

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 20.10.2023

Version number 3 (replaces version 2)

Revision: 20.10.2023

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

1.1 Product identifier

- Trade name: **Darkener Plus**
- Article number: 10991, 10992, 10993
- UFI: 6FU1-S0HN-700E-C1A9

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

Protective impregnation

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

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

- Flam. Liq. 3 H226 Flammable liquid and vapour.
STOT SE 3 H336 May cause drowsiness or dizziness.
Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.
Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms

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



GHS02 GHS07 GHS08

Signal word

Danger

Hazard-determining components of labelling:

2,2,4,6,6-pentamethylheptan
1-methoxy-2-propanol
Hydrocarbons, C10-C12, Isoalkanes, <2% aromatics

Hazard statements

H226 Flammable liquid and vapour.
H336 May cause drowsiness or dizziness.
H304 May be fatal if swallowed and enters airways.
H412 Harmful to aquatic life with long lasting effects.

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.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 Avoid breathing mist/vapours/spray.

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P273	Avoid release to the environment.
P280	Wear protective gloves.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304+P312	IF INHALED: Call a POISON CENTER/doctor if you feel unwell.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.
 · **vPvB:** Not applicable.

· **Determination of endocrine-disrupting properties**

For information on endocrine disrupting properties see section 11.

SECTION 3: Composition/information on ingredients**3.2 Mixtures**· **Description:** Mixture of substances listed below with nonhazardous additions.· **Dangerous components:**

CAS: 107-98-2 EINECS: 203-539-1 Index number: 603-064-00-3 Reg.nr.: 01-2119457435-35 02-2119752510-47-0000	1-methoxy-2-propanol Flam. Liq. 3, H226 STOT SE 3, H336	25-50%
CAS: 13475-82-6 EINECS: 236-757-0 Reg.nr.: 01-2119490725-29	2,2,4,6,6-pentamethylheptan Flam. Liq. 3, H226 Asp. Tox. 1, H304 Aquatic Chronic 4, H413 EUH066	12.5-25%
EC number: 923-037-2 Reg.nr.: 01-2119471991-29-xxxx	Hydrocarbons, C10-C12, Isoalkanes, <2% aromatics Flam. Liq. 3, H226 Asp. Tox. 1, H304 Aquatic Chronic 2, H411	12.5-25%
CAS: 68909-20-6 EINECS: 272-697-1 Index number: 014-052-00-7	silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica STOT RE 2, H373 EUH066	1-5%
CAS: 67-56-1 EINECS: 200-659-6 Index number: 603-001-00-X Reg.nr.: 01-2119433307-44	methanol Flam. Liq. 2, H225 Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331 STOT SE 1, H370 Specific concentration limits: STOT SE 1; H370: C ≥ 10 % STOT SE 2; H371: 3 % ≤ C < 10 %	<1%

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CAS: 123-86-4 EINECS: 204-658-1 Index number: 607-025-00-1 Reg.nr.: 01-2119485493-29	n-butyl acetate Flam. Liq. 3, H226 STOT SE 3, H336 EUH066	<1%
CAS: 1589-47-5 EINECS: 216-455-5 Index number: 603-106-00-0 Reg.nr.: 02-2119752454-37-0000	2-methoxypropanol Flam. Liq. 3, H226 Repr. 1B, H360D Eye Dam. 1, H318 Skin Irrit. 2, H315; STOT SE 3, H335	<1%

· 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.
Take affected persons out into the fresh air.
Position and transport stably in side position.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
- 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.
Drink plenty of water and provide fresh air. Call for a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

Breathing difficulty
 Headache
 Dizziness
 Dizziness
 Nausea
 Profuse sweating
 Danger of impaired breathing.

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

If swallowed, gastric irrigation with added, activated carbon.

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

Formation of toxic gases is possible during heating or in case of fire.
 In case of fire, the following can be released:
 Carbon monoxide (CO)
 Under certain fire conditions, traces of other toxic gases cannot be excluded.

5.3 Advice for firefighters

- Protective equipment: Do not inhale explosion gases or combustion gases.
Wear fully protective suit.
Wear self-contained respiratory protective device.

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- Additional information Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
 - Ensure adequate ventilation
 - Keep away from ignition sources.
 - Use respiratory protective device against the effects of fumes/dust/aerosol.
 - Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**
 - Inform respective authorities in case of seepage into water course or sewage system.
 - Do not allow product to reach sewage system or any water course.
 - 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).
 - Dispose contaminated material as waste according to section 13.
 - Ensure adequate ventilation.
- **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**
 - Store in cool, dry place in tightly closed receptacles.
 - Keep away from heat and direct sunlight.
 - Prevent formation of aerosols.
 - Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
 - Use only in well ventilated areas.
 - Keep receptacles tightly sealed.
 - Ensure good ventilation/exhaustion at the workplace.
- Information about fire - and explosion protection:
 - Keep ignition sources away - Do not smoke.
 - Protect against electrostatic charges.
 - Protect from heat.
- **7.2 Conditions for safe storage, including any incompatibilities**
- Storage:
- Requirements to be met by storerooms and receptacles:
 - Store in a cool location.
 - Store only in the original receptacle.
 - Prevent any seepage into the ground.
- Information about storage in one common storage facility:
 - Store away from oxidising agents.
 - Store away from foodstuffs.
- Further information about storage conditions:
 - Store in cool, dry conditions in well sealed receptacles.
 - Keep container tightly sealed.
 - Protect from heat and direct sunlight.
 - Store receptacle in a well ventilated area.
- Storage class:
 - 3

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· **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:**107-98-2 1-methoxy-2-propanol**

IOELV	Short-term value: 568 mg/m ³ , 150 ppm Long-term value: 375 mg/m ³ , 100 ppm Skin
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67-56-1 methanol

IOELV	Long-term value: 260 mg/m ³ , 200 ppm Skin
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123-86-4 n-butyl acetate

IOELV	Short-term value: 723 mg/m ³ , 150 ppm Long-term value: 241 mg/m ³ , 50 ppm
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· DNELs**107-98-2 1-methoxy-2-propanol**

Oral	DNEL (Langzeit-wiederholt)	33 mg/kg bw/day (BEV)
Dermal	DNEL (Langzeit-wiederholt)	50.6 mg/kg bw/day (ARB) 18.1 mg/kg bw/day (BEV)
Inhalative	DNEL (Kurzzeit-akut)	553.5 mg/m ³ Air (ARB)
	DNEL (Langzeit-wiederholt)	369 mg/m ³ Air (ARB) 43.9 mg/m ³ Air (BEV)

67-56-1 methanol

Oral	DNEL (Kurzzeit-akut)	4 mg/kg bw/day (BEV)
	DNEL (Langzeit-wiederholt)	4 mg/kg bw/day (BEV)
Dermal	DNEL (Kurzzeit-akut)	20 mg/kg bw/day (ARB) 4 mg/kg bw/day (BEV)
	DNEL (Langzeit-wiederholt)	20 mg/kg bw/day (ARB) 4 mg/kg bw/day (BEV)
Inhalative	DNEL (Kurzzeit-akut)	130 mg/m ³ Air (ARB) 26 mg/m ³ Air (BEV)
	DNEL (Langzeit-wiederholt)	130 mg/m ³ Air (ARB) 26 mg/m ³ Air (BEV)

123-86-4 n-butyl acetate

Oral	DNEL (Kurzzeit-akut)	2 mg/kg bw/day (BEV)
	DNEL (Langzeit-wiederholt)	2 mg/kg bw/day (BEV)
Dermal	DNEL (Kurzzeit-akut)	11 mg/kg bw/day (ARB) 6 mg/kg bw/day (BEV)
	DNEL (Langzeit-wiederholt)	7 mg/kg bw/day (ARB) 3.4 mg/kg bw/day (BEV)
Inhalative	DNEL (Kurzzeit-akut)	600 mg/m ³ Air (ARB) 300 mg/m ³ Air (BEV)
	DNEL (Langzeit-wiederholt)	300 mg/m ³ Air (ARB) 35.7 mg/m ³ Air (BEV)

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· PNECs

107-98-2 1-methoxy-2-propanol

PNEC (wässrig)	100 mg/l (KA) 1 mg/l (MW) 10 mg/l (SW) 100 mg/l (WAS)
PNEC (fest)	2.47 mg/kg Trockengew (BO) 4.17 mg/kg Trockengew (MWS) 41.6 mg/kg Trockengew (SWS)

67-56-1 methanol

PNEC (wässrig)	100 mg/l (KA) 2.08 mg/l (MW) 20.8 mg/l (SW) 1,540 mg/l (WAS)
PNEC (fest)	100 mg/kg Trockengew (BO) 7.7 mg/kg Trockengew (MWS) 77 mg/kg Trockengew (SWS)

123-86-4 n-butyl acetate

PNEC (wässrig)	35.6 mg/l (KA) 0.018 mg/l (MW) 0.18 mg/l (SW) 0.36 mg/l (WAS)
PNEC (fest)	0.0903 mg/kg Trockengew (BO) 0.0981 mg/kg Trockengew (MWS) 0.981 mg/kg Trockengew (SWS)

· Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

- Appropriate engineering controls No further data; see section 7.
- Individual protection measures, such as personal protective equipment
- General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Immediately remove all soiled and contaminated clothing

Avoid contact with the eyes and skin.

Do not inhale gases / fumes / aerosols.

Do not eat, drink, smoke or sniff while working.

Apply solvent resistant skin cream before starting work.

Use skin protection cream for skin protection.

- Respiratory protection: Use suitable respiratory protective device in case of insufficient ventilation.

Filter AX

- Hand protection Preventive skin protection by use of skin-protecting agents is recommended.

After use of gloves apply skin-cleaning agents and skin cosmetics.

Skin protection agent recommendation for preventive skin shelter without use of protective gloves:

STOKODERM (<http://www.stoko.com>)

Skin protection agent recommendation for preventive skin shelter in application and combination of protective gloves:

STOKO EMULSION (<http://www.stoko.com>)

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Skin protection recommendation for skin cleaning after product handling:

FRAPANTOL (<http://www.stoko.com>)

Skin protection agent recommendation for skin aftercare:

STOKO VITAN (<http://www.stoko.com>)

The protection gloves to be used have to comply with the specifications of the directive 89/686/EC and the directive derived decree EN374, respectively, e.g. the above listed protection glove type. The mentioned permeation times' data were generated and verified with material samples of the recommended protection glove type in the scope of laboratory analyses of the company KCL GmbH in compliance with EN374.

This recommendation refers exclusively to the material safety data sheet referenced product delivered by Akemi and the indicated field of application. In case of product dilution or in case of mixture with different substances or chemicals, and in condition of EN374 deviation the producer of CE-approved protection gloves must be contacted for detailed information (e.g., KCL GmbH, Germany, 36124 Eichenzell, internet: <http://www.kcl.de>).

**Protective gloves**

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

· Material of gloves

Fluorocarbon rubber (Viton)

Nitrile rubber, NBR

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.

· Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Value for the permeation: Level ≤ 6, 480 min

· For the permanent contact gloves made of the following materials are suitable:

Fluorocarbon rubber (Viton)

Vitoject (KCL, Art_No. 890)

Nitrile rubber, NBR

Camatril (KCL, Art_No. 730, 731, 732, 733)

· As protection from splashes gloves made of the following materials are suitable:

Nitrile rubber, NBR

Camatril (KCL, 730, 731, 732, 733)

· Not suitable are gloves made of the following materials:

Leather gloves

Strong material gloves

· Eye/face protection**Tightly sealed goggles**· Body protection:

Protective work clothing

SECTION 9: Physical and chemical properties· **9.1 Information on basic physical and chemical properties**· General Information· Colour:

Colourless

· Odour:

Characteristic

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· <u>Melting point/freezing point:</u>	Undetermined.
· <u>Boiling point or initial boiling point and boiling range</u>	180 °C
· <u>Lower and upper explosion limit</u>	
· <u>Lower:</u>	2.3 Vol %
· <u>Upper:</u>	20 Vol %
· <u>Flash point:</u>	35 °C (107-98-2 1-methoxy-2-propanol)
· <u>Auto-ignition temperature:</u>	270 °C
· <u>pH</u>	Not determined. Not applicable
· <u>Viscosity:</u>	
· <u>Kinematic viscosity at 20 °C</u>	11 s (DIN 53211/4)
· <u>Dynamic:</u>	Not determined.
· <u>Solubility</u>	
· <u>water:</u>	Not miscible or difficult to mix.
· <u>Vapour pressure at 20 °C:</u>	12 hPa
· <u>Density and/or relative density</u>	
· <u>Density at 20 °C:</u>	0.85 g/cm ³

9.2 Other information

· <u>Appearance:</u>	
· <u>Form:</u>	Fluid
· <u>Important information on protection of health and environment, and on safety.</u>	
· <u>Ignition temperature:</u>	Product is not selfigniting.
· <u>Explosive properties:</u>	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· <u>Solvent content:</u>	
· <u>Organic solvents:</u>	60.0 %
· <u>Solids content:</u>	0.1 %

· <u>Information with regard to physical hazard classes</u>	
· <u>Explosives</u>	Void
· <u>Flammable gases</u>	Void
· <u>Aerosols</u>	Void
· <u>Oxidising gases</u>	Void
· <u>Gases under pressure</u>	Void
· <u>Flammable liquids</u>	Flammable liquid and vapour.
· <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.

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· **10.3 Possibility of hazardous reactions**

No decomposition if used and stored according to specifications.

· **10.4 Conditions to avoid**

Reacts with strong oxidising agents.

Forms flammable gases/fumes.

· **10.5 Incompatible materials:**

No further relevant information available.

· **10.6 Hazardous decomposition products:**

No further relevant information available.

Carbon monoxide and carbon dioxide

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:

ATE (Acute Toxicity Estimates)

Oral	LD50	49,358 mg/kg (rat)
Dermal	LD50	148,075 mg/kg

107-98-2 1-methoxy-2-propanol

Oral	LD50	4,016 mg/kg (rat)
Dermal	LD50	13,500 mg/kg (rabbit)
Inhalative	LC50	27.596 mg/l (rat)
	LC50/4 h	54.6 mg/l (rat)

13475-82-6 2,2,4,6,6-pentamethylheptan

Oral	LD50	>5,000 mg/kg (rat) (OECD 401)
Dermal	LD50	2,200-2,500 mg/kg (rabbit) (OECD 402)
Inhalative	LC50/8h	>5 ppm (rat)
	LC50/48h	>3,193 mg/l (daphnia magna) (ISO 14559)

Hydrocarbons, C10-C12, Isoalkanes, <2% aromatics

Oral	LD50	>5,000 mg/kg (rat) (OECD 401)
Dermal	LD50	>5,000 mg/kg (rabbit) (OECD 402)
Inhalative	LC50/8h	>5 mg/l (rat)
	LC50/48h	>1,000 mg/l (daphnia magna) (OECD 202)

67-56-1 methanol

Oral	LD50	100 mg/kg (rat)
Dermal	LD50	15,800 mg/kg (rabbit)
		300 mg/kg (rat)
Inhalative	LC50/4 h	128.2 mg/l (rat)

123-86-4 n-butyl acetate

Oral	LD50	10,760 mg/kg (rat) (OECD 423)
Dermal	LD50	>14,112 mg/kg (rabbit) (OECD 402)
Inhalative	LC50/4 h	23.4 mg/l (rat) (OECD 403)
	LC50	390 mg/m ³ (rat)
	LC50/48h	64 mg/l (Brachydanio rerio)

· Skin corrosion/irritation

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

· Serious eye damage/irritation

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

· 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.

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- STOT-single exposure May cause drowsiness or dizziness.
- STOT-repeated exposure Based on available data, the classification criteria are not met.
- Aspiration hazard May be fatal if swallowed and enters airways.
- **11.2 Information on other hazards**

· Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information· **12.1 Toxicity**· Aquatic toxicity:**107-98-2 1-methoxy-2-propanol**

EC50/96h	>1,000 mg/l (BES)
EC50	>1,000 mg/l (BES) (OECD 209)
	>1,000 mg/l (Pseudokirchneriella subcapitata)
LC 0/96h	>4,600 mg/l (Leuciscus idus)
EC50/48h	23,300 mg/l (daphnia magna)
LC50/96h	>100 mg/l (daphnia magna)
	>100 mg/l (Desmodesmus subspicatus)
	6,812 mg/l (Leuciscus idus) (DIN 38412)
	>1,000 mg/l (Oncorhynchus mykiss) (OECD 203)
	20,800 mg/l (pimephales promelas) (ASTM)

13475-82-6 2,2,4,6,6-pentamethylheptan

IC50/72h	>1,000 mg/l (Pseudokirchneriella subcapitata)
EC50/48h	>1,000 mg/l (daphnia magna)
NOELR/72h	1,000 mg/l (Pseudokirchneriella subcapitata) (OECD201)
NOELR/21d	0.02 mg/l (daphnia magna) (OECD 211)
NOELR/28d	0.267 mg/l (Oncorhynchus mykiss) ((Q)SAR)
EC50/72h	>1,000 mg/l (Pseudokirchneriella subcapitata) (OECD 201)
LC50/96h	>1,000 mg/l (Oncorhynchus mykiss) (OECD 203)

Hydrocarbons, C10-C12, Isoalkanes, <2% aromatics

EL0/48h	1,000 mg/l (daphnia magna)
EL0/72h	1,000 mg/l (Pseudokirchneriella subcapitata)
LL0/96h	1,000 mg/l (Oncorhynchus mykiss)
NOELR/72h	1,000 mg/l (Pseudokirchneriella subcapitata) (OECD 201)
NOELR/21d	<1 mg/l (daphnia magna) (OECD 211)
NOELR/28d	0.192 mg/l (Oncorhynchus mykiss) ((Q)SAR)
EC50/72h	>1,000 mg/l (Pseudokirchneriella subcapitata) (OECD 201)
LC50/96h	>1,000 mg/l (Oncorhynchus mykiss) (OECD 203)

67-56-1 methanol

EC50/96h	22,000 mg/l (Pseudokirchneriella subcapitata)
IC50	>1,000 mg/l (BES)
EC50/48h	>10,000 mg/l (daphnia magna)
LC50/96h	13,500-17,600 mg/l (lem)
	19,500-20,700 mg/l (Oncorhynchus mykiss)
	28,200 mg/l (pimephales promelas)

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123-86-4 n-butyl acetate

EC50/24h	72.8 mg/l (daphnia magna) (DIN 38412)
EC50/96h	320 mg/l (algae)
LC50/24h	205 mg/l (daphnia magna)
IC50/72h	648 mg/l (Desmodesmus subspicatus)
EC10/18h	959 mg/l (pseudomonas putida)
EC50/48h	44 mg/l (daphnia magna)
EC50/16h	959 mg/l (pseudomonas putida)
NOEC	200 mg/kg (Desmodesmus subspicatus)
NOEC/21d	23 mg/l (daphnia magna) (OECD 211)
EC50/72h	647.7 mg/l (Desmodesmus subspicatus) (Zellvermehrungshemmtest)
	674 mg/l (Scenedesmus subspicatus)
LC50/96h	62 mg/l (Danio rerio.)
	81 mg/l (piscis)
	100 mg/l (Iepomis macrochirus)
	62 mg/l (Leuciscus idus) (DIN 38412)
	18 mg/l (Pimephales promelas) (OECD 203)

1589-47-5 2-methoxypropanol

EC50/48h	>500 mg/l (daphnia magna)
EC50/72h	>1,000 mg/l (Selenastrum capricornutum)
LC50/96h	>1,000 mg/l (Pimephales promelas)

- **12.2 Persistence and degradability**

No further relevant information available.

- **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**

- Remark: Harmful to fish

- Additional ecological information:

- General notes:

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

Harmful to aquatic organisms

Water hazard class 1 (German Regulation) (Self-assessment): 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

20 00 00	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 01 00	separately collected fractions (except 15 01)
20 01 13*	solvents

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- Uncleaned packaging:
- Recommendation: Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.
- Recommended cleansing agents: Alcohol

SECTION 14: Transport information· **14.1 UN number or ID number**· ADR, IMDG, IATA UN3295· **14.2 UN proper shipping name**· ADR 3295 HYDROCARBONS, LIQUID, N.O.S. (1-METHOXY-2-PROPANOL, Hydrocarbons, C10-C12, Isoalkanes, <2% aromatics)· IMDG, IATA HYDROCARBONS, LIQUID, N.O.S. (1-methoxy-2-propanol, Hydrocarbons, C10-C12, Isoalkanes, <2% aromatics)· **14.3 Transport hazard class(es)**· ADR· Class 3 (F1) Flammable liquids.
· Label 3· IMDG, IATA· Class 3 Flammable liquids.
· Label 3· **14.4 Packing group**· ADR, IMDG, IATA III· **14.5 Environmental hazards:**· Marine pollutant: No· **14.6 Special precautions for user**· Hazard identification number (Kemler code): Warning: Flammable liquids.· EMS Number: 30· Stowage Category F-E,S-D· Stowage Category A· **14.7 Maritime transport in bulk according to IMO instruments**

Not applicable.

· Transport/Additional information:· ADR· Limited quantities (LQ) 5L· Excepted quantities (EQ) Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

· Transport category 3· Tunnel restriction code D/E

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· IMDG	5L
· Limited quantities (LQ)	Code: E1
· Excepted quantities (EQ)	Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 3295 HYDROCARBONS, LIQUID, N.O.S. (1-METHOXY-2-PROPANOL, HYDROCARBONS, C10-C12, ISOALKANES, <2% AROMATICS), 3, III

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

- Directive 2012/18/EU
- Named dangerous substances - ANNEX I

None of the ingredients is listed.

- Seveso category

P5c FLAMMABLE LIQUIDS

- Qualifying quantity (tonnes) for the application of lower-tier requirements

5,000 t

- Qualifying quantity (tonnes) for the application of upper-tier requirements

50,000 t

- REGULATION (EC) No 1907/2006 ANNEX XVII

Conditions of restriction: 3, 30, 69

- 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.
Employment restrictions concerning pregnant and lactating women must be observed.
- Waterhazard class:

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

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

None of the ingredients is listed.

- VOC EU

506.7 g/l

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EU

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· **15.2 Chemical safety assessment:**

A Chemical Safety Assessment has not been carried out.

* **SECTION 16: Other information**

This Safety Data Sheet is in compliance with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

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.

<ul style="list-style-type: none"> · <u>Department issuing SDS:</u> · <u>Date of previous version:</u> · <u>Version number of previous version:</u> · <u>Abbreviations and acronyms:</u> 	<p>Laboratory</p> <p>28.06.2023</p> <p>2</p> <p>RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)</p> <p>ICAO: International Civil Aviation Organisation</p> <p>ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)</p> <p>IMDG: International Maritime Code for Dangerous Goods</p> <p>IATA: International Air Transport Association</p> <p>GHS: Globally Harmonised System of Classification and Labelling of Chemicals</p> <p>EINECS: European Inventory of Existing Commercial Chemical Substances</p> <p>ELINCS: European List of Notified Chemical Substances</p> <p>CAS: Chemical Abstracts Service (division of the American Chemical Society)</p> <p>DNEL: Derived No-Effect Level (REACH)</p> <p>PNEC: Predicted No-Effect Concentration (REACH)</p> <p>LC50: Lethal concentration, 50 percent</p> <p>LD50: Lethal dose, 50 percent</p> <p>PBT: Persistent, Bioaccumulative and Toxic</p> <p>SVHC: Substances of Very High Concern</p> <p>vPvB: very Persistent and very Bioaccumulative</p> <p>Flam. Liq. 2: Flammable liquids – Category 2</p> <p>Flam. Liq. 3: Flammable liquids – Category 3</p> <p>Acute Tox. 3: Acute toxicity – Category 3</p> <p>Skin Irrit. 2: Skin corrosion/irritation – Category 2</p> <p>Eye Dam. 1: Serious eye damage/eye irritation – Category 1</p> <p>Repr. 1B: Reproductive toxicity – Category 1B</p> <p>STOT SE 1: Specific target organ toxicity (single exposure) – Category 1</p> <p>STOT SE 3: Specific target organ toxicity (single exposure) – Category 3</p> <p>STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2</p> <p>Asp. Tox. 1: Aspiration hazard – Category 1</p> <p>Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2</p> <p>Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3</p> <p>Aquatic Chronic 4: Hazardous to the aquatic environment - long-term aquatic hazard – Category 4</p>
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