

Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 13.11.2024

Version number 5 (replaces version 4)

Revision: 13.11.2024

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

1.1 Product identifier

- Trade name: **Multi-Alu Filler**
- Article number: 87135
- UFI: DRF5-T0AV-U00Q-KJHP

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 2 | H373 | May cause damage to the hearing organs through prolonged or repeated exposure. |
| 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

Warning

Hazard-determining components of labelling:

styrene
maleic anhydride

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.
- H373 May cause damage to the hearing organs through prolonged or repeated exposure.
- H412 Harmful to aquatic life with long lasting effects.

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· <u>Precautionary statements</u>	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.
	P260	Do not breathe vapours.
	P273	Avoid release to the environment.
	P280	Wear protective gloves / eye protection.
	P302+P352	IF ON SKIN: Wash with plenty of water.
	P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P314	Get medical advice/attention if you feel unwell.
	P403+P235	Store in a well-ventilated place. Keep cool.
	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: 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	<10%
CAS: 25013-15-4 EINECS: 246-562-2 Reg.nr.: 01-2119622074-50-0000	vinyltoluene Flam. Liq. 3, H226 Asp. Tox. 1, H304 Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335 Aquatic Chronic 3, H412	<10%
CAS: 7779-90-0 EINECS: 231-944-3 Index number: 030-011-00-6 Reg.nr.: 01-2119485044-40-0000	trizinc bis(orthophosphate) Aquatic Acute 1, H400; Aquatic Chronic 1, H410	1-5%

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CAS: 64742-95-6 EC number: 918-668-5 Index number: 649-356-00-4 Reg.nr.: 01-2119455851-35	Solvent naphtha (petroleum), light arom. Flam. Liq. 3, H226 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 STOT SE 3, H335-H336 EUH066	<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%

· 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.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
Position and transport stably in side position.
- 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: 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. Then consult a doctor.
- After swallowing: Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed

Headache
Dizziness
Dizziness
Gastric or intestinal disorders
Nausea
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, sand, extinguishing powder. Do not use water.
- For safety reasons unsuitable extinguishing agents: Water
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.

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· 5.3 Advice for firefighters**· Protective equipment:**

Wear fully protective suit.
Wear self-contained respiratory protective device.

· Additional information

Do not inhale explosion gases or combustion gases.
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.

· 6.2 Environmental precautions:

Use respiratory protective device against the effects of fumes/dust/aerosol.
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:

Pick up mechanically.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.

· 6.4 Reference to other sections

Dispose of the material collected according to regulations.
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**

Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
Store in cool, dry place in tightly closed receptacles.
Keep receptacles tightly sealed.
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.

· Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Fumes can combine with air to form an explosive mixture.

· 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 foodstuffs.
Store away from oxidising agents.
Do not store together with acids.

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· Further information about storage conditions:

Do not store together with alkalis (caustic solutions).

Keep container tightly sealed.
Protect from heat and direct sunlight.
Store in cool, dry conditions in well sealed receptacles.

· 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:

64742-95-6 Solvent naphtha (petroleum), light arom.

OEL | Long-term value: 100 mg/m³, 20 ppm

· 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) 343 mg/kg bw/day (BEV)
Inhalative	DNEL (Kurzzeit-akut)	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)

25013-15-4 vinyltoluene

Oral	DNEL (Langzeit-wiederholt)	0.0833 mg/kg bw/day (BEV)
Dermal	DNEL (Langzeit-wiederholt)	1.65 mg/kg bw/day (ARB) 0.595 mg/kg bw/day (BEV)
Inhalative	DNEL (Langzeit-wiederholt)	5.83 mg/m ³ Air (ARB) 1.04 mg/m ³ Air (BEV)

7779-90-0 trizinc bis(orthophosphate)

Oral	DNEL (Langzeit-wiederholt)	0.83 mg/kg bw/day (BEV)
Dermal	DNEL (Langzeit-wiederholt)	83 mg/kg bw/day (ARB) 83 mg/kg bw/day (BEV)
Inhalative	DNEL (Langzeit-wiederholt)	5 mg/m ³ Air (ARB) 2.5 mg/m ³ Air (BEV)

64742-95-6 Solvent naphtha (petroleum), light arom.

Oral	DNEL (Langzeit-wiederholt)	11 mg/kg bw/day (BEV)
Dermal	DNEL (Langzeit-wiederholt)	25 mg/kg bw/day (ARB) 11 mg/kg bw/day (BEV)
Inhalative	DNEL (Langzeit-wiederholt)	150 mg/m ³ Air (ARB) 32 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)

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	DNEL (Langzeit-wiederholt)	0.081 mg/m ³ Air (ARB) 0.08 mg/m ³ Air (BEV)
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· 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)

25013-15-4 vinyltoluene

PNEC (wässrig)	17 mg/l (KA) 0.000319 mg/l (MW) 0.0000319 mg/l (SW)
PNEC (fest)	0.00471 mg/kg Trockengew (BO) 0.025 mg/kg Trockengew (MWS) 1.245 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) 0.379 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 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.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Do not inhale gases / fumes / aerosols.

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

Use skin protection cream for skin protection.

Clean skin thoroughly immediately after handling the product.

· Respiratory protection: Short term filter device:

Filter A/P2

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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**Protective gloves**

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>).

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

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>)

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

· 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.

· 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.

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

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

Fluorocarbon rubber (Viton)

Vitoject (KCL, Art_No. 890)

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

Fluorocarbon rubber (Viton)

Nitrile rubber, NBR

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

· Not suitable are gloves made of the following materials:

Chloroprene rubber, CR

Leather gloves

Strong material gloves

· Eye/face protection

**Tightly sealed goggles**

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· Body protection: Protective work clothing

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

· Colour:	Silver grey
· Odour:	Characteristic
· Melting point/freezing point:	Undetermined.
· Boiling point or initial boiling point and boiling range	145 °C
· Lower and upper explosion limit	
· Lower:	1.2 Vol % (100-42-5 styrene)
· Upper:	8.9 Vol % (100-42-5 styrene)
· Flash point:	31 °C
· Auto-ignition temperature:	>370 °C (7631-86-9 silicon dioxide, chemically prepared)
· pH	Not determined. Not applicable
· Viscosity:	
· Kinematic viscosity	Not determined. Not applicable
· Dynamic:	Not determined. Not applicable
· Solubility	
· water:	Not miscible or difficult to mix.
· Vapour pressure at 20 °C:	6 hPa (100-42-5 styrene)
· Vapour pressure at 50 °C:	35 hPa
· Density and/or relative density	
· Density at 20 °C:	1.76 g/cm ³

9.2 Other information

· Appearance:	
· Form:	Structurally viscous
· Important information on protection of health and environment, and on safety.	
· Ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· Solvent content:	
· Organic solvents:	14.8 %
· Solids content:	53.4 %

Information with regard to physical hazard classes

· Explosives	Void
· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	Flammable liquid and vapour.
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases in contact with water	Void
· Oxidising liquids	Void

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· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions** Exothermic polymerisation.
Reacts with peroxides.
Reacts with strong acids.
Reacts with strong alkali.
- **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
Possible in traces.
Aluminium oxide smoke

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)**

Inhalative LC50/4 h 79.1 mg/l

100-42-5 styrene

Oral	LD50	5,000 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)

25013-15-4 vinyltoluene

Oral	LD50	3,375 mg/kg (rat)
	NOAEL	600 mg/kg (rat)
Dermal	LD50	4,585 mg/kg (rabbit)
Inhalative	LC50/4h	>16,891 mg/m ³ (rat)
	LC50/4 h	11 mg/l (ATE)

7779-90-0 trizinc bis(orthophosphate)

Oral	LD50	>5,000 mg/kg (rat)
Inhalative	LC50/4 h	>5.7 mg/l (rat)

64742-95-6 Solvent naphtha (petroleum), light arom.

Oral	LD50	3,592 mg/kg (rat)
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Dermal	LD50	>3,160 mg/kg (rabbit) >2,000 mg/kg (rat)
108-31-6 maleic anhydride		
Oral	LD50	1,090-2,620 mg/kg (rabbit) (OECD 401) 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)

- Primary irritant effect:
- 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 May cause 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 (algae)
	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 (algae)
EC20/0.5h	140 mg/l (BES) (OECD 209)
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 (algae)
	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 (lem)
	3.24-4.99 mg/l (pimephales promelas)

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LC50/72h	6.75-14.5 mg/l (Pimephales promelas) 58.75-95.32 mg/l (poecilia reticulata) 4.9 mg/l (algae)
25013-15-4 vinyltoluene	
EC50	2.6 mg/l (Bluegill.)
EC50/48h	1.3 mg/l (daphnia magna)
ErC50/72h	4.3 mg/l (Pseudokirchneriella subcapitata)
NOEC	0.563 mg/l (piscis)
NOELR/72h	1.6 mg/l (algae)
NOEC/21d	0.32 mg/l (daphnia magna) 0.563 mg/l (piscis)
EC10	0.25 mg/l (Desmodesmus subspicatus)
EC50/72h	0.319 mg/l (Desmodesmus subspicatus) 5.2 mg/l (Fathead minnow)
LC50/96h	2.6 mg/l (senastrum capricornutum) 5.2-23.4 mg/l (piscis) 5.2 mg/l (pimephales promelas)
7779-90-0 trizinc bis(orthophosphate)	
EC50/48h	28.2 mg/l (daphnia magna)
ErC50/72h	<0.3 mg/l (Desmodesmus subspicatus)
EC50/48h	<1.7 mg/l (daphnia magna)
EC50/72h	0.28 mg/l (Senastrum capricornutum)
LC50/96h	<5.1 mg/l (Oncorhynchus mykiss)
64742-95-6 Solvent naphtha (petroleum), light arom.	
EC50	<10 mg/l (daphnia magna)
IC50	<10 mg/l (daphnia magna)
LC50	<10 mg/l (algae) >1-<10 mg/l (piscis)
EL50/48h	3.2 mg/l (ceriodaphnia Dubai) 3.2 mg/l (daphnia magna)
EL50/72h	2.6-2.9 mg/l (Pseudokirchneriella subcapitata) 2.9 mg/l (senastrum capricornutum)
LL50/96h	9.2 mg/l (Oncorhynchus mykiss)
NOELR/72h	1 mg/l (Pseudokirchneriella subcapitata)
EC50/48h	3.2 mg/l (daphnia magna)
EC50/72h	2.9 mg/l (Pseudokirchneriella subcapitata)
LC50/96h	9.2 mg/l (Oncorhynchus mykiss)
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) (OECD 202)
ErC50/72h	74.35 mg/l (Pseudokirchneriella subcapitata) (OECD 201)
NOELR/72h	150 mg/l (Pseudokirchneriella subcapitata)
NOEC/21d	10 mg/l (daphnia magna)

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EC50/72h	29 mg/l (Desmodesmus 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**
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:** Harmful to aquatic organisms
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:** Disposal must be made according to official regulations.
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** UN3269
- **14.2 UN proper shipping name**
- **ADR** 3269 POLYESTER RESIN KIT
- **IMDG, IATA** POLYESTER RESIN KIT

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14.3 Transport hazard class(es)

· ADR



· Class 3 (FT3) 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

Warning: Flammable liquids.
· Hazard identification number (Kemler code): 30
· EMS Number: 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: E0
Not permitted as Excepted Quantity
· Transport category 3
· Tunnel restriction code D/E
· Remarks: Without hardener component: no dangerous goods < 450 l

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

· IATA
· Remarks: Without hardener component: 3/III UN 1866 Resin Solution

· UN "Model Regulation": UN 3269 POLYESTER RESIN KIT, 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.

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- 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

· 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 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 260.4 g/l

· **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.

· Department issuing SDS: Laboratory

· Date of previous version: 19.01.2023

· Version number of previous version: 4

· Abbreviations and acronyms: 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)

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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
ATE: Acute toxicity estimate values
Flam. Liq. 3: Flammable liquids – Category 3
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
Asp. Tox. 1: Aspiration hazard – Category 1
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

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