

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 23.01.2023

Version number 2 (replaces version 1)

Revision: 23.01.2023

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

1.1 Product identifier

Trade name: **AKS System Fillers, Component II**

Article number: 60006, 60008, 60009

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

Knife filler/ Surfacer
Polyester resin

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.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Repr. 2 H361d Suspected of damaging the unborn child.

STOT RE 1 H372 Causes damage to the hearing organs through prolonged or repeated exposure.

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:

styrene
maleic anhydride

Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]-ethanol

Hazard statements

H226 Flammable liquid and vapour.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H361d Suspected of damaging the unborn child.

H372 Causes damage to the hearing organs through prolonged or repeated exposure.

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· <u>Precautionary statements</u>	P101 P102 P103 P210 P260 P280 P303+P361+P353 P305+P351+P338 P314 P333+P313 P403+P235 P405 P501	If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read carefully and follow all instructions. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not breathe vapours. Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention if you feel unwell. If skin irritation or rash occurs: Get medical advice/attention. Store in a well-ventilated place. Keep cool. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations.
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· 2.3 Other hazards

· Results of PBT and vPvB assessment	
· PBT:	Not applicable.
· vPvB:	Not applicable.

SECTION 3: Composition/information on ingredients**· 3.2 Mixtures**· Description: Mixture: consisting of the following components.· Dangerous components:

CAS: 100-42-5 EINECS: 202-851-5 Index number: 601-026-00-0 Reg.nr.: 01-2119457861-32	styrene Flam. Liq. 3, H226 Repr. 2, H361d; STOT RE 1, H372; Asp. Tox. 1, H304 Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335 Aquatic Chronic 3, H412	12.5-25%
CAS: 38668-48-3 EINECS: 254-075-1 Reg.nr.: 01-2119980937-17	1,1'-(p-tolylimino)dipropan-2-ol Acute Tox. 2, H300 Eye Irrit. 2, H319 Aquatic Chronic 3, H412	<1%
EC number: 911-490-9 Reg.nr.: 01-2119979579-10	Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]-ethanol Eye Dam. 1, H318 Acute Tox. 4, H302; Skin Irrit. 2, H315; Skin Sens. 1, H317 Aquatic Chronic 3, H412	<1%
CAS: 108-88-3 EINECS: 203-625-9 Index number: 601-021-00-3 Reg.nr.: 01-2119471310-51	toluene Flam. Liq. 2, H225 Repr. 2, H361d; STOT RE 2, H373; Asp. Tox. 1, H304 Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H336 Aquatic Chronic 3, H412	<1%
CAS: 108-31-6 EINECS: 203-571-6 Index number: 607-096-00-9 Reg.nr.: 01-2119472428-31	maleic anhydride Resp. Sens. 1, H334; STOT RE 1, H372 Skin Corr. 1B, H314; Eye Dam. 1, H318 Acute Tox. 4, H302; Skin Sens. 1A, H317 EUH071 Specific concentration limit: Skin Sens. 1A; H317: C ≥ 0.001 %	<1%

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· 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: Take affected persons out into the fresh air.
Position and transport stably in side position.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- After inhalation: Supply fresh air. If required, provide artificial respiration. Keep patient warm.
Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in side position for transportation.
- After skin contact: If skin irritation continues, consult a doctor.
Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing: If symptoms persist consult doctor.

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

Nausea
Dizziness
Headache

· 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: Wear self-contained respiratory protective device.
Do not inhale explosion gases or combustion gases.
Wear fully protective suit.
Mount respiratory protective device.
- Additional information Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

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.

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- **6.2 Environmental precautions:** Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
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 item 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** Keep receptacles tightly sealed.
Store in cool, dry place in tightly closed receptacles.
Keep away from heat and direct sunlight.
Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
Use only in well ventilated areas.
Ensure good ventilation/exhaustion at the workplace.
- Information about fire - and explosion protection: Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **7.2 Conditions for safe storage, including any incompatibilities**
- Storage:
- Requirements to be met by storerooms and receptacles: 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 receptacle in a well ventilated area.
Protect from frost.
Keep container tightly sealed.
- Storage class: 3
- **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:

108-88-3 toluene

IOELV	Short-term value: 384 mg/m ³ , 100 ppm Long-term value: 192 mg/m ³ , 50 ppm Skin
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- DNELs

100-42-5 styrene

Oral	DNEL (Langzeit-wiederholt)	2.1 mg/kg bw/day (BEV)
Dermal	DNEL (Langzeit-wiederholt)	406 mg/kg bw/day (ARB)

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Inhalative	DNEL (Kurzzeit-akut)	343 mg/kg bw/day (BEV) 289-306 mg/m ³ Air (ARB) 174.25-182.75 mg/m ³ Air (BEV)
	DNEL (Langzeit-wiederholt)	85 mg/m ³ Air (ARB) 10.2 mg/m ³ Air (BEV)

38668-48-3 1,1'-(p-tolylimino)dipropan-2-ol

Oral	DNEL (Langzeit-wiederholt)	0.25 mg/kg bw/day (BEV)
Dermal	DNEL (Langzeit-wiederholt)	0.7 mg/kg bw/day (ARB)
		0.3 mg/kg bw/day (BEV)
Inhalative	DNEL (Langzeit-wiederholt)	2.47 mg/m ³ Air (ARB)
		0.4 mg/m ³ Air (BEV)

Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]-ethanol

Oral	DNEL (Langzeit-wiederholt)	0.83 mg/kg bw/day (BEV)
Dermal	DNEL (Langzeit-wiederholt)	1.4 mg/kg bw/day (ARB)
		0.83 mg/kg bw/day (BEV)
Inhalative	DNEL (Langzeit-wiederholt)	9.8 mg/m ³ Air (ARB)
		2.9 mg/m ³ Air (BEV)

108-88-3 toluene

Oral	DNEL (Langzeit-wiederholt)	8.13 mg/kg bw/day (BEV)
Dermal	DNEL (Langzeit-wiederholt)	384 mg/kg bw/day (ARB)
		226 mg/kg bw/day (BEV)
Inhalative	DNEL (Kurzzeit-akut)	384 mg/m ³ Air (ARB)
		226 mg/m ³ Air (BEV)
		DNEL (Langzeit-wiederholt)
		56.5 mg/m ³ Air (BEV)

108-31-6 maleic anhydride

Oral	DNEL (Langzeit-wiederholt)	0.06 mg/kg bw/day (BEV)	
Dermal	DNEL (Kurzzeit-akut)	0.04 mg/kg bw/day (ARB)	
		DNEL (Langzeit-wiederholt)	0.2 mg/kg bw/day (ARB)
		0.1 mg/kg bw/day (BEV)	
Inhalative	DNEL (Kurzzeit-akut)	0.2 mg/m ³ Air (ARB)	
		DNEL (Langzeit-wiederholt)	0.081 mg/m ³ Air (ARB)
		0.08 mg/m ³ Air (BEV)	

· PNECs

100-42-5 styrene

PNEC (wässrig)	5 mg/l (KA)
	0.014 mg/l (MW)
	0.028 mg/l (SW)
	0.04 mg/l (WAS)
PNEC (fest)	0.2 mg/kg Trockengew (BO)
	0.307 mg/kg Trockengew (MWS)
	0.614 mg/kg Trockengew (SWS)

38668-48-3 1,1'-(p-tolylimino)dipropan-2-ol

PNEC (wässrig)	199.5 mg/l (KA)
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PNEC (fest)	0.0017 mg/l (MW) 0.017 mg/l (SW) 0.17 mg/l (WAS) 0.005 mg/kg Trockengew (BO) 0.00782 mg/kg Trockengew (MWS) 0.0782 mg/kg Trockengew (SWS)
Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]-ethanol	
PNEC (wässrig)	10 mg/l (KA) 0.005 mg/l (MW) 0.048 mg/l (SW)
PNEC (fest)	0.21 mg/kg Trockengew (BO) 0.12 mg/kg Trockengew (MWS) 1.2 mg/kg Trockengew (SWS)
108-88-3 toluene	
PNEC (wässrig)	13.61 mg/l (KA) 0.68 mg/l (MW) 0.68 mg/l (SW) 0.68 mg/l (WAS)
PNEC (fest)	2.89 mg/kg Trockengew (BO) 16.39 mg/kg Trockengew (MWS) 16.39 mg/kg Trockengew (SWS)
108-31-6 maleic anhydride	
PNEC (wässrig)	44.6 mg/l (KA) 0.0038 mg/l (MW) 0.038 mg/l (SW) 0.4281 mg/l (WAS)
PNEC (fest)	0.037 mg/kg Trockengew (BO) 0.0296 mg/kg Trockengew (MWS) 0.296 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 item 7.

· Individual protection measures, such as personal protective equipment

· General protective and hygienic measures:

Do not eat, drink, smoke or sniff while working.
Use skin protection cream for skin protection.
Clean skin thoroughly immediately after handling the product.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.

· Respiratory protection:

Filter AX

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· Hand protection

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

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

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

ARRETIL (<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>)

Skin protection recommendation for skin cleaning after product handling:

Kresto Classic (<http://debstoko.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.

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

· Material of gloves

Fluorocarbon rubber (Viton)

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

Value for the permeation: Level \leq 6, 480 min

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

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

Fluorocarbon rubber (Viton)

Vitoject (KCL, Art_No. 890)

Butyl rubber, BR

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

Fluorocarbon rubber (Viton)

Vitoject (KCL, Art_No. 890)

Nitrile rubber, NBR

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

Butyl rubber, BR

Butoject (KCL, Art_No. 897, 898)

· Not suitable are gloves made of the following materials:

Leather gloves

Strong material gloves

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· 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

· <u>Colour:</u>	Different according to colouring
· <u>Odour:</u>	Specific type
· <u>Odour threshold:</u>	Not determined.
· <u>Melting point/freezing point:</u>	Undetermined.
· <u>Boiling point or initial boiling point and boiling range</u>	145 °C
· <u>Flammability</u>	Not applicable.
· <u>Lower and upper explosion limit</u>	
· <u>Lower:</u>	1.2 Vol %
· <u>Upper:</u>	8.9 Vol %
· <u>Flash point:</u>	32 °C
· <u>Ignition temperature:</u>	480 °C
· <u>Decomposition temperature:</u>	Not determined.
· <u>pH</u>	Not determined.
	Not applicable
· <u>Viscosity:</u>	
· <u>Kinematic viscosity</u>	Not determined.
· <u>Dynamic at 20 °C:</u>	8,000 mPas
· <u>Solubility</u>	
· <u>water:</u>	Not miscible or difficult to mix.
· <u>Partition coefficient n-octanol/water (log value)</u>	Not determined.
· <u>Vapour pressure at 20 °C:</u>	6 hPa
· <u>Density and/or relative density</u>	
· <u>Density at 20 °C:</u>	1.66 g/cm ³ ([1,63-1,65 g/cm ³])
· <u>Relative density</u>	Not determined.
· <u>Vapour density</u>	Not determined.

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>Auto-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>	18.1 %
· <u>Solids content:</u>	58.2 %
· <u>Change in condition</u>	
· <u>Evaporation rate</u>	Not determined.

· Information with regard to physical hazard classes

· <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.

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· <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 and stored according to specifications.
· 10.3 Possibility of hazardous reactions	Exothermic polymerisation. Reacts with peroxides and other radical forming substances. Reacts with strong alkali. Reacts with strong acids. Reacts with strong oxidising agents.
· 10.4 Conditions to avoid	No further relevant information available.
· 10.5 Incompatible materials:	No further relevant information available.
· 10.6 Hazardous decomposition products:	Carbon monoxide and carbon dioxide Nitrogen oxides (NO _x) Hydrogen cyanide (prussic acid) Possible in traces.

SECTION 11: Toxicological information

· 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008	
· <u>Acute toxicity</u>	Based on available data, the classification criteria are not met.

· LD/LC50 values relevant for classification:**ATE (Acute Toxicity Estimates)**

Oral	LD50	>7,381-<59,049 mg/kg (rat)
Inhalative	LC50/4 h	65.9 mg/l

100-42-5 styrene

Oral	LD50	>2,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat) (OECD-Prüfrichtlinie 402)
Inhalative	LC50/4h	9.5 mg/m ³ (mouse)
		11,800 mg/m ³ (rat)
	LC50/4 h	11.8 mg/l (rat)
	NOAEC	4.34 mg/l (rat)

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38668-48-3 1,1'-(p-tolylimino)dipropan-2-ol

Oral	LD50	>25-<200 mg/kg (rat) (OECD 423)
Dermal	LD50	>2,000 mg/kg (rabbit) (OECD 402)

Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]-ethanol

Oral	LD50	619 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)

108-88-3 toluene

Oral	LD50	5,580 mg/kg (rat)
Dermal	LD50	12,124 mg/kg (rabbit)
Inhalative	LC50/4 h	5,320 mg/l (mus) 25.7-30 mg/l (rat)

108-31-6 maleic anhydride

Oral	LD50	1,090-2,620 mg/kg (rabbit) 400-480 mg/kg (rat)
Dermal	LD50	2,620 mg/kg (rabbit)
Inhalative	LC50/1h	>4.35 mg/l (rat)
	LC50/48h	138 mg/l (lem)

- Skin corrosion/irritation Causes skin irritation.
- Serious eye damage/irritation Causes serious eye irritation.
- Respiratory or skin sensitisation May cause an allergic skin reaction.
- 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 Suspected of damaging the unborn child.
- STOT-single exposure Based on available data, the classification criteria are not met.
- STOT-repeated exposure Causes damage to the hearing organs through prolonged or repeated exposure.
- Aspiration hazard Based on available data, the classification criteria are not met.

· 11.2 Information on other hazards

- Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information**· 12.1 Toxicity**

- Aquatic toxicity:

100-42-5 styrene

EC50/96h	6.3 mg/l (Pseudokirchneriella subcapitata)
EC50	500 mg/l (BES) (ISO Vorschrift 8192-1986 E) 5.5 mg/l (Photobac. phosphoreum)
IC50/72h	4.9 mg/l (green alge) 1.4 mg/l (selenastrum capricornutum)
IC5/8d	>200 mg/l (Scenedesmus quadricauda)
EC10/16h	72 mg/l (pseudomonas putida)
EC50/16h	>72 mg/l (pseudomonas putida)
EC50/8d	>200 mg/l (Scenedesmus quadricauda)
EC50/72u	>1-<10 mg/l (green alge)
EC20/0.5h	140 mg/l (BES) (OECD 209)

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NOEC/21d	1.01 mg/l (daphnia magna)
EC10	0.28 mg/l (Pseudokirchneriella subcapitata) (EPA OTS 797.1050)
EC50/48h	0.56 mg/l (green alge)
	3.3-7.4 mg/l (daphnia magna)
EC50/72h	0.46-4.3 mg/l (Pseudokirchneriella subcapitata)
LC50/96h	>1-<10 mg/l (piscis)
	19.03-33.53 mg/l (Iem)
	3.24-4.99 mg/l (Pimephales promelas)
	6.75-14.5 mg/l (Pimephales promelas)
	58.75-95.32 mg/l (poecilia reticulata)
LC50/72h	4.9 mg/l (green alge)

38668-48-3 1,1'-(p-tolylimino)dipropan-2-ol

EC50/48h	28.8 mg/l (daphnia magna) (OECD 202)
EC20/0.5h	>1,995 mg/l (BES) (OECD 209)
EC50/72h	245 mg/l (Desmodemus subspicatus) (OECD 201)
LC50/96h	17 mg/l (Brachydanio rerio)

Reaction mass of 2,2'-[(4-methylphenyl)imino]bisethanol and 2-[[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino]-ethanol

EC50/48h	48 mg/l (daphnia magna)
EC50/72h	>100 mg/l (Pseudokirchneriella subcapitata)
LC50/96h	>100 mg/l (Cyprinus carpio)

108-88-3 toluene

EC50/24h	84 mg/l (BES)
EC50/96h	>433 mg/l (Pseudokirchneriella subcapitata)
IC50/72h	12 mg/l (Pseudokirchneriella subcapitata) (lit.)
	12 mg/l (Selenastrum capricornutum) (lit.)
EC50/48h	5.46-11.5 mg/l (daphnia magna) (lit.)
NOEC	0.74 mg/kg (daphnia magna)
EC50/48h	3.78 mg/l (daphnia magna)
EC50/72h	10 mg/l (green alge)
	12.5 mg/l (Pseudokirchneriella subcapitata)
LC50/96h	5.5 mg/l (piscis)
	11-15 mg/l (Iem)
	5.8-17 mg/l (Oncorhynchus mykiss) (lit.)
	54 mg/l (Oryzias latipes)
	12.6-19.05 mg/l (Pimephales promelas)
	7-28.2 mg/l (poecilia reticulata)

108-31-6 maleic anhydride

EC50/24h	316-330 mg/l (daphnia magna)
EC50	77 mg/l (daphnia magna)
EC10/18h	44.6 mg/l (pseudomonas putida)
EC50/48h	42.81 mg/l (daphnia magna)
ErC50/72h	74.35 mg/l (Pseudokirchneriella subcapitata) (OECD 202)
NOELR/72h	150 mg/l (Pseudokirchneriella subcapitata)
NOEC/21d	10 mg/l (daphnia magna)

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EC50/72h	29 mg/l (Desmodemus subspicatus) 74.32 mg/l (Pseudokirchneriella subcapitata) >150 mg/l (Selenastrum capricornutum)
LC50/96h	75 mg/l (Iepomis macrochirus) 75 mg/l (Oncorhynchus mykiss)

- **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**
- **Additional ecological information:**
- **General notes:** Do not allow product to reach ground water, water course or sewage system.
Water hazard class 2 (German Regulation) (Self-assessment): 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 27*	paint, inks, adhesives and resins containing hazardous substances

- **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, ADN, IMDG** Void
- **IATA** UN1866
- **14.2 UN proper shipping name**
- **ADR, ADN, IMDG** Void
- **IATA** RESIN SOLUTION

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· 14.3 Transport hazard class(es)

· ADR, ADN, IMDG

· Class Void

· IATA



· Class 3 Flammable liquids.
· Label 3

· 14.4 Packing group

· ADR, IMDG Void

· IATA III

· 14.5 Environmental hazards:

· Marine pollutant: No

· **14.6 Special precautions for user** Not applicable.**· 14.7 Maritime transport in bulk according to IMO instruments**

Not applicable.

· Transport/Additional information: Not dangerous according to the above specifications.

· ADR

· Remarks: Without hardener component: no dangerous goods < 450 l

· IMDG

· Remarks: Without hardener component: no dangerous goods < 30 l

· UN "Model Regulation": Void

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, 48

· 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.

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· Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

· Regulation (EC) No 273/2004 on drug precursors

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3

· Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

108-88-3 toluene

3

· 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 2 (Self-assessment): hazardous for water.

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

None of the ingredients is listed.

· VOC EU 300.7 g/l

· 15.2 Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

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.

· Department issuing SDS: Laboratory

· Date of previous version: 23.01.2023

· Version number of previous version: 1

· 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)
ICAO: International Civil Aviation Organisation
ADR: Accord relatif au transport international 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 Harmonised 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)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 2: Flammable liquids – Category 2
Flam. Liq. 3: Flammable liquids – Category 3
Acute Tox. 2: Acute toxicity – Category 2
Acute Tox. 4: Acute toxicity – Category 4
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Resp. Sens. 1: Respiratory sensitisation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1
Skin Sens. 1A: Skin sensitisation – Category 1A
Repr. 2: Reproductive toxicity – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

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Asp. Tox. 1: Aspiration hazard – Category 1

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

EU