Lockfast® LF406

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 30/08/2022 Revision date: 21/02/2024 Supersedes version of: 22/01/2024 Version: 3.0

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

1.1. Product identifier

Product form	:	Mixture
Product name	:	Lockfast® LF406
UFI	:	H800-D0S3-9001-DDVN
Type of product	:	ethyl 2-cyanoacrylate
Product group	:	End product

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

1.2.1. Relevant identified uses

Intended for general public

Main use category	:	Industrial use,Professional use,Consumer use
Use of the substance/mixture	:	Adhesives, binding agents
Function or use category	:	Adhesives, binding agents

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier
Cyanotec Ltd
Bay 2 building 62, third avenue,
Kingswinford,
Dudley West Midlands DY6 7XT
T +44(0)1384 294753
sales@cyanotec.com
www.cyanotec.com

Only Representative
Adhesivos Kyrax SLU
Carrer Illes Pituises 15
Reus, Tarragona
Spain
T +34 601985804
info@kyrax2021.com

1.4. Emergency telephone number

Emergency number : +44 (0)1384 294753
Office hours 0900-1700hrs MONDAY TO THURSDAY

Country/Area	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH	0344 892 0111	Only for healthcare professionals

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	H335

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

Adverse physicochemical, human health and environmental effects

May cause respiratory irritation. Causes skin irritation. Causes serious eye irritation.

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS07

Signal word (CLP) : Warning

Contains : ethyl 2-cyanoacrylate

Hazard statements (CLP) : H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.

Precautionary statements (CLP) : P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P261 - Avoid breathing Avoid breathing (dust, vapor, mist, gas).
P271 - Use only outdoors or in a well-ventilated area.
P405 - Store locked up.
P501 - Dispose of contents to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.

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

2.3. Other hazards

Other hazards which do not result in classification : None under normal conditions.

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
ETHYL-2-CYANOACRYLATE	CAS-No.: 7085-85-0 EC-No.: 230-391-5 EC Index-No.: 607-236-00-9 REACH-no: 01-2119527766-29, 02-0000403180-68, 05-0000403157-85, UK-01-0847871764-1	50 – 100	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
HYDROQUINONE	CAS-No.: 123-31-9 EC-No.: 204-617-8 EC Index-No.: 604-005-00-4 REACH-no: 01-2119524016-51	0.01 – 0.1	Carc. 2, H351 Muta. 2, H341 Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=10)

Specific concentration limits:		
Name	**Product identifier**	**Specific concentration limits (%)**
ETHYL-2-CYANOACRYLATE	CAS-No.: 7085-85-0 EC-No.: 230-391-5 EC Index-No.: 607-236-00-9 REACH-no: 01-2119527766-29, 02-0000403180-68, 05-0000403157-85, UK-01-0847871764-1	(10 ≤ C < 100) STOT SE 3, H335

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Move to fresh air. Call a poison center or a doctor if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.

First-aid measures after skin contact : Exothermic reaction on contact with : skin. Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after inhalation : May cause irritation to the respiratory tract, sneezing, coughing, burning sensation of throat with constricting sensation of the larynx and difficulty in breathing. May cause respiratory irritation.

Symptoms/effects after skin contact : Rednesses. Irritation.

Symptoms/effects after eye contact : Eye irritation.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Clean up any spills as soon as possible, using an absorbent material to collect it.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Ventilate spillage area. Avoid breathing fume, gas, mist, spray, vapours, dust. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Ventilate area. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Use only outdoors or in a well-ventilated area. Avoid breathing fume, gas, mist, spray, vapours, dust. Avoid contact with skin and eyes. Wear personal protective equipment.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ensure adequate ventilation, especially in confined areas.

Storage conditions : Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

Incompatible products : Strong bases.

Incompatible materials : Do not allow contact with water.

7.3. Specific end use(s)

adhesives.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Lockfast® LF406	
United Kingdom - Occupational Exposure Limits	
Local name	Ethyl cyanoacrylate
WEL STEL (OEL STEL)	1.5 mg/m³
	0.3 ppm
Regulatory reference	EH40/2005 (Third edition, 2018). HSE

ETHYL-2-CYANOACRYLATE (7085-85-0)	
United Kingdom - Occupational Exposure Limits	
Local name	Ethyl cyanoacrylate
WEL STEL (OEL STEL)	1.5 mg/m³
	0.3 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

HYDROQUINONE (123-31-9)	
United Kingdom - Occupational Exposure Limits	
Local name	Hydroquinone
WEL TWA (OEL TWA)	0.5 mg/m³
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:
Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):

8.2.2.1. Eye and face protection

Eye protection:
Safety glasses

Eye protection			
Type	**Field of application**	**Characteristics**	**Standard**
Safety glasses		With side shields	EN 166

8.2.2.2. Skin protection

Skin and body protection:
Wear suitable protective clothing

Skin and body protection	
Type	**Standard**
Protective clothing	EN 14605

Hand protection:
Protective gloves

Hand protection					
Type	**Material**	**Permeation**	**Thickness (mm)**	**Penetration**	**Standard**
Disposable gloves	Nitrile rubber (NBR)		≥0.4 mm		EN ISO 374

8.2.2.3. Respiratory protection

Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment

Respiratory protection			
Device	**Filter type**	**Condition**	**Standard**
Full face mask	Filter A1/B1, Type A - High-boiling (>65 °C) organic compounds		EN 14387

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:
Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Colourless.
Appearance	:	Liquid.
Odour	:	characteristic.
Odour threshold	:	No data available No available data
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	> 149 °C
Flammability	:	Non flammable.
Explosive properties	:	No data available.
Oxidising properties	:	No data available.
Lower explosion limit	:	Not available
Upper explosion limit	:	Not available
Flash point	:	80 – 93.4 °C Closed cup
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
pH	:	Not applicable.
Viscosity, kinematic	:	≈ 27 mm²/s
Viscosity, dynamic	:	≈ 30 mPa·s
Solubility	:	No data available. Water: No data available Ethanol: No data available Ether: No data available Acetone: No data available Organic solvent:No data available
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	0.27 mbar
Vapour pressure at 50°C	:	< 0.7 bar
Density	:	≈ 1.08 g/ml
Relative density	:	Not available
Relative vapour density at 20°C	:	Not available
Relative gas density	:	No data available
Particle characteristics	:	Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Critical temperature	:	No data available

9.2.2. Other safety characteristics

Relative evaporation rate (butylacetate=1)	:	No data available
Relative evaporation rate (ether=1)	:	No data available
VOC content	:	< 3 %
Additional information	:	No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Incompatible with water, humid air.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	:	Not classified
Acute toxicity (dermal)	:	Not classified
Acute toxicity (inhalation)	:	Not classified

Lockfast® LF406	
LD50 oral rat	> 5000 mg/kg
LD50 dermal	> 2000 mg/kg

ETHYL-2-CYANOACRYLATE (7085-85-0)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method)
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Animal sex: male, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

HYDROQUINONE (123-31-9)	
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))

Skin corrosion/irritation	:	Causes skin irritation. pH: Not applicable.
Serious eye damage/irritation	:	Causes serious eye irritation. pH: Not applicable.
Respiratory or skin sensitisation	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified

STOT-single exposure : May cause respiratory irritation.

ETHYL-2-CYANOACRYLATE (7085-85-0)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

Lockfast® LF406	
Viscosity, kinematic	≈ 27 mm²/s

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

No additional information available

11.2.2. Other information

Potential adverse human health effects and symptoms : No data available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short–term (acute) : Not classified
Hazardous to the aquatic environment, long–term (chronic) : Not classified

HYDROQUINONE (123-31-9)	
LC50 - Fish [1]	0.638 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	0.134 mg/l Test organisms (species): Daphnia magna
EC50 - Crustacea [2]	0.061 mg/l Test organisms (species): Daphnia magna

12.2. Persistence and degradability

Lockfast® LF406	
Persistence and degradability	Not rapidly degradable

ETHYL-2-CYANOACRYLATE (7085-85-0)	
Persistence and degradability	Not rapidly degradable

HYDROQUINONE (123-31-9)	
Persistence and degradability	Not rapidly degradable

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
European List of Waste (LoW, EC 2000/532) : 08 04 09* - waste adhesives and sealants containing organic solvents or other dangerous substances

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
NOT SUBJECT				
14.1. UN number or ID number				
UN 3334	Not regulated	UN 3334	Not regulated	Not regulated
14.2. UN proper shipping name				
Aviation regulated liquid, n.o.s. (Contains cyanoacrylate)	Not regulated	Aviation regulated liquid, n.o.s. (Contains cyanoacrylate)	Not regulated	Not regulated
Transport document description				
UN 3334 Aviation regulated liquid, n.o.s. (Contains cyanoacrylate), 9	Not regulated	UN 3334 Aviation regulated liquid, n.o.s. (Contains cyanoacrylate), 9, III	Not regulated	Not regulated
14.3. Transport hazard class(es)				
9	Not regulated	9	Not regulated	Not regulated
Not applicable	Not regulated		Not regulated	Not regulated
14.4. Packing group				
Not applicable	Not regulated	III	Not regulated	Not regulated
14.5. Environmental hazards				
Dangerous for the environment: No	Not regulated	Dangerous for the environment: No	Not regulated	Not regulated
No supplementary information available				

14.6. Special precautions for user

Overland transport

Classification code (ADR) : M11
EAC code : 2Z

Transport by sea
Not regulated

Air transport

PCA Excepted quantities (IATA)	:	E1
PCA Limited quantities (IATA)	:	Y964
PCA limited quantity max net quantity (IATA)	:	30kgG
PCA packing instructions (IATA)	:	964
PCA max net quantity (IATA)	:	100L
CAO packing instructions (IATA)	:	964
CAO max net quantity (IATA)	:	220L
Special provisions (IATA)	:	A27
ERG code (IATA)	:	9A

Inland waterway transport
Not regulated

Rail transport
Not regulated

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)	
Reference code	**Applicable on**
3(b)	Lockfast® LF406

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

VOC Directive (2004/42)

VOC content : < 3 %

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes			
Section	**Changed item**	**Change**	**Comments**
	Revision date	Modified	
	Supersedes version of	Modified	
3	Composition/information on ingredients	Modified	

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet

Abbreviations and acronyms:	
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-statements:	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Carc. 2	Carcinogenicity, Category 2
EUH202	Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
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.
Muta. 2	Germ cell mutagenicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.