

According to directive 1907/2006/EC, 2020/878
Version 4.0 Revision date: 14-21-2021
Trade name: Polyester putty

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

1.1 Product identification:

Product name: Polyester putty
UFI code: 9JK0-F0MQ-800U-QS5J

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

Intended for the general public
Main use category: Consumer use, Professional use
Use of the substance or mixture: Sealants
Uses advised against: No additional information available.

1.3 Details of the supplier of the safety data sheet:

Responsible distributor : ASSYST bvba / A.S.O.W. bvba
Hellegatstraat 13a
2590 Berlaar
Belgium
Tel: +32 495 50 61 14 / +32 496 83 70 27
Website: www.assyst.org / www.artsuppliesonweb.com
Email: ao@assyst.org / vera.opsommer@assyst.org

1.4 Emergency phone number:

For Belgium:
Call the **Poison Control Center (070 245 245 - free)**, if not available: **02 264 96 30** (normal rate) or your doctor. In life-threatening situations, always call the European emergency number **112**.
NHS 24 Direct
For help from a GP, visit your GP surgery's website, use an online service to contact your GP, or call the surgery. **For urgent medical help**, use the NHS 111 online service, or **call 111** if you are unable to get help online. **For life-threatening emergencies, call 999** for an ambulance. There is more information about getting medical help on the NHS website.

SECTION 2: Identification of hazards

2.1 Classification of the substance or mixture:

Classification in accordance with Regulation (EC) No 1272/2008 as amended.

Health hazards

Flammable liquids, Category 3 - H226
Skin corrosion/irritation, Category 2 - H315
Serious eye damage/eye irritation, Category 2 - H319
Reproductive toxicity, Category 2 - H361d
Specific target organ toxicity for repeated exposure, Category 1 - H372
Full text of H- and EUH-phrases: see section 16

Adverse physicochemical, health and environmental effects

Flammable liquid and vapour.
May possibly harm fertility or the unborn child.
Causes damage to organs with prolonged or repeated exposure.
Causes skin irritation.
May cause allergic skin reaction.
Causes severe eye irritation.

2.2 Labelling elements:

Labelling according to regulation (EC) No 1272/2008 [CLP/GHS]:



Hazard pictograms:

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Signal word Danger.

Hazardous ingredients to be declared on the label:

- Styrene

Hazard statements:

H226 Flammable liquid and vapour.

H315 Causes skin irritation.

H319 Causes severe eye irritation.

H361d Suspected of damaging the unborn child.

H372 Causes damage to organs with prolonged or repeated exposure.

Precautions

Prevention:

P101 When obtaining medical advice, keep container or label at hand.

P102 Keep out of the reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames and other sources of ignition. Do not smoke.

P264 After handling this product, wash hands, forearms and face thoroughly.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Action:

P303+P361+P353 IF ON SKIN (or hair): remove contaminated clothing immediately. Rinse/show off skin with water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes; remove contact lenses, if possible; continue rinsing.

P308+P313 AFTER (possible) exposure: Consult a doctor.

P501 Dispose of contents/packaging to a hazardous or special waste collection point in accordance with local, regional, national and/or international regulations.

EUH sentences:

EUH208 Contains fatty acids, C14-18 and C16-18-unsaturated, maleic anhydride. May cause an allergic reaction.

EUH212 Caution! Hazardous inhalable dust particles may be formed during use. Do not inhale dust. (Except for black/brown/transparent product).

2.3 Other hazards:

Component:

styrene (100-42-5)

This substance/mixture does not meet the PBT criteria of the REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of the REACH regulation, annex XIII

fatty acids, C14-18 and C16-18-unsaturated, maleated (85711-46-2)

This substance/mixture does not meet the PBT criteria of the REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of the REACH regulation, annex XIII

1,4-naphthoquinone (130-15-4)

This substance/mixture does not meet the PBT criteria of the REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of the REACH regulation, annex XIII

The mixture does not contain any substances included in the list established according to Article 59(1) of REACH for having endocrine-disrupting properties, or identified as having endocrine-disrupting properties according to the criteria set out in Delegated Regulation (EU) 2017/2100 or Regulation (EU) 2018/605.

SECTION 3: Composition and information on ingredients

3.2 Mixtures:

Chemical Name	CAS No. EC No. Index no. REACH Registration number	Classification (Regulation (EC) No 1272/008)	Concentration (%)
styrene	100-42-5 202-851-5	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332	≥ 5 - < 25

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substance with national workplace exposure limit(s) (BE)	601-026-00-0 01-2119457861-32	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 2, H361d STOT SE 3, H335 STOT RE 1, H372 Asp. Tox. 1, H304 Aquatic Chronic 3, H412	
fatty acids, C14-18 and C16-18-unsaturated, maleated	85711-46-2 288-306-2 - 01-2119976378-19	Skin Irrit. 2, H315 Skin Sens. 1, H317	≥ 0,1 - < 1
1,4-naphthoquinone	130-15-4 204-977-6 - 01-2120760462-57	Acute Tox. 3 (Oral), H301 Acute Tox. 1 (Inhalation), H330 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410	< 0,1
maleic anhydride substance with national workplace exposure limit(s) (BE)	108-31-6 203-571-6 607-096-00-9 -	Acute Tox. 4 (Oral), H302 STOT RE 1, H372 Skin Corr. 1B, H314 Eye Dam. 1, H318 Resp. Sens. 1, H334 Skin Sens. 1A, H317 Specific concentration limits: (0.001 ≤ C ≤ 100) Skin Sens. 1A, H317	<0.001

The complete text of the hazard statements (H) is shown under section 16 of the sheet.

SECTION 4: First aid measures

4.1 Description of first-aid measures:

First aid general:

AFTER (possible) exposure: consult a doctor.

First aid after inhalation:

Get the person into fresh air and make sure they can breathe easily.

First aid after skin contact:

Rinse/shower skin with water.

Remove contaminated clothing immediately.

In case of skin irritation or rash: consult a doctor.

First aid after eye contact:

Rinse gently with water for several minutes.

Remove contact lenses, if possible.

Keep rinsing.

In case of persistent eye irritation: consult a doctor.

First aid after ingestion by mouth:

If you feel unwell, consult a poison control centre or doctor.

4.2 Main acute and delayed symptoms and effects:

Symptoms/effects after skin contact:

Irritation. May cause allergic skin reaction.

Symptoms/effects after eye contact:

Irritation of the eyes.

4.3 Indication of immediate medical attention and special treatment required:

Symptomatic treatment.

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SECTION 5: Fire-fighting measures

5.1 Extinguishing media:

Suitable extinguishing agents

Atomised water. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing agents

Do not use water jets.

Water is not effective to extinguish the fire, but it can be used to cool closed containers exposed to fire to prevent bursting and explosions.

5.2 Special hazards arising from the substance or mixture:

Fire hazard:

Flammable liquid and vapour.

Hazardous decomposition products in case of fire:

Possible formation of toxic vapours.

5.3 Advice for firefighters:

Protection during firefighting:

Do not intervene without appropriate safety equipment.

Self-contained breathing apparatus.

Fully protective clothing.

SECTION 6: Measures in case of accidental release of the substance or mixture

6.1 Personal precautions, protective equipment and emergency procedures:

For persons other than emergency services

Emergency procedures:

Ventilate contaminated area.

Do not expose to open fire, no sparks and no smoking.

Do not inhale dust/fume/gas/mist/vapour/spray.

Avoid contact with skin and eyes.

For emergency services

Protective equipment:

Do not intervene without appropriate safety equipment.

For further information, see section 8: "Measures to control exposure/personal protection".

6.2 Environmental precautions:

Avoid discharge into the environment.

6.3 Methods and materials for containment and cleaning:

Cleaning methods:

Large releases: scoop up spilled solids and deposit in sealable containers.

Clean contaminated surfaces with plenty of water.

Clean clothes and equipment after work.

Warn the authorities, if the product gets into the sewage system or open water.

Other information:

Take waste or solid residues to an authorised waste treatment facility.

6.4 Reference to other sections:

For further information, see paragraph 13.

SECTION 7: Handling and storage:

7.1 Precautions for safe handling of the substance or mixture:

Precautions for safe handling of the substance or mixture:

Make sure the workplace is well ventilated.

Keep away from heat, hot surfaces, sparks, open flames and other sources of ignition.

No smoking.

Ground storage and collection tank.

Only use spark-free tools.

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Take precautions against static electricity discharges.
 Highly flammable vapours may accumulate in the vessel.
 Use explosion-proof equipment.
 Wear personal protective equipment.
 Before using, consult the special instructions.
 Use only after you have read and understood all safety instructions.
 Do not inhale dust/fume/gas/mist/vapour/spray.
 Avoid contact with skin and eyes.

Hygiene measures:

Wash contaminated clothes before reusing them.
 Contaminated work clothes must not leave the work area.
 Do not eat, drink or smoke while using this product.
 Always wash hands after handling this product.

7.2 Conditions for safe storage, including incompatibilities:

Technical measures:

Ground storage and collection tank.

Storage conditions:

Store in a well-ventilated place.
 Keep cool.
 Keep in tightly closed container.
 Keep behind lock.

Non-combinable fabrics:

Heat sources. Ignition sources.

Maximum storage time:

1 year

Packaging material:

Tin.

7.3 Specific end use:

No additional information available.

SECTION 8: Exposure controls/personal protection measures

8.1 Control parameters:

National occupational exposure values and biological limit values:

maleic anhydride (108-31-6)	
Belgium - Occupational exposure limits	
Local name	Malic anhydride (vapeur et aerosol) # Malic anhydride (vapour and aerosol)
OEL TWA	0.01 mg/m ³
OEL TWA [ppm]	0.0025 ppm
Reference Legislation	Royal decree/Arrêté royal 19/11/2020
styrene (100-42-5)	
Belgium - Occupational exposure limits	
OEL TWA	108 mg/m ³
OEL TWA [ppm]	25 ppm
OEL STEL	216 mg/m ³
OEL STEL [ppm]	50 ppm

Recommended monitoring procedures:

No additional information available

Air pollutants formed:

No additional information available

DNEL and PNEC:

maleic anhydride (108-31-6)	
DNEL/DMEL (Employees)	
Acute - systemic effects, dermal	0.2 mg/kg bw/day

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Acute - systemic effects, inhalation	0.95 mg/m ³
Long-term - systemic effects, dermal	0.2 mg/kg bw/day
Long-term - systemic effects, inhalation	0.19 mg/m ³
Long-term - local effects, inhalation	0.32 mg/m ³
DNEL/DMEL (general population)	
Acute - systemic effects, dermal	0.1 mg/kg bw/day
Acute - systemic effects, inhalation	0,25
Acute - systemic effects, oral	0.1 mg/kg bw/day
Long-term - systemic effects, oral	0.06 mg/kg bw/day
Long-term - systemic effects, inhalation	0.05 mg/m ³
Long-term - systemic effects, dermal	0.1 mg/kg bw/day
Long-term - local effects, inhalation	0.08 mg/m ³
PNEC (Water)	
PNEC aqua (soft water)	0.075 mg/l
PNEC aqua (seawater)	0.0075 mg/l
PNEC aqua (intermittent, freshwater)	0.75 mg/l
PNEC (Sediments)	
PNEC sediment (freshwater)	0.06 mg/kg dry weight
PNEC sediment (seawater)	0.006 mg/kg dry weight
PNEC (Soil)	
PNEC soil	0.01 mg/kg dry weight
PNEC (Oral)	
PNEC oral (secondary poisoning)	6.67 mg/kg food
PNEC (STP)	
PNEC water treatment plant	4.46 mg/l
styrene (100-42-5)	
DNEL/DMEL (Employees)	
Acute - systemic effects, inhalation	289 mg/m ³
Acute - local effects, inhalation	306 mg/m ³
Long-term - systemic effects, dermal	406 mg/kg bw/day
Long-term - systemic effects, inhalation	85 mg/m ³
DNEL/DMEL (general population)	
Acute - systemic effects, inhalation	174.25 mg/m ³
Acute - local effects, inhalation	182.75 mg/m ³
Long-term - systemic effects, oral	2.1 mg/kg bw/day
Long-term - systemic effects, inhalation	10.2 mg/m ³
Long-term - systemic effects, dermal	343 mg/kg bw/day
PNEC (Water)	
PNEC aqua (soft water)	0.028 mg/l
PNEC aqua (seawater)	0.014 mg/l
PNEC (Sediments)	
PNEC sediment (freshwater)	0.614 mg/kg dry weight
PNEC sediment (seawater)	0.307 mg/kg dry weight
PNEC (Soil)	
PNEC soil	0.2 mg/kg dry weight
PNEC (STP)	
PNEC water treatment plant	5 mg/l

Control banding:

No additional information available

8.2 Exposure control measures:

Appropriate technical measures:

Make sure the workplace is well ventilated.

Personal protection devices:

Eye protection:

Close-fitting glasses.

Skin and body protection:

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Wear suitable protective clothing.

Hand protection:

Protective gloves.

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

Thermal hazards:

No additional information available.

Environmental exposure limitation and control:

Avoid discharge into the environment.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Physical state:	Liquid
Colour:	Variable.
Appearance:	Pasta-like.
Odour:	solvent-like.
Odour threshold value:	Not available
Melting point:	Not applicable
Freezing point:	Not available
Boiling point:	Not available
Flammability:	Not applicable
Explosion limits:	Not available
Lower explosion limit (OEL):	Not available
Upper explosion limit (BEG):	Not available
Flash point:	Not available
Self-ignition temperature:	Not available
Decomposition temperature:	Not available
pH:	Not available
Viscosity, kinematic:	Not available
Solubility:	Not available
Partition coefficient n-octanol/water (Log Kow):	Not available
Vapour pressure:	Not available
Vapour pressure at 50°C:	Not available
Density:	1.86 kg/l (20°C)
Relative density:	1,86 (20°C)
Relative vapour density at 20°C:	Not available
Particle size:	Not applicable
Particle size distribution:	Not applicable
Particle shape:	Not applicable
Aspect ratio particles:	Not applicable
Particulate aggregation state:	Not applicable
Particle agglomeration state:	Not applicable
Specific surface size particles:	Not applicable
Particulate matter formation:	Not applicable

9.2 Other information

Information on physical hazard classes:

No additional information available.

Other safety features:

VOC content: 10.92 - 19.33 % (207.38 g/l - 367.35 g/l)

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SECTION 10: Stability and reactivity

10.1 Reactivity:

Flammable liquid and vapour.

10.2 Chemical Stability:

Stable under normal conditions.

10.3 Potential Hazardous Reactions:

No hazardous reactions known under normal conditions of use.

10.4 Conditions to avoid:

Avoid contact with hot surfaces.

Heat.

No flames, no sparks.

Remove all ignition sources.

10.5 Chemically interacting Materials:

No additional information available.

10.6 Hazardous Decomposition Products:

Under normal storage and use conditions, no hazardous decomposition products will be generated.

SECTION 11: Toxicological information

11.1 Information on toxicological effects:

Acute toxicity (oral):

Not classified

Acute toxicity (dermal):

Not classified

Acute toxicity (inhalation):

Not classified

1,4-naphthoquinone (130-15-4)

LD50 oral rat

124 mg/kg body weight (Equivalent to or equivalent to OECD 401, Rat, Male/female, Experimental value, Oral, 14 day(s))

1,4-naphthoquinone (130-15-4)

LC50 Inhalation - Rat

0.046 mg/l air (OECD 403: Acute inhalation toxicity, 4 h, Rat, Male/female, Experimental value, Inhalation (aerosol), 14 day(s))

fatty acids, C14-18 and C16-18-unsaturated, maleated (85711-46-2)

LD50 oral rat

> 2000 mg/kg body weight (OECD 423: Acute oral toxicity - Acute toxicity class, Rat, Female, Read-across, Oral, 14 day(s))

LD50 dermal rat

> 2000 mg/kg body weight (OECD 402: Acute dermal toxicity, 24 h, Rat, Male/female, Experimental value, Dermal, 14 day(s))

maleic anhydride (108-31-6)

LD50 dermal rabbit

2620 mg/kg body weight Animal: rabbit, Animal sex: female, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

styrene (100-42-5)

LD50 oral rat

5000 mg/kg body weight (Rat, Male/female, Experimental value, Oral, 14 day(s))

LD50 dermal rat

> 2000 mg/kg body weight (OECD 402: Acute dermal toxicity, 24 h, Rat, Male/female, Experimental value, Dermal, 14 day(s))

LC50 Inhalation - Rat

11.8 mg/l air (4 h, Rat, Experimental value, Inhalation (vapour))

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Skin corrosion/irritation:

Causes skin irritation.

Serious eye damage/eye irritation:

Causes severe eye irritation.

Respiratory/skin sensitisation:

Not classified

Mutagenicity in gametes:

Not classified

Carcinogenicity:

Not classified.

Reproductive toxicity:

Suspected of harming the unborn child.

STOT on single exposure:

Not classified

1,4-naphthoquinone (130-15-4)

STOT from single exposure

May cause respiratory irritation.

styrene (100-42-5)

STOT from single exposure

May cause respiratory irritation.

STOT on repeated exposure:

Causes damage to organs with prolonged or repeated exposure.

maleic anhydride (108-31-6)

NOAEL (oral, rat, 90 days)

≈ 10 mg/kg body weight Animal: rat, Guideline: OECD Guideline 452 (Chronic Toxicity Studies)

NOAEC (inhalation, rat, vapour, 90 days)

≈ 0,0033 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)

STOT on repeated exposure

Causes damage to organs (respiratory system) with prolonged or repeated exposure (inhalation).

styrene (100-42-5)

STOT on repeated exposure

Causes damage to organs (hearing organs) with prolonged or repeated exposure.

Inhalation hazard:

Not classified

11.2. Information on other hazards

No additional information available.

SECTION 12: Ecological information

12.1 Toxicity:

Ecology - general:

The product is not considered harmful to aquatic organisms and has no long-term negative impact on the environment.

Short-term hazard to the aquatic environment (acute):

Not classified

Aquatic hazard, long-term (chronic):

Not classified

Not rapidly degradable

1,4-naphthoquinone (130-15-4)

LC50 - Fish [1]

0.045 mg/l (OECD 203: Fish: acute toxicity study, 96 h, Oryzias latipes, Semi-static system, Freshwater, Experimental value, GLP)

EC50 - Crustaceans [1].

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0.026 mg/l (OECD 202: Acute immobilisation study on Daphnia sp., 48 h, Daphnia magna, Semi-static system, Freshwater, Experimental value, GLP)

ErC50 algae

0.42 mg/l (OECD 201: Algae: growth inhibition study, 72 h, Pseudokirchneriella subcapitata, Static system, Freshwater, Experimental value, GLP)

fatty acids, C14-18 and C16-18-unsaturated, maleated (85711-46-2)

LC50 - Fish [1]

> 100 mg/l (OECD 203: Fish: acute toxicity study, 96 h, Danio rerio, Static system, Freshwater, Experimental value, GLP)

EC50 - Crustaceans [1].

> 100 mg/l (OECD 202: Acute immobilisation study on Daphnia sp., 48 h, Daphnia magna, Static system, Freshwater, Experimental value, GLP)

ErC50 algae

> 100 mg/l (OECD 201: Algae: growth inhibition study, 72 h, Desmodesmus subspicatus, Static system, Freshwater, Experimental value, GLP)

maleic anhydride (108-31-6)

LC50 - Fish [1]

75 mg/l Test organisms (species): Lepomis macrochirus

LC50 - Fish [2]

75 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)

EC50 - Crustaceans [1].

330 mg/l Test organisms (species): Daphnia magna

EC50 72h - Algae [1].

> 150 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

styrene (100-42-5)

LC50 - Fish [1]

10 mg/l (OECD 203: Fish: acute toxicity study, 96 h, Pimephales promelas, Flow-through system, Freshwater, Experimental value, Lethal)

EC50 - Crustaceans [1].

4.7 mg/l (OECD 202: Acute immobilisation study on Daphnia sp., 48 h, Daphnia magna, Flow-through system, Freshwater, Experimental value, Movement)

ErC50 algae

4.9 mg/l (EPA OTS 797.1050, 72 h, Pseudokirchneriella subcapitata, Static system, Freshwater, Experimental value, Growth rate)

12.2 Persistence and Degradability:

1,4-naphthoquinone (130-15-4)

Persistence and degradability

Not readily biodegradable in water.

fatty acids, C14-18 and C16-18-unsaturated, maleated (85711-46-2)

Persistence and degradability

Not readily biodegradable in water.

styrene (100-42-5)

Persistence and degradability

Biodegradable in soil. Readily biodegradable in water.

styrene (100-42-5)

Chemical oxygen demand (COD):

2.8 g O₂/g substance

ThZV:

3.07 g O₂/g substance

BOD (% of ThOD):

0.42 (Literature study)

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12.3 Bioaccumulation:

1,4-naphthoquinone (130-15-4)

Partition coefficient n-octanol/water (Log Pow)

1.77 (Evidence-based approach, OECD 107: Partition coefficient (n-octanol/water): Shaker bottle method)

Bioaccumulation

Low potential for bioaccumulation (Log Kow < 4).

fatty acids, C14-18 and C16-18-unsaturated, maleated (85711-46-2)

BCF - Other aquatic organisms [1].

10 (BCFBAF v3.01, Calculated value)

Partition coefficient n-octanol/water (Log Pow)

> 4 (Experimental value, Other, 23 °C)

Bioaccumulation

Bioaccumulation potential.

styrene (100-42-5)

BCF - Fish [1]

74 (Calculated value)

Partition coefficient n-octanol/water (Log Pow)

2.96 (Practical experience/observation, OECD 107: Partition coefficient (n-octanol/water): Shaker bottle method, 25 °C)

Bioaccumulation

Low potential for bioaccumulation (BCF < 500).

12.4 Mobility in soil:

1,4-naphthoquinone (130-15-4)

Surface tension

72.6 mN/m (20 °C, ≤ 0.57 g/l, OECD 115: Surface tension of aqueous solutions)

Ecology - soil

No (test) data available on mobility of the substance.

fatty acids, C14-18 and C16-18-unsaturated, maleated (85711-46-2)

Organic carbon normalised adsorption coefficient (Log Koc)

2,41 - 5,38 (log Koc, Other, Calculated value)

Ecology - soil

No unequivocal conclusion can be drawn from the available numerical values.

styrene (100-42-5)

Surface tension

No data available in the literature

Organic carbon normalised adsorption coefficient (Log Koc)

2.55 (log Koc, estimated value)

Ecology - soil

Little ability to adsorb into soil.

12.5 Results of PBT and vPvB assessment:

Component

styrene (100-42-5)

This substance/mixture does not meet the PBT criteria of the REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of the REACH regulation, annex XIII

fatty acids, C14-18 and C16-18-unsaturated, maleated (85711-46-2)

This substance/mixture does not meet the PBT criteria of the REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of the REACH regulation, annex XIII

1,4-naphthoquinone (130-15-4)

This substance/mixture does not meet the PBT criteria of the REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of the REACH regulation, annex XIII

12.6. Endocrine-disrupting properties

No additional information available.

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12.7 Other Harmful Effects:

No additional information available.

SECTION 13: Disposal instructions

13.1 Waste treatment methods:

Waste treatment methods:

Dispose of contents/packaging in accordance with the sorting instructions of an authorised collection company.

Wastewater disposal recommendations:

Do not discharge into drains or the environment.

Additional information:

Highly flammable vapours may accumulate in the vessel.

Ecology - wastes:

Avoid discharge into the environment.

EURAL code:

08 04 09* - waste adhesives and sealants containing organic solvents or other dangerous substances 15 01 10*

- packaging containing residues of or contaminated by dangerous substances

SECTION 14: Information relating to transport

14.1 UN number

ADR/ADN/RID, IMDG, IATA: UN 3269

14.2 Proper cargo name according to UN model regulations

ADR/ADN/RID: POLYESTER RESIN SEALANT

IMDG: POLYESTER RESIN SEALANT

IATA: Polyester resin kit

Transport document description:

ADR: UN 3269 POLYESTER RESIN SEALANT, 3, III, (E)

ADN: UN 3269 POLYESTER RESIN SEALANT, 3, III

RID: UN 3269 POLYESTER RESIN SEALANT, 3, III

IMDG: UN 3269 POLYESTER RESIN SEALANT, 3, III

IATA: UN 3269 Polyester resin kit, 3, III

14.3 Transport hazard class(es)

ADR/ADN/RID: Class: 3 Label: 3

IMDG: Class: 3 Label: 3

IATA: Class: 3 Label: 3

14.4 Packing group

ADR/ADN/RID, IMDG, IATA: III

14.5 Environmental hazards

ADR/ADN/RID: No

IMDG: No

IATA: No

14.6 Special precautions for the user

Road transport

Classification code (ADR): F3

Special provisions (ADR): 236, 340

Limited quantities (ADR): 5I

Exempted quantities (ADR): E0

Packing instructions (ADR): P302, R001

Transport category (ADR): 3

Special provisions for transport - Company (ADR): S2

Code for restrictions in tunnels (ADR): E

Transport at sea

Special provision (IMDG): 236, 340

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Limited quantities (IMDG):	5 L
Packing instructions (IMDG):	P302
No NS (Fire):	F-E
No NS (Waste):	S-D
Stowage category (IMDG):	A
Measures and observations (IMDG):	Polyester resin kits consist of two components: a base material (flammable liquid, packaging group II) and an activator (organic peroxide), each separately packed in an inner packaging.

Air transport

PCA Expected quantities (IATA):	E0
PCA Limited quantities (IATA):	Y370
PCA limited quantity max. net quantity (IATA):	5kg
PCA packing requirements (IATA):	370
PCA max. net quantity (IATA):	10kg
CLA packaging requirement (IATA):	370
CLA max net quantity (IATA):	10kg
Special provisions (IATA):	A66, A163
ERG (IATA) code:	3L

Transport on inland waters

Classification code (ADN):	F3
Special provision (ADN):	236, 340
Limited quantities (ADN):	5 L
Exceptional quantities (ADN):	E0
Required equipment (ADN):	PP, EX, A
Ventilation (ADN):	VE01
Number of blue cones/lights (ADN):	0

Rail transport

Classification code (RID):	F3
Special provision (RID):	236, 340
Restricted quantities (RID):	5L
Excepted quantities (RID):	E0
Packaging instructions (RID):	P302, R001
Transport category (RID):	3
Express package (RID):	CE4
Hazard identification number (RID):	30

14.7 Transport in bulk in accordance with Annex II to MARPOL 73/78 and the IBC Code

Information not applicable

SECTION 15: Statutory information

15.1 Safety, health and environmental regulations and legislation specific to the substance or mixture:

✓ **REACH list of restrictions (Annex XVII)**

Reference code

3(a)

Applicable to

Metal Plastic Standard ; styrene

Indication or description

Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories in accordance with Annex I to EC Regulation 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, and 2.15 types A to F

Reference code

3(b)

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Applicable to

Metal Plastic Standard ; styrene ; fatty acids, C14-18 and C16-18-unsaturated, maleated

Indication or description

Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories in accordance with Annex I to EC Regulation 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10

Reference code

3(c)

Applicable to

styrene

Indication or description

Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories in accordance with Annex I to EC Regulation 1272/2008: Hazard Class 4.1

- ✓ **Does not contain REACH candidate list substances**
- ✓ **Does not contain any substances listed in Annex XIV of REACH**
- ✓ **Does not contain any substances covered by Regulation (EU) No 649/2012 of The European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals.**
- ✓ **Does not contain substance(s) covered by Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants.**
- ✓ **Does not contain substances covered by Regulation (EU) No 2019/1148 of the European Parliament and of the Council of Thursday 20 June 2019 on the marketing and use of explosives precursors.**
- ✓ **VOC content:**
10.92 - 19.33 % (207.38 g/l - 367.35 g/l)

National regulations:

No additional information available

15.2 Chemical safety assessment:

No chemical safety assessment has been carried out.

SECTION 16: Other information

Indication of changes

Modified item:

in accordance with Regulation (EC) No 1907/2006 (REACH) with the additional Regulation (EU) 2020/878

Heading:

2 and 3.2

Abbreviations and acronyms:

ADN:	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE:	Acute toxicity estimate
BCF:	Bioconcentration factor
BLV:	Biological limit value
BOD:	Biochemical oxygen demand (BOD).
COD:	Chemical oxygen demand (COD)
DMEL:	Derived dose with minimal effect
DNEL:	Derived dose without effect
EC No	European Commission Number
EC50:	Median effective concentration
EN:	European standard
IARC:	International Agency for Research on Cancer

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IATA:	International Air Transport Association
IMDG:	International Maritime Dangerous Goods Code
LC50:	Concentration leading to death in 50% of a test population
LD50:	Dose leading to death in 50% of a test population (median lethal dose)
LOAEL:	Lowest dose or concentration at which an adverse effect was observed
NOAEC:	Concentration at which no adverse effect was observed
NOAEL:	Dose or concentration at which no adverse effect was observed
NOEC:	Concentration with no observed effects
OECD:	Organisation for Economic Co-operation and Development, OECD
OEL:	Occupational exposure limit
PBT:	Persistent, bioaccumulative and toxic substance
PNEC:	Predicted no-effect concentration(s)
RID:	Regulations concerning the International Carriage of Dangerous Goods by Rail
MSDS:	Safety Data Sheet
STP:	Water treatment plant
ThZV:	Theoretical oxygen demand (TZV).
TLM:	Median Tolerance Limit
VOCS:	Volatile organic compounds
CAS No:	Chemical Abstract Service - Number
N.E.G.:	Not Elsewhere Named
vPvB:	Very persistent and very bioaccumulative, vPvB
ED:	Endocrine disrupting properties

Integral text of sentences H and EUH:

Acute Tox. 1 (Inhalation):	Acute toxicity by inhalation, Category 1
Acute Tox. 3 (Oral):	Acute toxicity (oral), Category 3
Acute Tox. 4 (Inhalation):	Acute toxicity by inhalation, Category 4
Acute Tox. 4 (Oral):	Acute toxicity (oral), Category 4
Aquatic Acute 1:	Acute hazard to the aquatic environment, Category 1
Aquatic Chronic 1:	Chronic hazard to the aquatic environment, Category 1
Aquatic Chronic 3:	Chronic hazard to the aquatic environment, Category 3
Asp. Tox. 1:	Aspiration hazard, Category 1
EUH208:	Contains fatty acids, C14-18 and C16-18-unsaturated, maleic anhydride. May cause an allergic reaction.
EUH212:	Caution! Hazardous inhalable dust particles may be formed during use. Do not inhale dust. (Except for black/brown/transparent product)
Eye Dam. 1:	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2:	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3:	Flammable liquids, Category 3
H226:	Flammable liquid and vapour.
H301:	Toxic if swallowed.
H302:	Harmful if swallowed.
H304:	May be fatal if substance enters airways if swallowed.
H314:	Causes severe burns and eye damage.
H315:	Causes skin irritation.
H317:	May cause an allergic skin reaction.
H318:	Causes serious eye damage.
H319:	Causes severe eye irritation.
H330:	Fatal by inhalation.
H332:	Harmful by inhalation.
H334:	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335:	May cause respiratory tract irritation.

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H361d: Suspected of harming the unborn child.
H372: Causes damage to organs on prolonged or repeated exposure.
H400: Very toxic to aquatic organisms.
H410: Highly toxic to aquatic organisms with long-lasting effects.
H412: Harmful to aquatic organisms with long-lasting effects.
Repr. 2: Reproductive toxicity, Category 2
Resp. Sens. 1: Respiratory sensitisation, Category 1
Skin Corr. 1B: Skin corrosion/irritation, Category 1, Subcategory 1B
Skin Irrit. 2 : Skin corrosion/irritation, Category 2
Skin Sens. 1 : Skin sensitisation, Category 1
Skin Sens. 1A: Skin sensitisation, Category 1A
STOT RE 1: Specific target organ toxicity by repeated exposure, Category 1
STOT SE 3: Specific target organ toxicity by single exposure, Category 3, respiratory tract irritation

Classification and procedure used to determine the classification of mixtures in accordance with Regulation (EC) 1272/2008 [CLP]:

Flam. Liq. 3	H226	Calculation method
Skin Irrit. 2	H315	Calculation method
Eye Irrit. 2	H319	Calculation method
Repr. 2	H361d	Expert assessment
STOT RE 1	H372	Calculation method

Safety data sheet (MSDS), EU

This information is based on our current knowledge and is intended to describe the product for the application of health, safety and environmental aspects. It should therefore not be construed as a guarantee of any specific property of the product.