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

1.1. Product identifier

FINOCOLL V 40 Instant Adhesive

REF 19981 / 19983

Further trade names

ETHYL CYANOACRYLATE

Product group:	Carbonsäureester
CAS No:	7085-85-0
Index No:	607-236-00-9
EC No:	230-391-5
UFI:	**1NAS-91HW-M00Y-CCE8**

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

Use of the substance/mixture

Excellently suitable for repairs of fractured teeth, plaster and investment materials and of connecting bars in partial dentures as well as for fixations prior to furnace soldering.

1.3. Details of the supplier of the safety data sheet

Company name:	FINO GmbH	
Street:	Mangelsfeld 18	
Place:	D-97708 Bad Bocklet	
Telephone:	+49-97 08-90 94 20	Telefax: +49-97 08-90 94 21
e-mail:	info@fino.com	Internet: www.fino.com
Contact person:	Joachim Mahlmeister	Telephone: +49-97 08-90 94 20
e-mail:	info@fino.com	
Responsible Department:	This number can only be reached during our office hours, Monday to Friday from 8 a.m. to 5 p.m.	

1.4. Emergency telephone number:

+49-89-1 92 40
POISON CENTER München
24 hour(s) 7 day(s)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Skin Irrit. 2; H315
Eye Irrit. 2; H319
STOT SE 3; H335

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

ethyl 2-cyanoacrylate

Signal word: Warning

Pictograms:

Hazard statements

H335 May cause respiratory irritation.

H319	Causes serious eye irritation.
H315	Causes skin irritation.

Precautionary statements

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear Protective gloves /Eye protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

Special labelling of certain mixtures

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

Additional advice on labelling

The product is classified and labelled according to EC directives or corresponding national laws.
Classification according to Regulation (EC) No 1272/2008 [CLP]

2.3. Other hazards

No specific if used according to specifications.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Cyanoacrylate adhesive

Sum formula: C6H7NO2

Molecular weight: 125,13

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
7085-85-0	ethyl 2-cyanoacrylate			>80 - <100 %
	230-391-5	607-236-00-9		
	Skin Irrit. 2, Eye Irrit. 2, STOT SE 3; H315 H319 H335			
123-31-9	1,4-dihydroxybenzene; hydroquinone; quinol			>=0,01-<0,1 %
	204-617-8	604-005-00-4		
	Carc. 2, Muta. 2, Acute Tox. 4, Eye Dam. 1, Skin Sens. 1, Aquatic Acute 1; H351 H341 H302 H318 H317 H400			

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

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
7085-85-0	230-391-5	ethyl 2-cyanoacrylate	>80 - <100 %
	oral: LD50 = > 5000 mg/kg STOT SE 3; H335: >= 10 - 100		
123-31-9	204-617-8	1,4-dihydroxybenzene; hydroquinone; quinol	>=0,01-<0,1 %
	oral: LD50 = 302 mg/kg Aquatic Acute 1; H400: M=10		

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Damage can be caused through mechanical influence of the product (eg. sticking).

After inhalation

Provide fresh air.

Seek medical attention if problems persist.

After contact with skin

Soak affected skin areas for a long time with warm soapsuds. Subsequently grease well and thoroughly for a couple of times. Product residues disengage from skin after a couple of hours. Damage can be caused through mechanical influence of the product (eg. sticking). Do not tear agglutinated skin parts apart. After wetting with warm soap water they can be carefully separated with a blunt object e.g. a spoon. In case the lips are accidentally glued together apply warm water to the lips. Make sure of the best possible wetting with saliva and apply intraoral pressure. Peel or roll lips until they separate. Do not try to tear the lips apart by moving them in an opposite direction.

After contact with eyes

If the eye is so agglutinated that it cannot be opened release eyelashes with warm water through the application of a wet cotton ball. Cyan-acrylate cured at the eye protein, which causes lacrimation. This helps to dissolve the glue again. Keep eye covered until the glue has completely separated, which will usually take 1 to 3 days.

Do not force eyes open. Seek medical treatment if solid particles of the cyan-acrylate are trapped under the lid and thus cause injury through friction.

After ingestion

Make sure that the air way is free. The product polymerises immediately intraorally whereby it is almost impossible to swallow it. Saliva will slowly separate the cured product from the mouth (several hours).

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

After eye contact: Irritant, Conjunctival oedema (chemosis).

Following skin contact: erythema (redness), Ignition

Respiratory tract: Irritant, Cough, Dyspnoea

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

Special First Aid training necessary.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Foam, Extinguishing powder, Carbon dioxide (CO2), Water mist

Unsuitable extinguishing media

Not known.

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Carbon dioxide (CO2), Carbon monoxide

Use water spray jet to protect personnel and to cool endangered containers.

Carbon monoxide, Nitrogen, irritating organic vapors.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Ventilate affected area.

Avoid contact with eyes and skin.

Ensure good ventilation / exhaustion at the workplace.

For non-emergency personnel

Emergency procedures

Remove persons to safety. Remove victim out of the danger area.
The danger areas must be delimited and identified using relevant warning and safety signs.

For emergency responders

Wear breathing apparatus if exposed to vapours/dusts/aerosols.
Wear personal protection equipment (refer to section 8).

6.2. Environmental precautions

Do not allow to enter into surface water or drains.
Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

For containment

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).
Following consultation with waste management company and after biological pre-treatment, landfill together with household waste.

For cleaning up

Do not flush with water or watery cleaning agents
For cleaning, approved industrial vacuum cleaners are recommended, dust class:
Collect in closed and suitable containers for disposal.

Other information

Collect with a cloth or cellulose and dispose. polymerises with water Take up mechanically.

6.4. Reference to other sections

See protective measures under point 7 and 8.
Treat the recovered material as prescribed in the section on waste disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Provide adequate ventilation as well as local exhaustion at critical locations. Handling larger quantities Odour threshold: approx. 1-2 ppm

Advice on protection against fire and explosion

Usual measures for fire prevention.

Advice on general occupational hygiene

The usual precautionary measures are to be adhered to when handling chemicals.
When using do not eat, drink or smoke.
Keep away from food, drink and animal feedingstuffs.
Wash hands before breaks and after work.

Further information on handling

The product is intended for professional use.
Avoid contact with eyes and skin.
Wash hands before breaks and after work.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Store only in original container.

Hints on joint storage

Suitable container/equipment material: Polyethylene

Further information on storage conditions

Keep container tightly closed and at a temperature not exceeding {temp 2-8}.

7.3. Specific end use(s)

Cyanoacrylate containing adhesive.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
7085-85-0	Ethyl cyanoacrylate	0.3	1.5		STEL (15 min)	WEL
123-31-9	Hydroquinone	-	0.5		TWA (8 h)	WEL

DNEL/DMEL values

CAS No	Substance		
DNEL type	Exposure route	Effect	Value
7085-85-0	ethyl 2-cyanoacrylate		
Worker DNEL, long-term	inhalation	local	9,25 mg/m³
Worker DNEL, long-term	inhalation	systemic	9,25 mg/m³
Consumer DNEL, long-term	inhalation	local	9,25 mg/m³
Consumer DNEL, long-term	inhalation	systemic	9,25 mg/m³
123-31-9	1,4-dihydroxybenzene; hydroquinone; quinol		
Worker DNEL, long-term	inhalation	systemic	7,0 mg/m³
Worker DNEL, long-term	inhalation	local	1,0 mg/m³
Consumer DNEL, long-term	dermal	systemic	64,0 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	1,74 mg/m³
Consumer DNEL, long-term	inhalation	local	0,5 mg/m³

PNEC values

CAS No	Substance
Environmental compartment	Value
123-31-9	1,4-dihydroxybenzene; hydroquinone; quinol
Freshwater	0,0000114 mg/l
Marine water	0,0000114 mg/l
Freshwater sediment	0,00098 mg/kg
Marine sediment	0,00098 mg/kg
Secondary poisoning	0,71 mg/l
Soil	0,0000129 mg/kg

Additional advice on limit values

Long-term occupational exposure limit value : 9,25 mg/m³

8.2. Exposure controls

Appropriate engineering controls

Ensure good ventilation / exhaustion at the workplace.

Use appropriate respiratory protection. If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Filtering device with filter or ventilator filtering device of type: A

Individual protection measures, such as personal protective equipment

Eye/face protection

Eye glasses

Hand protection

The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. EN ISO 374: NBR (Nitrile rubber) = 0,4 mm
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
EN ISO 374: NBR (Nitrile rubber) = 0,4 mm
Use chemicals-resistant protective gloves made from neoprene. Polyethylene (PE), NR (natural rubber, Natural latex) Regularly change protective gloves.
Unsuitable material: PVC (polyvinyl chloride) Pull-over gloves of rubber.

Skin protection

Wear suitable protective clothing.

Respiratory protection

If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.
type 5 particle-tight (method A) Combination filtering device

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	colourless / gel formation
Odour:	stinging

Changes in the physical state

Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	> 149 °C
Softening point:	not applicable
Flash point:	80-93,4 °C

Flammability

Solid/liquid:	not applicable

Explosive properties

not explosive according to EU A.14

Lower explosion limits:	--
Upper explosion limits:	--
Auto-ignition temperature:	Not applicable.

Self-ignition temperature

Solid:	not determined
Decomposition temperature:	not applicable
pH-Value:	not determined
Viscosity / dynamic:	not applicable
Viscosity / kinematic:	not applicable

Solubility in other solvents

The polymer component is soluble in: Humidity
Acetone: miscible

Partition coefficient n-octanol/water:	not applicable
Vapour pressure: (at 25 °C)	< 0,3 hPa
Density (at 23,9 °C):	1,10 g/cm³
Relative vapour density:	not determined

9.2. Other information

Information with regard to physical hazard classes

Sustaining combustion: No data available

Other safety characteristics

Solvent content: not determined

Solid content: not determined

Evaporation rate: not determined

Further Information

SECTION 10: Stability and reactivity

10.1. Reactivity

Polymerisation Exothermic reaction with: Water, Amines, Alcohols, alkaline Avoid contact with the substance.

10.2. Chemical stability

Stable under normal storage conditions.

10.3. Possibility of hazardous reactions

See section Reactivity.

10.4. Conditions to avoid

The product is stable under storage at normal ambient temperatures.

10.5. Incompatible materials

No specific if used according to specifications.

10.6. Hazardous decomposition products

No decomposition if used according to specifications.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Acute toxicity

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

The classification criteria for this hazard class are not met by definition. Further information concerning special risk management measures: see annex of this safety data sheet (exposure scenarios).

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
7085-85-0	ethyl 2-cyanoacrylate				
	oral	LD50 > 5000 mg/kg		GESTIS	
123-31-9	1,4-dihydroxybenzene; hydroquinone; quinol				
	oral	LD50 302 mg/kg	Rat	IUCLID	

Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

Agglutinates skin within seconds. Is classified as low-toxic. Due to the fact that the product cures on the skin surface, allergic reactions are unlikely.

Sensitising effects

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

May cause sensitization by inhalation.

Carcinogenic/mutagenic/toxic effects for reproduction

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

STOT-single exposure

May cause respiratory irritation. (ethyl 2-cyanoacrylate)

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.

Specific effects in experiment on an animal

No data available.

Additional information on tests

No data available.

Practical experience

No special references.

11.2. Information on other hazards

Other information

No special precautionary measures.

SECTION 12: Ecological information

12.1. Toxicity

Do not allow to enter into surface water or drains.

12.2. Persistence and degradability

none Evidence exists for biodegradation processes.

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

12.4. Mobility in soil

This information is not available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.
The components in this formulation do not meet the criteria for classification as PBT or vPvB.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No specific information.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Following consultation with waste management company and after physico-chemical pre-treatment, landfill together with household waste. Send to a hazardous waste incinerator facility under observation of official regulations. Dispose of waste according to applicable legislation.

List of Wastes Code - residues/unused products

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

List of Wastes Code - used product

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

List of Wastes Code - contaminated packaging

150102 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); plastic packaging

Contaminated packaging

Dispose of waste according to applicable legislation.

SECTION 14: Transport information

Land transport (ADR/RID)	
14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.
Inland waterways transport (ADN)	
14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.
Marine transport (IMDG)	
14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.
Air transport (ICAO-TI/IATA-DGR)	
14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

2004/42/EC (VOC):	< 3,0 %
Information according to 2012/18/EU (SEVESO III):	Not subject to 2012/18/EU (SEVESO III)
Additional information:	0

Additional information

The product is classified and labelled according to EC directives or corresponding national laws.
Classification according to Regulation (EC) No 1272/2008 [CLP]

National regulatory information

Water hazard class (D): 1 - slightly hazardous to water

Additional information

"Accident Prevention Regulation VBG 81 ""Processing of Adhesives"""
Betriebssicherheitsverordnung (BetrSichV) ---

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 14.

Abbreviations and acronyms

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
"IATA-DGR: Dangerous Goods Regulations by the ""International Air Transport Association"" (IATA)"
ICAO: International Civil Aviation Organization
"ICAO-TI: Technical Instructions by the ""International Civil Aviation Organization"" (ICAO)"
ADR: Accord européen sur le transport 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 Harmonized 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)
STOT SE 1
Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
Skin Irrit. 2

Relevant H and EUH statements (number and full text)

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.
H351	Suspected of causing cancer.
H400	Very toxic to aquatic life.
EUH202	Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material. The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.

Identified uses

No	Short title	LCS	SU	PC	PROC	ERC	AC	TF	Specification
1	Adhesives	-	-	-	-	-	-	-	7085-85-0

LCS: Life cycle stages
SU: Sectors of use
PC: Product categories
PROC: Process categories
ERC: Environmental release categories
AC: Article categories
TF: Technical functions

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)