

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

Product identifier

Trade name: **CYANO EX**

Reference-no. / Version: 2501 / 2

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

This product may only be used in the manner provided. A liability for improper applications is excluded.

Application of the substance / the preparation:

(Please note the application instructions.)

Cyanoacrylat remover

Details of the supplier of the safety data sheet

Manufacturer/Supplier:

MEYER - HAAKE GmbH
Medical Innovations
Daimlerstr. 4
D-61239 Ober-Mörlen

Informing department: Qualitymanagement: ++49 - 6002 / 99270 - 0 (info@meyer-haake.com)
Emergency telephone number: Qualitymanagement: ++49 - 6002 / 99270 - 0 (On week days from 08:00 to 17:00 h)

2 Hazards identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC



Xi; Irritant

R36: Irritating to eyes.



F; Highly flammable

R11: Highly flammable.

R66-67: Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness.

Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

At long or repeated contact with skin it may cause dermatitis due to the degreasing effect of the solvent.

Has a narcotizing effect.

Classification system:

The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

Label elements

Labelling according to EU guidelines:

The product has been classified and labelled in accordance with EC Directives / Ordinance on Hazardous Materials.

Observe the normal safety regulations when handling chemicals.

Code letter and hazard designation of product:



Xi Irritant

F Highly flammable

Hazard-determining components of labelling: --

Risk phrases:

11 Highly flammable.

36 Irritating to eyes.

66 Repeated exposure may cause skin dryness or cracking.

67 Vapours may cause drowsiness and dizziness.

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Safety phrases:

- 2 Keep out of the reach of children.
- 16 Keep away from sources of ignition - No smoking.
- 23 Do not breathe fumes/aerosol.
- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 46 If swallowed, seek medical advice immediately and show this container or label.
- 56 Dispose of this material and its container to hazardous or special waste collection point.

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixtures

Description: Mixture of organic solvents.

Dangerous components:

CAS: 67-64-1 EINECS: 200-662-2	acetone	Xi R36; F R11 R66-67 Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	50 - 75%
CAS: 141-78-6 EINECS: 205-500-4	ethyl acetate	Xi R36; F R11 R66-67 Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	25 - 50%

SVHC (substances of very high concern): The product contains no listed substances.

Regulation (EC) No 648/2004 on detergents / Labelling for contents: This product is not under restriction of the regulation of EC 648/2004.

Regulation (EC) No 2032/2003 on biocidal-products: This product is not under restriction of the regulation of EC 2032/2003.

Additional information For the wording of the listed risk phrases refer to section 16.

4 First aid measures

Description of first aid measures

General information:

Instantly remove any clothing soiled by the product.



Remove the victim immediately from the danger area. If the patient is unwell consult a doctor and present this data sheet.

After inhalation: Supply fresh air; consult doctor in case of symptoms.

After skin contact: Instantly wash with water and soap and rinse thoroughly.

After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.

After swallowing: Do not induce vomiting; instantly call for medical help.

Information for doctor: None.

Most important symptoms and effects, both acute and delayed

Dizziness

Dazed

Indication of any immediate medical attention and special treatment needed Monitor circulation

5 Firefighting measures

Extinguishing media

Suitable extinguishing agents: CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

For safety reasons unsuitable extinguishing agents: Water with a full water jet.

Special hazards arising from the substance or mixture Can form explosive gas-air mixtures.

Advice for firefighters

Protective equipment: No special measures required.

Fire fighting information: Cool containers with water jet. Transport containers can burst explosively due to severe heat.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Keep away from ignition sources.

Environmental precautions: Prevent material from reaching sewage system, holes and cellars.

Methods and material for containment and cleaning up:

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

Ensure adequate ventilation.

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Reference to other sections
See Section 8 for information on personal protection equipment.

7 Handling and storage

Handling

Precautions for safe handling

Keep containers tightly sealed.
Store in cool, dry place in tightly closed containers.
Ensure good ventilation/exhaustion at the workplace.

Information about protection against explosions and fires:

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

Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and containers:

Store in cool location.
According to the water pollution class (refer to WGK, item 12), the country-specific regulations for storage of water-polluting substances are to be complied with.

Information about storage in one common storage facility:

Store away from oxidizing agents.
Do not store together with foodstuffs, semiluxuries or feeding stuffs.

Further information about storage conditions: Protect against frost, severe exposure to the sun and contaminants.

Recommended storage temperature: 15°C - 25°C

Specific end use(s) This produkt may be used only for discribed applications.

8 Exposure controls/personal protection

Additional information about design of technical systems: Provide good workplace ventilation/air extraction.

Control parameters

Components with critical values that require monitoring at the workplace:

CAS No.	Designation of material	%	Type	Value	Unit
67-64-1 acetone					
WEL (Great Britain)	Short-term value: 3620 mg/m ³ , 1500 ppm Long-term value: 1210 mg/m ³ , 500 ppm				
IOELV (European Union)	Long-term value: 1210 mg/m ³ , 500 ppm				
141-78-6 ethyl acetate					
WEL (Great Britain)	Short-term value: 400 ppm Long-term value: 200 ppm				

Additional information: The applicable WEL-list was used as the basis for the preparation and/or revision of this safety data sheet.

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and food.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes and skin.
Do not eat, drink, smoke or take snuff while working.
Use a moisturising skin cream after processing the product.

Breathing equipment:



Use breathing protection in case of insufficient ventilation.

Filter AX.

Protection of hands:



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

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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 in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:

Fluorocarbon rubber (Viton)

Not suitable are gloves made of the following materials: Natural rubber, NR

Eye protection:



Safety glasses.

Tightly sealed safety glasses.

Body protection:



Protective work clothing.

Light weight protective clothing

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:

Form: Fluid
Colour: Colourless
Smell: Characteristic

pH-value: Not applicable.

Change in condition:

Melting point/Melting range: Not determined
Boiling point/Boiling range: 55°C (DIN)

Flash point: -20°C (DIN 51755 / EN ISO 2719)

Ignition temperature: 460°C (DIN 51794)

Self-flammability: Product is not self-igniting.

Danger of explosion: Product is not explosive. However, formation of explosive air/steam mixtures is possible.

Critical values for explosion:

Lower: 2.1 Vol % (DIN 51649)
Upper: 13.0 Vol % (DIN 51649)
Oxidizing properties: Product is not oxidizing.

Steam pressure at 20°C: 247 hPa (DIN 51640)

Density at 20°C: 0.821 g/cm³ (DIN 51757)

Settled apparent density: Not applicable.

Solubility in / Miscibility with

Water: Not miscible or difficult to mix

Viscosity:

dynamic: Not determined.
kinematic: Not determined.

Solvent separation test: Not applicable.

Flammable components: 100.0 %

Water: 0.0 %

Other information None.

10 Stability and reactivity

Reactivity

Chemical stability

Conditions to be avoided: No decomposition when properly applied and stored.

Possibility of hazardous reactions Bei sachgemäßem Umgang keine gefährlichen Reaktionen bekannt.

Conditions to avoid No further relevant information available.

Incompatible materials: Strong oxidizing agents.

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Hazardous decomposition products: If handled and stored properly dangerous products of decomposition are not to be expected.
Additional information: There is no risk of decomposition or uncontrolled chemical reaction when the specified application conditions are complied with.

11 Toxicological information

Information on toxicological effects

Acute toxicity:

LD/LC50 values that are relevant for classification:

Due to § 7 of the animal protection law (FRG), no toxicological examination on living organisms was performed for this product. The following listed data are values from the literature which are available to us of individual ingredients, which do not claim to be exhaustive.

Components	Type	Value	Species
67-64-1 acetone			
Oral	LD50	5800 mg/kg (rat)	
Dermal	LD 50	20000 mg/kg (rbt)	
Inhalative	LC50/4	76 mg/l/4h (rat)	
141-78-6 ethyl acetate			
Oral	LD50	4935 mg/kg (rbt)	
Inhalative	LC50/4	1600 mg/l/4h (rat)	

Specific symptoms in biological assay: We do not have any knowledge of this.

Primary irritant effect:

on the skin:

No primary irritant effect.

Skin irritation possible due to drying effect.

on the eye: Irritant effect.

Sensitization: No sensitizing effect known.

Subacute to chronic toxicity:

Result: We do not have any toxicological data on this point.

Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:

Irritant

Repeated dose toxicity: Not tested.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction): None.

12 Ecological information

Toxicity

Aquatic toxicity: No further relevant information available.

Type of test Effective concentration Method Assessment

67-64-1 acetone	
EC50/16h	65 mg/l (BeS)
EC50/48h	6100 mg/l (Daphnia magna (großer Wasserfloh))
LC50/96h	5540 mg/l (Oncorhynchus mykiss (rainbow trout))
	7000 mg/l (Pimephales promelas)
141-78-6 ethyl acetate	
EC 10/16h	2000 mg/l (pseudomonas putida)
EC50/24h	724 mg/l (Daphnia magna (großer Wasserfloh))
LC0/48h	350 mg/l (Leuciscus idus (Goldorfe))

Persistence and degradability

Evaluation text: We do not have any data on this point.

Other information: The product has good biodegradable properties. (7d:>80%)

Behaviour in environmental systems:

Bioaccumulative potential

67-64-1 acetone	
Bioakkumulation	-0.24 log Pow (n.a)

Ecotoxic effects:

Remark: The product is high-volatile.

Behaviour in sewage processing plants:

Comment: The product does not impair the operation of a sewage plant.

Other information: None.

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Additional ecological information:

According to recipe contains the following heavy metals and compounds according to EC guideline NO. 76/464 EC: None

General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

Results of PBT and vPvB assessment No effects.

PBT: Not applicable.

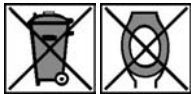
vPvB: Not applicable.

Other adverse effects No further relevant information available.

13 Disposal considerations

Waste treatment methods

Recommendation:



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

Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with local authority requirements.

Waste disposal key number:

The classification in a waste code according to the european waste catalogue (EWC) is to be made in accordance with the regional responsible for waste disposal.

European waste catalogue

07 00 00	WASTES FROM ORGANIC CHEMICAL PROCESSES
07 07 00	wastes from the MFSU of fine chemicals and chemical products not otherwise specified
07 07 04*	other organic solvents, washing liquids and mother liquors

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

Recommended cleaning agent: Water, if necessary with cleaning agent.

Cleaned/completely emptied packaging:

Packaging which does not exhibit any harmful adhering products (e.g. cured or cleaned) can be sent for reprocessing.

14 Transport information

Land transport ADR/RID



ADR/RID-GGVS/E Class: 3 (F1) Flammable liquids.

Kemler Number: 33

UN-Number: 1993

Packaging group: II

Label 3

UN proper shipping name: 1993 FLAMMABLE LIQUID, N.O.S. (vapor pressure at 50°C at most 110 kPa) (ACETONE, ETHYL ACETATE)

Contains: -

Limited quantities (LQ) 1L

Transport category 2

Tunnel restriction code D/E

Remarks: None.

Water pollutant class: WGK 1 (substance which slightly pollutes water)

Maritime transport IMDG/GGVSea:



IMDG/GGVSea Class: 3

UN Number: 1993

Label 3

Packaging group: II

EMS Number: F-E,S-E

Marine pollutant: No

Correct technical name: FLAMMABLE LIQUID, N.O.S. (ACETONE, ETHYL ACETATE)

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Remarks: None.

Air transport ICAO-TI and IATA-DGR:



ICAO/IATA Class: 3
UN/ID Number: 1993
Label: 3
Packaging group: II
PI Ltd Qty: Y 341
PI Pass.: 353
PI Cargo: 364
Correct technical name: FLAMMABLE LIQUID, N.O.S. (ACETONE, ETHYL ACETATE)
Comments: Please note the general packing instructions of IATA / ICAO.

UN "Model Regulation": UN1993, FLAMMABLE LIQUID, N.O.S., 3, II

Environmental hazards: -

Special precautions for user: Warning: Flammable liquids.

Transport/Additional information: The shipment of this product via post is regulated.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.

* 15 Regulatory information

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

Designation according to EC guidelines:

VOC (EU): 821.4 g/l

VOC (EU): 100.00 %

Remarks: This product is not under restriction of the regulation of EC 42/2004.

National regulations

Additional classification according to Decree on Hazardous Materials, Annex II: None.

Technical instructions (air):

Class	Share in %
II	50 - 75
NK	25 - 50

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

The above details are based on the latest state of our knowledge and do not represent any assurance of product properties. Processing notes for this product are listed in a technical data sheet. Moreover a material compatibility test is to be undertaken with these containers before use of other storage or transport containers than those used by the manufacturer.

Existing laws, decrees and regulations, even those which are not stated in this data sheet are to be complied with by the recipient of our products at his own responsibility.

Relevant phrases

The following risk-phrases belong to single-substances of this preparation (chapter 3). Those risk-phrases, which are relevant for the classification of this product, are listed in the chapter 2.

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

R11 Highly flammable.

R36 Irritating to eyes.

R66 Repeated exposure may cause skin dryness or cracking.

R67 Vapours may cause drowsiness and dizziness.

Department issuing data specification sheet:

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Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

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Safety data sheet
according to 1907/2006/EC, Article 31



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ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

[*] Those chapters marked with (*) were changed to the previous version of this MSDS.

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