

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



VAKU 20 PRECISION SURFACER- 1000 G (Filler 970 G)

Version	Revision Date:	SDS Number:	Date of last issue: 25.01.2023
9.0	30.03.2023	10785605-00011	Date of first issue: 11.06.2010

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

1.1 Product identifier

Trade name	:	VAKU 20 PRECISION SURFACER- 1000 G (Filler 970 G)
Product code	:	089260201
Unique Formula Identifier (UFI)	:	H7Y2-S02F-500H-849J

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

Use of the Sub-stance/Mixture	:	Construction material, Body filler/stopper Professional use product
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Recommended restrictions on use	:	Not applicable
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1.3 Details of the supplier of the safety data sheet

Company	:	Adolf Wuerth GmbH & Co. KG Reinhold-Würth-Str. 12-17 74653 Künzelsau
Telephone	:	+49 794015 0
Telefax	:	+49 794015 10 00
E-mail address of person responsible for the SDS	:	prodsafe@wuerth.com

1.4 Emergency telephone number

+49 (0)6132 – 84463

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 3	H226: Flammable liquid and vapour.
Skin irritation, Category 2	H315: Causes skin irritation.
Eye irritation, Category 2	H319: Causes serious eye irritation.
Reproductive toxicity, Category 2	H361d: Suspected of damaging the unborn child.

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Specific target organ toxicity - repeated exposure, Category 1

H372: Causes damage to organs through prolonged or repeated exposure.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Danger

Hazard statements :
H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H361d Suspected of damaging the unborn child.
H372 Causes damage to organs through prolonged or repeated exposure.

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 Do not breathe vapours.
P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

Hazardous components which must be listed on the label:

Styrene

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Vapours may form explosive mixture with air.

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SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Styrene	100-42-5 202-851-5 601-026-00-0 01-2119457861-32	Flam. Liq. 3; H226 Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Repr. 2; H361d STOT SE 3; H335 STOT RE 1; H372 (Auditory system) Asp. Tox. 1; H304 Aquatic Chronic 3; H412 Acute toxicity estimate Acute inhalation toxicity (vapour): 11,8 mg/l	$\geq 10 - < 20$
Potassium 2-ethylhexanoate	3164-85-0 221-625-7	Skin Irrit. 2; H315 Eye Dam. 1; H318 Repr. 1B; H360D	$\geq 0,1 - < 0,3$

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : In the case of accident or if you feel unwell, seek medical advice immediately.
When symptoms persist or in all cases of doubt seek medical advice.
- Protection of first-aiders : First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists (see section 8).
- If inhaled : If inhaled, remove to fresh air.
Get medical attention.
- In case of skin contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Get medical attention.

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Wash clothing before reuse.
Thoroughly clean shoes before reuse.

- In case of eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.
If easy to do, remove contact lens, if worn.
Get medical attention.
- If swallowed : If swallowed, DO NOT induce vomiting.
Get medical attention.
Rinse mouth thoroughly with water.

4.2 Most important symptoms and effects, both acute and delayed

- Risks : Causes skin irritation.
Causes serious eye irritation.
Suspected of damaging the unborn child.
Causes damage to organs through prolonged or repeated exposure.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : Treat symptomatically and supportively.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Water spray
Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry chemical

- Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

- Specific hazards during fire-fighting : Do not use a solid water stream as it may scatter and spread fire.
Flash back possible over considerable distance.
Vapours may form explosive mixtures with air.
Exposure to combustion products may be a hazard to health.
- Hazardous combustion products : Carbon oxides
Metal oxides
Sulphur oxides

5.3 Advice for firefighters

- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment.

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Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Use water spray to cool unopened containers.
Remove undamaged containers from fire area if it is safe to do so.
Evacuate area.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Remove all sources of ignition.
Use personal protective equipment.
Follow safe handling advice (see section 7) and personal protective equipment recommendations (see section 8).

6.2 Environmental precautions

Environmental precautions : Avoid release to the environment.
Prevent further leakage or spillage if safe to do so.
Prevent spreading over a wide area (e.g. by containment or oil barriers).
Retain and dispose of contaminated wash water.
Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Non-sparking tools should be used.
Soak up with inert absorbent material.
Suppress (knock down) gases/vapours/mists with a water spray jet.
For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container.
Clean up remaining materials from spill with suitable absorbent.
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.
Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Technical measures : See Engineering measures under EXPOSURE

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CONTROLS/PERSONAL PROTECTION section.

- | | | |
|-------------------------|---|--|
| Local/Total ventilation | : | If sufficient ventilation is unavailable, use with local exhaust ventilation.
Use explosion-proof electrical, ventilating and lighting equipment. |
| Advice on safe handling | : | Do not get on skin or clothing.
Do not breathe vapours.
Do not swallow.
Do not get in eyes.
Wash skin thoroughly after handling.
Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment
Non-sparking tools should be used.
Keep container tightly closed.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Take precautionary measures against static discharges.
Do not eat, drink or smoke when using this product.
Take care to prevent spills, waste and minimize release to the environment. |
| Hygiene measures | : | If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use. |

7.2 Conditions for safe storage, including any incompatibilities

- | | | |
|---|---|---|
| Requirements for storage areas and containers | : | Keep in properly labelled containers. Store locked up. Keep tightly closed. Keep in a cool, well-ventilated place. Store in accordance with the particular national regulations. Keep away from heat and sources of ignition. |
| Advice on common storage | : | Do not store with the following product types:
Strong oxidizing agents
Self-reactive substances and mixtures
Organic peroxides
Flammable solids
Pyrophoric liquids
Pyrophoric solids
Self-heating substances and mixtures
Substances and mixtures, which in contact with water, emit flammable gases
Explosives
Gases
Very acutely toxic substances and mixtures |
| Storage class (TRGS 510) | : | 3 |

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7.3 Specific end use(s)

Specific use(s) : No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Talc	14807-96-6	AGW (Inhalable fraction)	10 mg/m ³	DE TRGS 900
		Peak-limit: excursion factor (category): 2;(II)		
		AGW (Alveolate fraction)	1,25 mg/m ³	DE TRGS 900
		Peak-limit: excursion factor (category): 2;(II)		
Styrene	100-42-5	AGW	20 ppm 86 mg/m ³	DE TRGS 900
		Peak-limit: excursion factor (category): 2;(II)		
		Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child		
Titanium dioxide	13463-67-7	AGW (Inhalable fraction)	10 mg/m ³ (Titanium dioxide)	DE TRGS 900
		Peak-limit: excursion factor (category): 2;(II)		
		Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child		
		AGW (Alveolate fraction)	1,25 mg/m ³ (Titanium dioxide)	DE TRGS 900
		Peak-limit: excursion factor (category): 2;(II)		
		Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child		

This substance(s) is not bioavailable and therefore does not contribute to a dust inhalation hazard.

Titanium dioxide

Biological occupational exposure limits

Substance name	CAS-No.	Control parameters	Sampling time	Basis
Styrene	100-42-5	mandelic acid + phenylglyoxylic acid: 600 mg/g Creatinine (Urine)	In case of long-term exposure: after more than one shift, Immediately after exposure or after working hours	TRGS 903

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
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Barite (Ba(SO ₄))	Workers	Inhalation	Long-term systemic effects	10 mg/m ³
	Workers	Inhalation	Long-term local effects	10 mg/m ³
	Consumers	Inhalation	Long-term systemic effects	10 mg/m ³
	Consumers	Ingestion	Long-term systemic effects	13000 mg/kg bw/day
Potassium 2-ethylhexanoate	Workers	Inhalation	Long-term systemic effects	41,98 mg/m ³
	Workers	Skin contact	Long-term systemic effects	5,95 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	10,35 mg/m ³
	Consumers	Skin contact	Long-term systemic effects	2,98 mg/kg bw/day
	Consumers	Ingestion	Long-term systemic effects	2,98 mg/kg bw/day
Styrene	Workers	Inhalation	Long-term systemic effects	85 mg/m ³
	Workers	Inhalation	Acute local effects	289 mg/m ³
	Workers	Inhalation	Acute local effects	306 mg/m ³
	Workers	Skin contact	Long-term systemic effects	406 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	10,2 mg/m ³
	Consumers	Inhalation	Acute systemic effects	174,25 mg/m ³
	Consumers	Inhalation	Acute local effects	182,75 mg/m ³
	Consumers	Skin contact	Long-term systemic effects	343 mg/kg bw/day
	Consumers	Ingestion	Long-term systemic effects	2,1 mg/kg bw/day

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Barite (Ba(SO ₄))	Fresh water	0,115 mg/l
	Sewage treatment plant	62,2 mg/l
	Fresh water sediment	600,4 mg/kg dry weight (d.w.)
	Soil	207,7 mg/kg dry weight (d.w.)
Potassium 2-ethylhexanoate	Fresh water	0,36 mg/l
	Freshwater - intermittent	0,493 mg/l
	Marine water	0,036 mg/l
	Sewage treatment plant	71,7 mg/l
	Fresh water sediment	6,37 mg/kg dry weight (d.w.)
	Marine sediment	0,637 mg/kg dry weight (d.w.)
	Soil	1,06 mg/kg dry weight (d.w.)

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Styrene	Soil	0,2 mg/kg
	Marine sediment	0,307 mg/kg
	Fresh water sediment	0,614 mg/kg
	Sewage treatment plant	5 mg/l
	Intermittent use/release	0,04 mg/l
	Marine water	0,014 mg/l
	Fresh water	0,028 mg/l

8.2 Exposure controls

Engineering measures

Minimize workplace exposure concentrations.
If sufficient ventilation is unavailable, use with local exhaust ventilation.
Use explosion-proof electrical, ventilating and lighting equipment.

Personal protective equipment

Eye/face protection : Wear the following personal protective equipment:
Safety goggles
Equipment should conform to DIN EN 166

Hand protection

Material : Fluorinated rubber
Break through time : ≥ 480 min
Glove thickness : $\geq 0,7$ mm
Directive : Equipment should conform to DIN EN 374
Protective index : Class 6

Remarks : Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.

Skin and body protection : Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential.
Wear the following personal protective equipment:
If assessment demonstrates that there is a risk of explosive atmospheres or flash fires, use flame retardant antistatic protective clothing.
Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc).

Respiratory protection : If adequate local exhaust ventilation is not available or exposure assessment demonstrates exposures outside the recommended guidelines, use respiratory protection.
Equipment should conform to DIN EN 14387

Filter type : Combined particulates and organic vapour type (A-P)

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	: viscous
Colour	: white
Odour	: characteristic
Odour Threshold	: No data available
Melting point/freezing point	: No data available
Initial boiling point and boiling range	: 145,2 °C
Flammability (solid, gas)	: Not applicable
Flammability (liquids)	: Ignitable (see flash point)
Upper explosion limit / Upper flammability limit	: 8,9 %(V)
Lower explosion limit / Lower flammability limit	: 1,2 %(V)
Flash point	: 34 °C Method: DIN 53213
Auto-ignition temperature	: 480 °C Method: DIN 51794
Decomposition temperature	: No data available
pH	: Solvent mixture; pH value determination not possible, no aqueous solution
Viscosity	
Viscosity, dynamic	: 80.000 mPa.s (20 °C)
Viscosity, kinematic	: > 20,5 mm ² /s (40 °C)
Solubility(ies)	
Water solubility	: partly miscible
Partition coefficient: n-octanol/water	: Not applicable
Vapour pressure	: 6 hPa (20 °C)
Density	: 1,744 g/cm ³ (20 °C)

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Method: DIN 53217

Relative vapour density : No data available

Particle characteristics
Particle size : Not applicable

9.2 Other information

Explosives : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Evaporation rate : No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Not classified as a reactivity hazard.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : Flammable liquid and vapour.
Vapours may form explosive mixture with air.
Can react with strong oxidizing agents.

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid : Oxidizing agents

10.6 Hazardous decomposition products

No hazardous decomposition products are known.

SECTION 11: Toxicological information

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

Information on likely routes of exposure : Inhalation
Skin contact
Ingestion
Eye contact

Acute toxicity

Not classified based on available information.

Product:

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Acute inhalation toxicity : Acute toxicity estimate: > 20 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: Calculation method

Components:

Styrene:

Acute oral toxicity : LD50 (Hamster): > 5.000 mg/kg

Acute inhalation toxicity : LC50 (Rat): 11,8 mg/l
Exposure time: 4 h
Test atmosphere: vapour

Acute dermal toxicity : LD50 (Rat): > 2.000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity

Potassium 2-ethylhexanoate:

Acute oral toxicity : LD50 (Rat, female): > 2.000 - 5.000 mg/kg
Remarks: Based on data from similar materials

Acute dermal toxicity : LD50 (Rat): > 2.000 mg/kg
Method: OECD Test Guideline 402
Remarks: Based on data from similar materials

Skin corrosion/irritation

Causes skin irritation.

Components:

Styrene:

Species : Rabbit
Result : Skin irritation

Potassium 2-ethylhexanoate:

Species : Rabbit
Method : OECD Test Guideline 404
Result : Skin irritation

Serious eye damage/eye irritation

Causes serious eye irritation.

Components:

Styrene:

Species : Rabbit
Result : Irritation to eyes, reversing within 21 days

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Potassium 2-ethylhexanoate:

Species	:	Bovine cornea
Method	:	OECD Test Guideline 437
Result	:	Irreversible effects on the eye

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Components:

Potassium 2-ethylhexanoate:

Test Type	:	Maximisation Test
Exposure routes	:	Skin contact
Species	:	Guinea pig
Result	:	negative
Remarks	:	Based on data from similar materials

Germ cell mutagenicity

Not classified based on available information.

Components:

Styrene:

Genotoxicity in vitro	:	Test Type: Bacterial reverse mutation assay (AMES) Result: negative
Genotoxicity in vivo	:	Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay) Species: Mouse Application Route: inhalation (vapour) Method: OECD Test Guideline 474 Result: negative

Potassium 2-ethylhexanoate:

Genotoxicity in vitro	:	Test Type: Bacterial reverse mutation assay (AMES) Method: OECD Test Guideline 471 Result: negative Remarks: Based on data from similar materials
		Test Type: In vitro mammalian cell gene mutation test Method: OECD Test Guideline 476 Result: negative Remarks: Based on data from similar materials
		Test Type: Chromosome aberration test in vitro

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Method: OECD Test Guideline 473

Result: negative

Remarks: Based on data from similar materials

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)
Species: Mouse
Application Route: Ingestion
Method: OECD Test Guideline 474
Result: negative
Remarks: Based on data from similar materials

Germ cell mutagenicity- Assessment : Remarks: Based on data from similar materials

Carcinogenicity

Not classified based on available information.

Components:

Styrene:

Species : Rat
Application Route : inhalation (vapour)
Exposure time : 104 weeks
Result : positive
Remarks : The mechanism or mode of action may not be relevant in humans.

Reproductive toxicity

Suspected of damaging the unborn child.

Components:

Styrene:

Effects on fertility : Test Type: Three-generation reproduction toxicity study
Species: Rat
Application Route: Ingestion
Result: negative

Effects on foetal development : Test Type: Embryo-foetal development
Species: Rat
Application Route: inhalation (vapour)
Result: positive

Reproductive toxicity - Assessment : Some evidence of adverse effects on development, based on animal experiments.

Potassium 2-ethylhexanoate:

Effects on fertility : Test Type: Fertility/early embryonic development
Species: Rat
Application Route: Ingestion

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Method: OECD Test Guideline 443

Result: negative

Remarks: Based on data from similar materials

Effects on foetal develop-
ment

: Test Type: Embryo-foetal development

Species: Rat

Application Route: Ingestion

Result: positive

Remarks: Based on data from similar materials

Reproductive toxicity - As-
sessment

: Clear evidence of adverse effects on development, based on animal experiments.

Remarks: Based on data from similar materials

STOT - single exposure

Not classified based on available information.

Components:

Styrene:

Assessment : May cause respiratory irritation.

STOT - repeated exposure

Causes damage to organs through prolonged or repeated exposure.

Components:

Styrene:

Target Organs : Auditory system

Assessment : Causes damage to organs through prolonged or repeated exposure.

Repeated dose toxicity

Components:

Styrene:

Species : Rat

NOAEL : 1,28 mg/l

Application Route : inhalation (vapour)

Exposure time : 4 Weeks

Species : Rat

NOAEL : 1.000 - 2.000 mg/kg

Application Route : Ingestion

Exposure time : 78 - 100 Weeks

Potassium 2-ethylhexanoate:

Species : Rat

LOAEL : > 100 mg/kg

Application Route : Ingestion

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Exposure time : 13 Weeks
Remarks : Based on data from similar materials

Aspiration toxicity

Not classified based on available information.

Components:

Styrene:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 12: Ecological information

12.1 Toxicity

Components:

Styrene:

Toxicity to fish	: LC50 (Pimephales promelas (fathead minnow)): 10 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): 4,7 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	: ErC50 (Pseudokirchneriella subcapitata (green algae)): 6,3 mg/l Exposure time: 96 h EC10 (Pseudokirchneriella subcapitata (green algae)): 0,28 mg/l Exposure time: 96 h
Toxicity to microorganisms	: NOEC (Pseudomonas putida): 72 mg/l Exposure time: 16 h
Toxicity to daphnia and other aquatic invertebrates (Chron-	: NOEC: 1,01 mg/l Exposure time: 21 d

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Species: *Daphnia magna* (Water flea)
Method: OECD Test Guideline 211

Potassium 2-ethylhexanoate:

Toxicity to fish : LC50 (*Oryzias latipes* (Orange-red killifish)): > 100 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 10 - 100 mg/l
Exposure time: 48 h
Method: Directive 67/548/EEC, Annex V, C.2.
Remarks: Based on data from similar materials

<p>Toxicity to algae/aquatic plants</p>	<p>: ErC50 (Desmodesmus subspicatus (green algae)): > 10 - 100 mg/l</p> <p>Exposure time: 72 h</p> <p>Remarks: Based on data from similar materials</p>
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EC10 (Desmodesmus subspicatus (green algae)): > 1 mg/l
Exposure time: 72 h
Remarks: Based on data from similar materials

Toxicity to microorganisms : EC10 (*Pseudomonas putida*): > 1 mg/l
Exposure time: 17 h
Method: DIN 38 412 Part 8
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: > 1 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Method: OECD Test Guideline 211
Remarks: Based on data from similar materials

12.2 Persistence and degradability

Components:

Styrene:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 100 %
Exposure time: 28 d

Potassium 2-ethylhexanoate:

Biodegradability	: Result: Readily biodegradable. Method: OECD Test Guideline 301E Remarks: Based on data from similar materials
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12.3 Bioaccumulative potential

Components:

Styrene:

Partition coefficient: n-octanol/water : log Pow: 2,96

Potassium 2-ethylhexanoate:

Partition coefficient: n-octanol/water : log Pow: 2,96
Method: OECD Test Guideline 107

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

- | | |
|------------------------|--|
| Product | : Dispose of in accordance with local regulations.
According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.
Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.
Do not dispose of waste into sewer. |
| Contaminated packaging | : Empty containers should be taken to an approved waste handling site for recycling or disposal.
Empty containers retain residue and can be dangerous.
Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources |

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of ignition. They may explode and cause injury and/or death.
If not otherwise specified: Dispose of as unused product.

Waste Code

: The following Waste Codes are only suggestions:

used product

08 01 11, waste paint and varnish containing organic solvents
or other hazardous substances

unused product

08 01 11, waste paint and varnish containing organic solvents
or other hazardous substances

uncleaned packagings

15 01 10, packaging containing residues of or contaminated
by hazardous substances

SECTION 14: Transport information

14.1 UN number or ID number

ADN	:	UN 1866
ADR	:	UN 1866
RID	:	UN 1866
IMDG	:	UN 1866
IATA	:	UN 1866

14.2 UN proper shipping name

ADN	:	RESIN SOLUTION
ADR	:	RESIN SOLUTION
RID	:	RESIN SOLUTION
IMDG	:	RESIN SOLUTION
IATA	:	Resin solution

14.3 Transport hazard class(es)

	Class	Subsidiary risks
ADN	:	3
ADR	:	3
RID	:	3
IMDG	:	3
IATA	:	3

14.4 Packing group

ADN

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Packing group : III
Classification Code : F1
Hazard Identification Number : 30
Labels : 3
Remarks : Complies with the chemical and physical criteria according to 2.2.3.1.5 ADN.

ADR

Packing group : III
Classification Code : F1
Hazard Identification Number : 30
Labels : 3
Tunnel restriction code : (D/E)
Remarks : Complies with the chemical and physical criteria according to 2.2.3.1.5 ADR.

RID

Packing group : III
Classification Code : F1
Hazard Identification Number : 30
Labels : 3
Remarks : Complies with the chemical and physical criteria according to 2.2.3.1.5 RID.

IMDG

Packing group : III
Labels : 3
EmS Code : F-E, S-E
Remarks : Complies with the chemical and physical criteria according to 2.3.2.5 of the International Maritime Code for Dangerous Goods (IMDG Code).

IATA (Cargo)

Packing instruction (cargo aircraft) : 366
Packing instruction (LQ) : Y344
Packing group : III
Labels : Flammable Liquids

IATA (Passenger)

Packing instruction (passenger aircraft) : 355
Packing instruction (LQ) : Y344
Packing group : III
Labels : Flammable Liquids

14.5 Environmental hazards

ADN

Environmentally hazardous : no

ADR

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Environmentally hazardous : no

RID

Environmentally hazardous : no

IMDG

Marine pollutant : no

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Maritime transport in bulk according to IMO instruments

Remarks : Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) : Conditions of restriction for the following entries should be considered: Number on list 75, 3

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) : If you intend to use this product as tattoo ink, please contact your vendor.

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EU) 2019/1021 on persistent organic pollutants (recast) : Not applicable

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

P5c	FLAMMABLE LIQUIDS	Quantity 1 5.000 t	Quantity 2 50.000 t
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Water hazard class (Germa- : WGK 2 obviously hazardous to water

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ny)

Classification according to AwSV, Annex 1 (5.2)

|| Volatile organic compounds : Directive 2004/42/EC
VOC content in g/l: 4 g/l
Product sub-category: Body filler/stopper
Coatings: All types
VOC limit level 1 (2007): 250 g/l

Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control)
Volatile organic compounds (VOC) content: 0,43 %

Other regulations:

Take note of Law on the protection of mothers at work, in education and in studies (Maternity Protection Act - MuSchG).

|| Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

The product is subject to the supply restrictions of the Ordinance on the Prohibition of Chemicals.

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Other information : Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

Full text of H-Statements

H226 : Flammable liquid and vapour.
H304 : May be fatal if swallowed and enters airways.
H315 : Causes skin irritation.
H318 : Causes serious eye damage.
H319 : Causes serious eye irritation.
H332 : Harmful if inhaled.
H335 : May cause respiratory irritation.
H360D : May damage the unborn child.
H361d : Suspected of damaging the unborn child.
H372 : Causes damage to organs through prolonged or repeated exposure.
H412 : Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox. : Acute toxicity
Aquatic Chronic : Long-term (chronic) aquatic hazard
Asp. Tox. : Aspiration hazard
Eye Dam. : Serious eye damage

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Eye Irrit.	:	Eye irritation
Flam. Liq.	:	Flammable liquids
Repr.	:	Reproductive toxicity
Skin Irrit.	:	Skin irritation
STOT RE	:	Specific target organ toxicity - repeated exposure
STOT SE	:	Specific target organ toxicity - single exposure
DE TRGS 900	:	Germany. TRGS 900 - Occupational exposure limit values.
TRGS 903	:	TRGS 903 - Biological limit values
DE TRGS 900 / AGW	:	Time Weighted Average

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Sources of key data used to compile the Safety Data Sheet : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

Classification of the mixture:

Flam. Liq. 3	H226
Skin Irrit. 2	H315

Classification procedure:

Based on product data or assessment
Calculation method

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Eye Irrit. 2	H319	Calculation method
Repr. 2	H361d	Calculation method
STOT RE 1	H372	Calculation method

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

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