Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 09.02.2023 Version number 6 (replaces version 5) Revision: 29.06.2022

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

1.1 Product identifier
Trade name MARISEAL 400

Safety data sheet no.: XXP016845
1.2 Relevant identified uses of the substance or mixture and uses advised against
The product is intended for industrial or professional use.
Application of the substance / the mixture Coating material

1.3 Details of the supplier of the safety data sheet
Manufacturer/Supplier:
Manufacturer/Supplier:
MARIS POLYMERS S.M.S.A.
Industrial Area of Inofita, 32 011 Inofita, Greece
Tel. : +30 22620 32918-9
e-mail:marispolymers@saint-gobain.com

Distributor:
Saint-Gobain Construction Products Polska Sp. z o.o.
ul. Okrężna 16, 44-100 Gliwice
Phone: +48 41 35 69 317 (Mon-Fri 9.00-16.00)
e-mail: SDS.pl@saint-gobain.com
1.4 Emergency telephone number:
112 (emergency number), 999 (ambulance), 998 (fire department).

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008


GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.


GHS08 health hazard

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.
Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.


GHS07

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.
STOT SE 3 H335 May cause respiratory irritation.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

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2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

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

Hazard pictograms

GHS02 GHS07 GHS08

Signal word Danger

Hazard-determining components of labelling:

reaction mass of ethylbenzene and m-xylene and p-xylene
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate homopolymer, isocyanurate type
1,6-hexanediyl-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl)carbamate
maleic anhydride
4,5-dichloro-2-octyl-2H-isothiazol-3-one
3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate
Addition reaction products of conjugated sunflower-oil fatty acids and tall-oil fatty acids with 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.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
H304 May be fatal if swallowed and enters airways.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P331 Do NOT induce vomiting.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information:

EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.
As from 24 August 2023 adequate training is required before industrial or professional use.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Does not contain PBT substances.
vPvB: Does not contain vPvB substances.

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SECTION 3: Composition/information on ingredients

3.2 Mixtures
Description: Mixture consisting of the following components.

Dangerous components:		
EC number: 905-562-9 Reg.nr.: 01-2119488216-32-xxxx	reaction mass of ethylbenzene and m-xylene and p-xylene Flam. Liq. 3, H226; STOT RE 2, H373; Asp. Tox. 1, H304; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335; Aquatic Chronic 3, H412 Specific concentration limit: STOT RE 2; H373:C ≥ 10 %	≥30-<40%
CAS: 13463-67-7 EINECS: 236-675-5 Index number: 022-006-00-2 Reg.nr.: 01-2119489379-17-xxxx	titanium dioxide Carc. 2, H351	≥10-<20%
CAS: 108-65-6 EINECS: 203-603-9 Index number: 607-195-00-7 Reg.nr.: 01-2119475791-29-xxxx	2-methoxy-1-methylethyl acetate Flam. Liq. 3, H226	≥3-<5%
CAS: 53880-05-0 EC number: 931-312-3 Reg.nr.: 01-2119488734-24-xxxx	3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate homopolymer, isocyanurate type Acute Tox. 4, H332; Skin Sens. 1, H317; STOT SE 3, H335	≥3-<5%
CAS: 140921-24-0 ELINCS: 411-700-4 Index number: 616-079-00-5 Reg.nr.: 01-0000015906-63-xxxx	1,6-hexanediyl-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl)carbamate Skin Sens. 1, H317	≥3-<5%
EC number: 701-043-4 Reg.nr.: 01-2119976378-19-xxxx	Addition reaction products of conjugated sunflower-oil fatty acids and tall-oil fatty acids with maleic anhydride Skin Irrit. 2, H315; Skin Sens. 1, H317	≥0.1-<1%

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CAS: 4098-71-9 EINECS: 223-861-6 Index number: 615-008-00-5 Reg.nr.: 01-2119490408-31-xxxx	3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate Acute Tox. 3, H331; Resp. Sens. 1, H334; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335, EUH204 Specific concentration limits: Resp. Sens. 1;H334: C ≥ 0.5 % Skin Sens. 1; H317: C ≥ 0.5 %	≥0.25-<0.5%
CAS: 108-31-6 EINECS: 203-571-6 Index number: 607-096-00-9	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 Specific concentration limit: Skin Sens. 1A;H317: C ≥ 0.001 %	≥0.001-<0.1%
CAS: 64359-81-5 EINECS: 264-843-8 Index number: 613-335-00-8	4,5-dichloro-2-octyl-2H-isothiazol-3-one Acute Tox. 2, H330; Skin Corr. 1, H314; Eye Dam. 1, H318; Aquatic Acute 1, H400 (M=100); Aquatic Chronic 1, H410 (M=100); Acute Tox. 4, H302; Skin Sens. 1A, H317, EUH071 ATE: LD50 oral: 567 mg/kg LC50/4 h inhalative: 0.16 mg/l Specific concentration limits: Skin Irrit. 2; H315:C ≥ 0.025 % Eye Irrit. 2; H319: C ≥ 0.025 % Skin Sens. 1A; H317: C ≥ 0.0015 %	≥0.0025-<0.025%

SVHC Void
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
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
Take affected persons out into the fresh air.
Seek immediate medical advice
Immediately remove any clothing soiled by the product.
After inhalation
Supply fresh air and to be sure call for a doctor.
Seek medical treatment in case of complaints.
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. If symptoms persist, consult a doctor. Rinse liquid should be tempered (20-30°C).
Protect unharmed eye.

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Seek immediate medical advice.
After swallowing
Do not induce vomiting; call for medical help immediately.
Drink plenty of water and provide fresh air. Call for a doctor immediately.
Seek immediate medical advice.
4.2 Most important symptoms and effects, both acute and delayed
No further relevant information available.
4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing agents CO2, powder or water spray. Fight larger fires with water spray.
For safety reasons unsuitable extinguishing agents Water with full jet
5.2 Special hazards arising from the substance or mixture No further relevant information available.
5.3 Advice for firefighters
Protective equipment:
Wear fully protective suit.
Wear self-contained respiratory protective device.
Additional information
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
Wear protective equipment. Keep unprotected persons away.
Mouth respiratory protective device.
Avoid inhalation of vapors.
Keep away from ignition sources
6.2 Environmental precautions: 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).
Ensure adequate ventilation.
Absorb liquid components with liquid-binding material.
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 Ensure good ventilation/exhaustion at the workplace.
Information about fire - and explosion protection:
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

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7.2 Conditions for safe storage, including any incompatibilities
Storage
Requirements to be met by storerooms and receptacles:
Store in a cool location.
Provide ventilation for receptacles.
Information about storage in one common storage facility: Store away from foodstuffs.
Further information about storage conditions:
Keep container tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.
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:

DNELs		
reaction mass of ethylbenzene and m-xylene and p-xylene		
Oral	Derived No Effect Level	12.5 mg/kgxday (consumer systemic long term value)
Dermal	Derived No Effect Level	212 mg/kgxday (worker systemic long term value)
		125 mg/kgxday (consumer systemic long term value)
Inhalative	Derived No Effect Level	221 mg/m³ (worker systemic long term value)
		442 mg/m³ (worker systemic short term value)
		65.3 mg/m³ (consumer systemic long term value)
		260 mg/m³ (consumer systemic short term value)
CAS: 108-65-6 2-methoxy-1-methylethyl acetate		
Oral	Derived No Effect Level	36 mg/kgxday (consumer systemic long term value)
Dermal	Derived No Effect Level	796 mg/kgxday (worker systemic long term value)
		320 mg/kgxday (consumer systemic long term value)
Inhalative	Derived No Effect Level	275 mg/m³ (worker systemic long term value)
		33 mg/m³ (consumer systemic long term value)
		550 mg/m³ (worker local short term value)
		33 mg/m³ (consumer local long term value)
CAS: 53880-05-0 3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate homopolymer, isocyanurate type		
Inhalative	Derived No Effect Level	0.58 mg/m³ (worker local short term value)
		0.29 mg/m³ (worker local long term value)
Addition reaction products of conjugated sunflower-oil fatty acids and tall-oil fatty acids with maleic anhydride		
Oral	Derived No Effect Level	1.5 mg/kgxday (consumer systemic long term value)
Dermal	Derived No Effect Level	3 mg/kgxday (worker systemic long term value)
		1.5 mg/kgxday (consumer systemic long term value)

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CAS: 4098-71-9 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate		
Inhalative	Derived No Effect Level	0.0453 mg/m³ (worker local short term value) 0.0453 mg/m³ (worker local long term value)

PNECs	
reaction mass of ethylbenzene and m-xylene and p-xylene	
Predicted No-Effect Concentration	0.327 mg/l (sea water rating factor) 0.327 mg/l (fresh water rating factor)

CAS No. / Designation of material / % / Type / Value / Unit	
CAS: 13463-67-7 titanium dioxide	
AGW (Germany)	Long-term value: 1.25* 10** mg/m³ 2(II);*alveolengängig**einatembar; AGS, DFG, Y
GV (Denmark)	Short-term value: 12 mg/m³ Long-term value: 6 mg/m³ K, som Ti
LEP (Spain)	Long-term value: 10 mg/m³
TWA (Italy)	Long-term value: 10 mg/m³ A4
VLE (Portugal)	Long-term value: 10 mg/m³ A4; Irritação do TRI
OEL (Sweden)	Long-term value: 5 mg/m³ totaldamm
CAS: 108-65-6 2-methoxy-1-methylethyl acetate	
IOELV (European Union)	Short-term value: 550 mg/m³, 100 ppm Long-term value: 275 mg/m³, 50 ppm Skin
AGW (Germany)	Long-term value: 270 mg/m³, 50 ppm 1(I);DFG, EU, Y
GV (Denmark)	Short-term value: 550 mg/m³, 100 ppm Long-term value: 275 mg/m³, 50 ppm EH
LEP (Spain)	Short-term value: 550 mg/m³, 100 ppm Long-term value: 275 mg/m³, 50 ppm vía dérmica, VLI
VL (Italy)	Short-term value: 550 mg/m³, 100 ppm Long-term value: 275 mg/m³, 50 ppm Cute
OEL (Sweden)	Short-term value: 550 mg/m³, 100 ppm Long-term value: 275 mg/m³, 50 ppm H
HTP (Finland)	Short-term value: 550 mg/m³, 100 ppm Long-term value: 270 mg/m³, 50 ppm iho

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CAS: 4098-71-9 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	
AGW (Germany)	Long-term value: 0.046 mg/m³, 0.005 ppm 1;=2=(I);DFG, 11, 12, Sa
GV (Denmark)	Short-term value: 0.090 mg/m³, 0.01 ppm Long-term value: 0.045 mg/m³, 0.005 ppm
LEP (Spain)	Long-term value: 0.046 mg/m³, 0.005 ppm Sen
TWA (Italy)	Long-term value: 0.045 mg/m³, 0.005 ppm
VLE (Portugal)	Long-term value: 0.005 ppm Sensibilização respiratória
OEL (Sweden)	Short-term value: 0.046 mg/m³, 0.005 ppm Long-term value: 0.018 mg/m³, 0.002 ppm M, S
HTP (Finland)	Short-term value: 0.035 mg/m³ NCO
CAS: 108-31-6 maleic anhydride	
AGW (Germany)	Long-term value: 0.081 mg/m³, 0.02 ppm 1;=2.5=(I);DFG, Sah, Y, 11
GV (Denmark)	Short-term value: 0.8 mg/m³, 0.2 ppm Long-term value: 0.4 mg/m³, 0.1 ppm
LEP (Spain)	Long-term value: 0.4 mg/m³, 0.1 ppm FIV, Sen
TWA (Italy)	Long-term value: 0.04 mg/m³, 0.01 ppm sen, A4 (i, h)
VLE (Portugal)	Long-term value: 0.1 mg/m³ SC, SR; A4;Sensibilização respiratória
OEL (Sweden)	Short-term value: 0.4 mg/m³, 0.1 ppm Long-term value: 0.2 mg/m³, 0.05 ppm M, S
HTP (Finland)	Long-term value: 0.41 mg/m³, 0.1 ppm Ceiling limit: 0.81 mg/m³, 0.2 ppm

8.2 Exposure controls
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.
Use a moisturising skin cream after processing the product.
Respiratory protection:
Use suitable respiratory protective device in case of insufficient ventilation.
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.
Short term filter device:
Combination of charcoal filter and particulate filter A2-P2 (EN 529)

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Hand protection
The glove material has to be impermeable and resistant to the product/ the substance/ the mixture.
Protective gloves against chemicals (standard EN 374-1)
Due to missing tests no recommendation to the glove material can be given for the product/ the mixture/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Material of gloves
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 mixture 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.
Fluorocarbon rubber (FKM-Viton)
Butyl rubber, BR
Recommended thickness of the material: ≥ 0.5 (BR) ; 0.4 (Viton) mm
Recommendation: contaminated gloves should be disposed of.
Penetration time of glove material
The determined breakthrough times according to EN 16523-1:2015 are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the breakthrough time, is recommended.
For the mixture of chemicals mentioned below the breakthrough time has to be at least 480 minutes (Permeation according to EN 16523-1:2015: Level 6).
Eye/face protection
Tightly sealed goggles
Protective eyewear (standard EN 166)
Body protection:
Chemically resistant protective work clothing (EN 14605)
Boots

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information	
Colour:	Various colours
Odour:	Characteristic
Odour threshold:	Not determined.
Melting point/freezing point:	Undetermined.
Boiling point or initial boiling point and boiling range	130 °C
Flammability	Not applicable.
Lower and upper explosion limit	
Lower:	Not determined.
Upper:	0.8 Vol %
Flash point:	27-32 °C (closed up, EC No. 905-562)
Ignition temperature:	488 °C (xylene)
Decomposition temperature:	Not determined.
pH	Not applicable.
Viscosity:	
Kinematic viscosity	Not determined.

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dynamic at 20 °C:	>40 mPas
Solubility	
Water:	Not miscible or difficult to mix
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure:	Not determined.
Density and/or relative density	
Density at 20 °C:	1.14 g/cm³
Relative density	Not determined.
Bulk density:	Not applicable.
Vapour density	Not determined.
9.2 Other information	No further relevant information available.
Appearance:	
Form:	Liquid
Important information on protection of health and environment, and on safety.	
Auto-ignition temperature:	Product is not self-igniting.
Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
Minimum ignition energy	
Solvent separation test:	Not determined
EU-VOC (g/L)	460.0000 g/l
Change in condition	
Softening point/range	
Oxidising properties	Not considered as oxidising.
Evaporation rate	Not determined.
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
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitised explosives	Void

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SECTION 10: Stability and reactivity

10.1 Reactivity No further relevant information available.
10.2 Chemical stability Stable at recommended storage conditions
Thermal decomposition / Conditions to be avoided: Stable at environment temperature.
10.3 Possibility of hazardous reactions No dangerous reactions known
10.4 Conditions to avoid Avoid heat, sparkles, naked flame or other sources of ignition.
10.5 Incompatible materials: No further relevant information available.
10.6 Hazardous decomposition products: No dangerous decomposition products known.

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:

Components / Type / Value / Species		
Dermal	LD50	2,933 mg/kg (Calculation)
Inhalative	LC50/4 h	>28.2 mg/l (Calculation)

reaction mass of ethylbenzene and m-xylene and p-xylene		
Oral	LD50	>3,523 mg/kg (Rat)
Dermal	LD50	>12,126 mg/kg (Rabbit)
Inhalative	LC50/4 h	>27 mg/l (Rat)
CAS: 13463-67-7 titanium dioxide		
Oral	LD50	>10,000 mg/kg (Rat)
CAS: 108-65-6 2-methoxy-1-methylethyl acetate		
Oral	LD50	>6,000 mg/kg (Rat)
Dermal	LD50	>2,000 mg/kg (Rat)
CAS: 53880-05-0 3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate homopolymer, isocyanurate type		
Oral	LD50	14,000 mg/kg (Rat)
Inhalative	LC50/4 h	>5 mg/l (Rat)
CAS: 140921-24-0 1,6-hexanediyl-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl)carbamate		
Oral	LD50	>2,000 mg/kg (Rat)
Dermal	LD50	>2,000 mg/kg (Rat)
Addition reaction products of conjugated sunflower-oil fatty acids and tall-oil fatty acids with maleic anhydride		
Oral	LD50	>2,000 mg/kg (Rat)
CAS: 4098-71-9 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate		
Oral	LD50	4,814 mg/kg (Rat)
Dermal	LD50	7,000 mg/kg (Rat)
Inhalative	LC50/4 h	>31 mg/l (Rat)
CAS: 64359-81-5 4,5-dichloro-2-octyl-2H-isothiazol-3-one		
Oral	LD50	567 mg/kg (ATE)

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Inhalative	LC50/4 h	0.16 mg/l (ATE)

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 Based on available data, the classification criteria are not met.
STOT-single exposure
May cause respiratory irritation.
STOT-repeated exposure
May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard
May be fatal if swallowed and enters airways.
11.2 Information on other hazards

Endocrine disrupting properties
None of the ingredients is listed.

SECTION 12: Ecological information

12.1 Toxicity
Aquatic toxicity: Harmful to aquatic life with long lasting effects.

Type of test / Effective concentration / Method / Assessment	
reaction mass of ethylbenzene and m-xylene and p-xylene	
LC50/96h	>2.6 mg/l (Fish)
EC50/24h	96 mg/l (Activated sludge)
EC50/72h	4.6-4.9 mg/l (Algae)
NOEC (21d)	1.57 mg/l (Daphnia magna)
CAS: 13463-67-7 titanium dioxide	
LC50/48h	500 mg/l (Daphnia magna)
EC50/72h	100 mg/l (Algae)
NOEC (72h)	100 mg/l (Algae)
NOEC (14d)	0.87-1.1 mg/l (Fish)
NOEC (21d)	5 mg/l (Daphnia magna)
CAS: 108-65-6 2-methoxy-1-methylethyl acetate	
LC50/96h	161 mg/l (Pimephales promelas (Minnow))
	140 mg/l (Fish)
EC50/48h	>500 mg/l (Daphnia magna)
CAS: 53880-05-0 3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate homopolymer, isocyanurate type	
EC50/48h	3.36 mg/l (Daphnia magna)
EC50/72h	3.1 mg/l (Algae)

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Addition reaction products of conjugated sunflower-oil fatty acids and tall-oil fatty acids with maleic anhydride	
LC50/48h	150 mg/l (Fish)
EC50/48h	100 mg/l (Daphnia magna)
EC50/72h	100 mg/l (Algae)
NOEC (72h)	100 mg/l (Algae)
NOEC (21d)	10 mg/l (Daphnia magna)
CAS: 4098-71-9 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	
LC50/96h	208 mg/l (Fish)
EC50/72h	4.8 mg/l (Daphnia magna)
	70 mg/l (Algae)

12.2 Persistence and degradability No further relevant information available.
Behaviour in environmental systems:

Components:	
reaction mass of ethylbenzene and m-xylene and p-xylene	
DT50-value (Degradation Half Time)	2 day

12.3 Bioaccumulative potential	
CAS: 4098-71-9 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	
EBAB	4.7 log Pow (Bioaccumulation)

12.4 Mobility in soil No further relevant information available.
12.5 Results of PBT and vPvB assessment
PBT: Does not contain PBT substances.
vPvB: Does not contain vPvB substances.
12.6 Endocrine disrupting properties
The product does not contain substances with endocrine disrupting properties.
12.7 Other adverse effects

Behaviour in sewage processing plants:

Type of test / Effective concentration / Method / Assessment	
Addition reaction products of conjugated sunflower-oil fatty acids and tall-oil fatty acids with maleic anhydride	
EC 50 (3h)	1,000 mg/l (Activated sludge)

Additional ecological information:

General notes:
Harmful to aquatic organisms
Do not allow product to reach ground water, water course or
sewage system, even in small quantities.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Recommendation
Dispose of the product in accordance with national and local regulations.
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

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European waste catalogue	
08 04 09*	waste adhesives and sealants containing organic solvents or other hazardous substances
HP3	Flammable
HP4	Irritant - skin irritation and eye damage
HP5	Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
HP6	Acute Toxicity
HP7	Carcinogenic
HP14	Ecotoxic

Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

14.1 UN number or ID number
ADR, IMDG, IATA UN1866

14.2 UN proper shipping name
ADR 1866 RESIN SOLUTION
IMDG, IATA RESIN SOLUTION

14.3 Transport hazard class(es)

ADR

Class 3 (F1) Flammable liquids.
Label 3

IMDG, IATA

Class 3 Flammable liquids.
Label 3

14.4 Packing group
ADR, IMDG, IATA III

14.5 Environmental hazards: Not applicable.

14.6 Special precautions for user Warning: Flammable liquids.
Hazard identification number (Kemler code): 30
EMS Number: F-E,S-E
Stowage Category A

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14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
Transport/Additional information:	
ADR	
Limited quantities (LQ)	5L
Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
Transport category	3
Tunnel restriction code	D/E
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
UN "Model Regulation":	UN 1866 RESIN SOLUTION, 3, III

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Regulation (EC) No 1907/2006 (REACH) (Candidate List, Annexes XIV and XVII)
Regulation (EC) No 1272/2008 (CLP)
Regulation (EU) 2020/878 (amending REACH Annex II on the compilation of safety data sheets)
Directive 2004/42/CE (VOC), cf. section 9
Labelling according to Regulation (EC) No 1272/2008 cf. section 2

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, 74

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.

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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.

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.

Relevant phrases

H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H331 Toxic if inhaled.
H332 Harmful if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H351 Suspected of causing cancer.
H372 Causes damage to organs through prolonged or repeated exposure.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.
EUH071 Corrosive to the respiratory tract.
EUH204 Contains isocyanates. May produce an allergic reaction.

Classification according to Regulation (EC) No 1272/2008	
Flammable liquids	Bridging principles
Skin corrosion/irritation Serious eye damage/irritation Skin sensitisation Specific target organ toxicity (single exposure) Specific target organ toxicity (repeated exposure) Hazardous to the aquatic environment - long-term (chronic) aquatic hazard	The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.
Aspiration hazard	Expert judgement

Department issuing SDS: SUSTCHEM S.A

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Contact:
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Date of previous version: 25.10.2021
Version number of previous version: 5
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
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organisation
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 (REACH regulation)
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 3: Flammable liquids – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Acute Tox. 2: Acute toxicity – Category 2
Acute Tox. 3: Acute toxicity – Category 3
Skin Corr. 1: Skin corrosion/irritation – Category 1
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
Carc. 2: Carcinogenicity – 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
*** Data compared to the previous version altered.**
According to Annex II of the REACH regulation, the modified sections in this version of the Safety Data Sheet in comparison with the previous one are marked with asterisks.