety regulations.

Further information
Vapours are heavier than air. Vapours form explosive mixtures with air.

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

Requirements for storage rooms and vessels
Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSiVO). Keep container tightly closed. Do not empty containers with pressure - no pressure vessel! Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

Hints on joint storage
Keep away from strongly acidic and alkaline materials as well as oxidizers.

Further information on storage conditions
Take care of instructions on label. Store in a well-ventilated and dry room at temperatures between 5 °C and 15 °C. Protect from heat and direct sunlight. Keep container tightly closed. Remove all sources of ignition. Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

7.3. **Specific end use(s)**
Observe technical data sheet. Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1. **Control parameters**
Occupational exposure limit values

ethyl 2-cyanoacrylate
Index No. 607-236-00-9 / EC No. 230-391-5 / CAS No. 7085-85-0

STEL: 1,5 mg/m3; 0,3 ppm

1,4-dihydroxybenzene
Index No. 604-005-00-4 / EC No. 204-617-8 / CAS No. 123-31-9

TWA: 0,5 mg/m3

Additional information
TWA : Long-term occupational exposure limit value
STEL : short-term occupational exposure limit value
Ceiling : peak limitation

8.2. **Exposure controls** *
Provide good ventilation. This can be achieved with local or room suction. If this should not be sufficient to keep aerosol and

solvent vapour concentration below the exposure limit values, a suitable respiratory protection must be used.

Personal protection equipment

Respiratory protection
If the workplace limit values (AGW) are exceeded, a suitable breathing apparatus must be worn.Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190). Use only respiratory protection equipment with CE-symbol including four digit test number.Use combination filters according to EN 14387.
Suitable respiratory protection apparatus: ABEK-P2

Hand protection
For prolonged or repeated handling the following glove material must be used: NBR (Nitrile rubber)
Thickness of the glove material > 0,4 mm ; Breakthrough time: > 480 min.
Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin. Recommended glove articles EN ISO 374
Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

Eye/face protection
Wear eye glasses with side protection according to EN 166.

Body protection
Wear suitable protective clothing.

Protective measures
After contact clean skin thoroughly with water and soap or use appropriate cleanser. See chapter 4 of the safety data sheet (First-aid measures)

Environmental exposure controls
Do not allow to enter into surface water or drains. See section 7. No additional measures necessary.

SECTION 9: Physical and chemical properties

9.1. **Information on basic physical and chemical properties**

Physical state:	**Liquid**
Appearance:	**Liquid**
Colour:	**colourless**
Odour:	**characteristic**
Odour threshold:	**not applicable**
Melting point/freezing point:	**-25 °C** Source: ethyl 2-cyanoacrylate
Initial boiling point and boiling range:	**not applicable**
Flammability:	**Combustible liquid.**
Lower and upper explosion limit:	
Lower explosion limit:	**not applicable**
Upper explosion limit:	**not applicable**
Flash point:	**87 °C**
Auto-ignition temperature:	**not applicable**
Decomposition temperature:	**not applicable**
pH at 20 °C:	**not relevant**
Cinematic viscosity (40°C):	**972,22 mm²/s**
Viscosity at 20 °C:	**600 - 1500 mPas**
Solubility(ies):	
Water solubility at 20 °C:	**insoluble**
Partition coefficient: n-octanol/water:	**see section 12**
Vapour pressure at 20 °C:	**not applicable**
Density and/or relative density:	
Density at 20 °C:	**1,08 g/cm³**
Relative vapour density:	**not applicable**
particle characteristics:	**not applicable**

9.2. **Other information**

solvent content:

Organic solvents:	**0 weight-%**
Water:	**0 weight-%**
Solvent separation test:	**< 3 weight-% (ADR/RID)**

SECTION 10: Stability and reactivity

10.1. **Reactivity**
No information available.

10.2. **Chemical stability**
Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7.

10.3. **Possibility of hazardous reactions**
Reaction with: Alcohols, Amines, Acids , alkalines.
Reaction with: Water

10.4. **Conditions to avoid**
Hazardous decomposition byproducts may form with exposure to high temperatures.

10.5. **Incompatible materials**
not applicable

10.6. **Hazardous decomposition products**
Hazardous decomposition byproducts may form with exposure to high temperatures, e.g.: carbon dioxide, carbon monoxide, smoke, nitrogen oxides.

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.

Skin corrosion/irritation; Serious eye damage/eye irritation

Causes skin irritation.

Causes serious eye irritation.

Respiratory or skin sensitisation

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

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

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

STOT-single exposure; STOT-repeated exposure

May cause respiratory irritation.

Aspiration hazard

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

Practical experience/human evidence

Acute toxicity (dermal) LD50: Rabbit > 2000 mg/kg
Acute toxicity (oral) LD50: Rat > 5000 mg/kg

Overall assessment on CMR properties

The ingredients in this mixture do not meet the criteria for classification as CMR category 1A or 1B according to CLP.

Remark

There is no information available on the preparation itself .

11.2. **Information on other hazards**

Endocrine disrupting properties
No information available.

SECTION 12: Ecological information

Classification according to Regulation (EC) No 1272/2008 [CLP]

Do not allow to enter into surface water or drains.

12.1. **Toxicity**
Based on available data, the classification criteria are not met.

12.2. **Persistence and degradability**
Toxicological data are not available.

12.3. **Bioaccumulative potential**
Toxicological data are not available.

12.4. **Mobility in soil**
Toxicological data are not available.

12.5. **Results of PBT and vPvB assessment**
The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. **Endocrine disrupting properties**
No information available.

12.7. **Other adverse effects**
No information available.

SECTION 13: Disposal considerations

13.1. **Waste treatment methods**

Appropriate disposal / Product
Recommendation
Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.
Observe in addition any national regulations!

List of proposed waste codes/waste designations in accordance with EWC
080409* Waste adhesives and sealants containing organic solvents or other dangerous substances
*Hazardous waste according to Directive 2008/98/EC (waste framework directive).

Appropriate disposal / Package
Dispose of packaging and contaminated filters at a offical hazardous waste incinerator facility.
Recommendation:
Waste codes / waste designations according to EWC / AVV: 15 01 10*
Non-contaminated packages may be recycled.

SECTION 14: Transport information

No dangerous good in sense of this transport regulation.

14.1. **UN number or ID number**
not applicable

14.2. **UN proper shipping name**

14.3. **Transport hazard class(es)**
not applicable

14.4. **Packing group** *
not applicable

14.5. **Environmental hazards**

Land transport (ADR/RID)	not applicable
Marine pollutant	not applicable

14.6. **Special precautions for user**
Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.
Advices on safe handling: see parts 6 - 8

Further information

Land transport (ADR/RID)

Tunnel restriction code -

Sea transport (IMDG)

EmS-No. not applicable

14.7. **Maritime transport in bulk according to IMO instruments**

No transport as bulk according IBC - Code.

SECTION 15: Regulatory information

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

EU legislation

Directive 2010/75/EU on industrial emissions [Industrial Emissions Directive]
VOC-value (in g/L): 0

National regulations

Restrictions of occupation
Observe employment restrictions under the Maternity Protection Directive 92/85/EEC or stricter national regulations, if applicable.

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC) or stricter national regulations, if applicable.

Further details:

For professional use only. Product is not intended for consumer use.

Substance/product listed in the following inventories:
AICS no informtion
DSL no information
EHS no information
IECSC no information
KECI no information
MITI no information
NZLoC no information
PICCS no information
TCSI no information
TSCA no information

15.2. **Chemical Safety Assessment**
For the following substances of this mixture a chemical safety assessment has been carried out:

EC No. CAS No.	Designation	REACH No.
230-391-5 7085-85-0	ethyl 2-cyanoacrylate	01-2119527766-29

SECTION 16: Other information

Full text of classification in section 3:

Eye Irrit. 2 / H319	Serious eye damage/eye irritation	Causes serious eye irritation.
STOT SE 3 / H335	STOT-single exposure	May cause respiratory irritation.
Skin Irrit. 2 / H315	Skin corrosion/irritation	Causes skin irritation.
Carc. 2 / H351	Carcinogenicity	Suspected of causing cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
Muta. 2 / H341	Germ cell mutagenicity	Suspected of causing genetic defects (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
Acute Tox. 4 / H302	Acute toxicity (oral)	Harmful if swallowed.
Eye Dam. 1 / H318	Serious eye damage/eye irritation	Causes serious eye damage.
Skin Sens. 1 / H317	Respiratory or skin sensitisation	May cause an allergic skin reaction.
Aquatic Acute 1 / H400	Hazardous to the aquatic environment	Very toxic to aquatic organisms.

Abbreviations and acronyms

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
OEL	Occupational Exposure Limit Value
BLV	Biological Limit Value
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
CMR	Carcinogenic, Mutagenic and Reprotoxic
DIN	German Institute for Standardization / German industrial standard
DNEL	Derived No-Effect Level
EAKV	European Waste Catalogue Directive
EC	Effective Concentration
EC	European Community
EN	European Standard
IATA-DGR	International Air Transport Association – Dangerous Goods Regulations
IBC Code	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO-TI	International Civil Aviation Organization Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG Code	International Maritime Code for Dangerous Goods
ISO	International Organization for Standardization
LC	Lethal Concentration
LD	Lethal Dose
MARPOL	Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
OECD	Organisation for Economic Cooperation and Development
PBT	persistent, bioaccumulative, toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
UN	United Nations
VOC	Volatile Organic Compounds
vPvB	very persistent and very bioaccumulative

Abbreviations and acronyms

n.a. = not applicable
n.b. = not determined

Further information

Classification according to Regulation (EC) No 1272/2008 [CLP]

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations.Without written approval, the product must not be used for purposes different from those mentioned in section 1.It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations.The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.

* Data changed compared with the previous version