according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Issue date: 01/04/2016 Revision date: 04/01/2022 Supersedes version of: 05/05/2021 Version: 6.0

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

1.1. Product identifier

Product form	: Mixture
Name	: Universal filling putty SOLL FULL
UFI	: WK80-20M1-600U-NKFG
Contains	: styrene; reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700); maleic anhydride

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

1.2.1. Relevant identified uses

Main use category Industrial/Professional use spec : Professional use, Industrial use

: Used for the repair of car body components and polyester laminates.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

UAB HELVINA Parko str. 96, Ramuciai LT-54464 Kaunas distr., Lithuania T. +370 37 308901 - F. +370 37 308902 <u>info@helvina.pl</u> - <u>www.helvina.lt</u> E-mail address of competent person responsible for the SDS : <u>info@helvina.lt</u>

1.4. Emergency telephone number

Emergency number

: Poison control and information office.

Tel. +370 5 236 2052 or +370 687 53378

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 3	H226
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Skin sensitisation, Category 1	H317
Reproductive toxicity, Category 2	H361d
Specific target organ toxicity — Repeated exposure, Category 1	H372
Full text of H-statements: see section 16	

Adverse physicochemical, human health and environmental effects

Flammable liquid and vapour. Suspected of damaging the unborn child.. Causes damage to organs (hearing organs) through prolonged or repeated exposure (inhalation). Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



Signal word (CLP) Contains : Danger

: styrene; reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700); maleic anhydride

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Hazard statements (CLP)	: H226 - Flammable liquid and vapour.
	H315 - Causes skin irritation.
	H317 - May cause an allergic skin reaction.
	H319 - Causes serious eye irritation.
	H361d - Suspected of damaging the unborn child.
	H372 - Causes damage to organs (hearing organs) through prolonged or repeated exposure (inhalation).
Precautionary statements (CLP)	: P260 - Do not breathe dust, vapours.
	P280 - Wear protective gloves, protective clothing, eye protection, face protection.
	P314 - Get medical advice/attention if you feel unwell.
	P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.
	Rinse skin with water or shower.
	P403+P235 - Store in a well-ventilated place. Keep cool.
Extra phrases	The product is intended for professional use.

2.3. Other hazards

Other hazards which do not result in classification : Vapours may form flammable mixture with air. The product does not meet the PBT and vPvB classification criteria

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
styrene	(CAS-No.) 100-42-5 (EC-No.) 202-851-5 (EC Index-No.) 601-026-00-0 (REACH-no) 01-2119457861-32- XXXX	≤ 15	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 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
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)	(CAS-No.) 25068-38-6 (EC-No.) 500-033-5 (EC Index-No.) 603-074-00-8 (REACH-no) 01-2119456619-26- XXXX	≤ 0,15	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411
maleic anhydride	(CAS-No.) 108-31-6 (EC-No.) 203-571-6 (EC Index-No.) 607-096-00-9 (REACH-no) 01-2119472428-31- XXXX	≤ 0,05	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Resp. Sens. 1, H334 Skin Sens. 1A, H317 STOT RE 1, H372

Specific concentration limits:		
Name	Product identifier	Specific concentration limits
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)	(CAS-No.) 25068-38-6 (EC-No.) 500-033-5 (EC Index-No.) 603-074-00-8 (REACH-no) 01-2119456619-26- XXXX	(5 ≤C < 100) Skin Irrit. 2, H315 (5 ≤C < 100) Eye Irrit. 2, H319

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

maleic anhydride	(CAS-No.) 108-31-6 (EC-No.) 203-571-6 (EC Index-No.) 607-096-00-9 (REACH-no) 01-2119472428-31- XXXX	(0,001 ≤C ≤ 100) Skin Sens. 1A, H317
Full text of H- and EUH-statements: see section 16	-	· · · · · · · · · · · · · · · · · · ·
SECTION 4: First aid measures		
4.1. Description of first aid measures		
First-aid measures general First-aid measures after inhalation First-aid measures after skin contact First-aid measures after eye contact	 IF exposed or concerned: Get medical advice/attention. Remove person to fresh air and keep comfortable for breathing. Rinse skin with water/shower. Take off immediately all contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention. Rinse cautiously with water for several minutes. Remove contact lenses, if present and east to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Call a poison center or a doctor if you feel unwell. 	
First-aid measures after ingestion		
4.2. Most important symptoms and effects	, both acute and delayed	
Symptoms/effects after skin contact Symptoms/effects after eye contact	: Irritation. May cause an allergic skin : Eye irritation.	reaction.
4.3. Indication of any immediate medical a	ttention and special treatment need	ded
	-	ssessment of the victim's condition. In case of severe rt and circulatory system. There is no antidote. Treat
5.1. Extinguishing media		
Suitable extinguishing media Unsuitable extinguishing media	: Water spray. Dry powder. Foam. Car : Do not use a heavy water stream.	bon dioxide.
5.2. Special hazards arising from the subs	tance or mixture	
Fire hazard Hazardous decomposition products in case of fire		rs and gases containing thermal decomposition by be formed. Avoid inhalation of combustion products,
5.3. Advice for firefighters		
o.o. Advice for intelligiters		
Protection during firefighting	: Do not attempt to take action without breathing apparatus. Complete prote	suitable protective equipment. Self-contained ctive clothing.
-	breathing apparatus. Complete prote	
Protection during firefighting	breathing apparatus. Complete prote	
Protection during firefighting SECTION 6: Accidental release measu	breathing apparatus. Complete prote	
Protection during firefighting SECTION 6: Accidental release measu 6.1. Personal precautions, protective equi	breathing apparatus. Complete prote	ctive clothing.
Protection during firefighting SECTION 6: Accidental release measu 6.1. Personal precautions, protective equip 6.1.1. For non-emergency personnel	breathing apparatus. Complete prote ires pment and emergency procedures : Ventilate spillage area. No open flam	ctive clothing.
Protection during firefighting SECTION 6: Accidental release measu 6.1. Personal precautions, protective equip 6.1.1. For non-emergency personnel Emergency procedures	breathing apparatus. Complete prote pres pres ventilate spillage area. No open flam dust/fume/gas/mist/vapours/spray. A	ctive clothing.

Avoid release to the environment. Avoid the formation of vapors. In case of spillage, steps should be taken to prevent it from spreading into the environment - prevent it from reaching sewage systems, water reservoirs, rivers, groundwater and soil. Do not use open fire, avoid sparks, eliminate ignition sources. Notify the appropriate emergency services. Warn others about the danger. Similar precautions should also be taken in the event of fire water.

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

6.3. Methods and material for containment and cleaning up		
Methods for cleaning up	: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.	
Other information	: Proceed in accordance with the Environmental Protection Law and the Waste Act. Dispose of materials or solid residues at an authorized site.	
6.4. Reference to other sections		
For further information refer to section 13.		
SECTION 7: Handling and storage		
7.1. Precautions for safe handling		
Precautions for safe handling	 Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes. Wash contaminated clothing before reuse. Contaminated work clothing should not be 	
Hygiene measures	allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.	
7.2. Conditions for safe storage, including any incompatibilities		
Storage conditions Incompatible materials Storage temperature	 Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up. Strong acids, strong bases and oxidation agents. Organic peroxides. 5 - 20 °C 	
Heat and ignition sources	: Keep away from open flames, hot surfaces and sources of ignition. Keep out of direct sunlight. Protect from moisture.	

7.3. Specific end use(s)

See Section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

styrene (100-42-5)	
Lithuania - Occupational Exposure Limits	
Local name	Styren
WEL (Short-term value)	200 mg/m³, 50 ppm
WEL (Long-term value)	90 mg/m³, 20 ppm
Regulatory reference	HN 23:2011

maleic anhydride (108-31-6)	
Lithuania - Occupational Exposure Limits	
Local name	Maleic anhydride
WEL (Short-term value)	0,5 mg/m³
WEL (Long-term value)	1 mg/m ³
Regulatory reference	HN 23:2011

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

styrene (100-42-5)		
DNEL/DMEL (Workers)		
Acute - systemic effects, inhalation	289 mg/m³	
Acute - local effects, inhalation	306 mg/m ³	
Long-term - systemic effects, dermal	406 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	85 mg/m ³	
DNEL/DMEL (General population)		
Acute - systemic effects, inhalation	174,25 mg/m³	
Acute - local effects, inhalation	182,75 mg/m³	
Long-term - systemic effects,oral	2,1 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	10,2 mg/m ³	
Long-term - systemic effects, dermal	343 mg/kg bodyweight/day	
PNEC (Water)		
PNEC aqua (freshwater)	0,028 mg/l	
PNEC aqua (marine water)	0,014 mg/l	
PNEC aqua (intermittent, freshwater)	0,04 mg/l	
PNEC (Sediment)		
PNEC sediment (freshwater)	0,614 mg/kg dwt	
PNEC sediment (marine water)	0,307 mg/kg dwt	
PNEC (Soil)		
PNEC soil	0,2 mg/kg dwt	
PNEC (STP)		
PNEC sewage treatment plant	5 mg/l	

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) (25068-38-6)		
DNEL/DMEL (Workers)		
Acute - systemic effects, dermal	8,33 mg/kg bodyweight/day	
Acute - systemic effects, inhalation	12,25 mg/m ³	
Long-term - systemic effects, dermal	8,33 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	12,25 mg/m ³	
DNEL/DMEL (General population)		
Acute - systemic effects, dermal	3,571 mg/kg bodyweight/day	
Acute - systemic effects, oral	0,75 mg/kg bodyweight/day	
Long-term - systemic effects,oral	0,75 mg/kg bodyweight/day	
Long-term - systemic effects, dermal	3,571 mg/kg bodyweight/day	
PNEC (Water)		
PNEC aqua (freshwater)	0,006 mg/l	

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

PNEC aqua (marine water)	0,0006 mg/l	
PNEC aqua (intermittent, freshwater)	0,018 mg/l	
PNEC (Sediment)		
PNEC sediment (freshwater)	0,996 mg/kg dwt	
PNEC sediment (marine water)	0,0996 mg/kg dwt	
PNEC (Soil)		
PNEC soil	0,196 mg/kg dwt	
PNEC (Oral)		
PNEC oral (secondary poisoning)	11 mg/kg food	
PNEC (STP)		
PNEC sewage treatment plant	10 mg/l	

maleic anhydride (108-31-6)		
DNEL/DMEL (Workers)		
Acute - systemic effects, dermal	0,2 mg/kg bodyweight/day	
Acute - systemic effects, inhalation	0,95 mg/m³	
Long-term - systemic effects, dermal	0,2 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	0,19 mg/m³	
Long-term - local effects, inhalation	0,32 mg/m³	
DNEL/DMEL (General population)		
Acute - systemic effects, dermal	0,1 mg/kg bodyweight/day	
Acute - systemic effects, inhalation	0,25	
Acute - systemic effects, oral	0,1 mg/kg bodyweight/day	
Long-term - systemic effects,oral	0,06 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	0,05 mg/m³	
Long-term - systemic effects, dermal	0,1 mg/kg bodyweight/day	
Long-term - local effects, inhalation	0,08 mg/m³	
PNEC (Water)		
PNEC aqua (freshwater)	0,075 mg/l	
PNEC aqua (marine water)	0,0075 mg/l	
PNEC aqua (intermittent, freshwater)	0,75 mg/l	
PNEC (Sediment)		
PNEC sediment (freshwater)	0,06 mg/kg dwt	
PNEC sediment (marine water)	0,006 mg/kg dwt	
PNEC (Soil)	PNEC (Soil)	
PNEC soil	0,01 mg/kg dwt	
PNEC (Oral)		
PNEC oral (secondary poisoning)	6,67 mg/kg food	
PNEC (STP)		
PNEC sewage treatment plant	4,46 mg/l	

8.1.5. Control banding

No additional information available

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure adequate ventilation in confined areas. If ventilation is not sufficient, to keep vapour concentrations below the limit valuesuse the appropriate respiratory protection. Personal protection equipment should be selected on the basis of substance concentrations at individual work stations, exposure time, operator functions and recommendations indicated by the supplier of the equipment. In explosion-risk areas, wear clothes, gloves and boots with electrostatic discharge protection function. Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:			
Safety glasses			
Туре	Field of application	Characteristics	Standard
Safety goggles	Dust, Fine dust	clear	EN 166

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:					
Protective gloves					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Protective gloves	Polyvinylchloride (PVC), Latex, Neoprene rubber (HNBR), Nitrile rubber (NBR)	6 (> 480 minutes)	> 0,38 mm	3 (> 0.65)	EN ISO 374, EN 420

Other skin protection Materials for protective clothing:		
Condition	Material	Standard
Indoor or outdoor use	Antistatic clothing	EN 340, EN 14605, EN ISO 20346

8.2.2.3. Respiratory protection

Respiratory protection:			
[In case of inadequate ventilation] wear respiratory protection.			
Device	Filter type	Condition	Standard
Reusable half mask	Type P2	Short term exposure, Protection for Solid particles	EN 143, EN 149

8.2.2.4. Thermal hazards

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

In order to reduce the impact on the environment and human health, the recommendations contained in this safety data sheet should be followed. When carrying out operations with the product at elevated temperatures, use efficient ventilation systems equipped with devices preventing the emission of gases into the atmospheric air. Do not contaminate water with the product or its packaging. Prevent the product or its packaging from getting into the sewage system, water reservoirs, rivers, groundwater and soil. It is forbidden to recover or dispose of the product, packaging and packaging waste outside of the installations or devices intended for this purpose, meeting the requirements specified in the provisions of the Act on waste. Avoid release to the environment.

Other information:

Handle in accordance with good industrial hygiene and safety procedures.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties		
Physical state	: Liquid	
Colour	Yellow.	
Appearance	: Thixotropic paste.	
Odour	: Sweet. aromatic.	
Odour threshold	: Not available	
Melting point	: Not applicable	
Freezing point	: Not available	
Boiling point	: 145 °C (1013 hPa; for styrene)	
Flammability	: Flammable liquid and vapour.	
Explosive properties	: Vapours may form flammable mixture with air.	
Oxidising properties	: Does not meet the criteria for classification as oxidising.	
Explosive limits	: Not available	
Lower explosive limit (LEL)	: 0,9 vol % (for styrene)	
Upper explosive limit (UEL)	: 6,1 vol % (for styrene)	
Flash point	: 31 °C (for styrene)	
Auto-ignition temperature	: 490 °C (1013 hPa; for styrene)	
Decomposition temperature	: Not available	
рН	: Not available	
Viscosity, kinematic	: Not available	
Viscosity, dynamic	: 250000 – 400000 mPa⋅s (EN ISO 2555:2018, 23°C, Brookfield)	
Solubility	: Not available	
Partition coefficient n-octanol/water (Log Kow)	: Not available	
Vapour pressure	: 6,67 hPa (20°C; for styrene)	
Vapour pressure at 50 °C	: Not available	
Density	: 1,8 – 1,9 g/cm³ (EN ISO 2811-1:2016, 23°C)	
Relative density	: Not available	
Relative vapour density at 20 °C	: Not available	
Particle size	: Not applicable	
Particle size distribution	: Not applicable	
Particle shape	: Not applicable	
Particle aspect ratio	: Not applicable	
Particle aggregation state	: Not applicable	
Particle agglomeration state	: Not applicable	
Particle specific surface area	Not applicable	
Particle dustiness	: Not applicable	

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

VOC content

: < 250 Directive 2004/42/CE Annex II B bodyfiller/stopper

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable liquid and vapour.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

Strong acids, strong bases and strong oxidants. Organic peroxides.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

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

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

styrene (100-42-5)	
LD50 oral	> 6000 mg/kg bodyweight Animal: hamster, Syrian, Animal sex: male
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat (Vapours)	11,8 mg/l/4h

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) (25068-38-6)	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))

maleic anhydride (108-31-6)	
LD50 dermal rabbit	2620 mg/kg bodyweight Animal: rabbit, Animal sex: female, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
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	: Not classified
Carcinogenicity	: Not classified

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) (25068-38-6)		
NOAEL (chronic, oral, animal/male, 2 years)	15 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Guideline: EPA OPPTS 870.4300 (Combined Chronic Toxicity / Carcinogenicity), Guideline: other:MITI, Japanese ministry of international trade and industry, February 1998, Remarks on results: other:Effect type: toxicity (migrated information)	
NOAEL (chronic, oral, animal/female, 2 years)	100 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Guideline: EPA OPPTS 870.4300 (Combined Chronic Toxicity / Carcinogenicity), Guideline: other:MITI, Japanese ministry of international trade and industry, February 1998, Remarks on results: other:Effect type: toxicity (migrated information)	
Reproductive toxicity	: Suspected of damaging the unborn child.	
STOT-single exposure	: Not classified	
styrene (100-42-5)		
STOT-single exposure	May cause respiratory irritation.	

STOT-repeated exposure

: Causes damage to organs (hearing organs) through prolonged or repeated exposure (inhalation).

styrene (100-42-5)	
LOAEL (oral, rat, 90 days)	2000 mg/kg bodyweight Animal: rat
LOAEC (inhalation, rat, vapour, 90 days)	0,21 mg/l air Animal: rat, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat
NOAEL (subchronic, oral, animal/male, 90 days)	10 mg/kg bodyweight Animal: mouse, Animal sex: male
STOT-repeated exposure	Causes damage to organs (hearing organs) through prolonged or repeated exposure.

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) (25068-38-6)		
NOAEL (oral, rat, 90 days)	50 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90- Day Oral Toxicity in Rodents), Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents), Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: other:japanese MITI guidelines for toxicity testing of chemicals	

maleic anhydride (108-31-6)	
NOAEL (oral, rat, 90 days)	≈ 10 mg/kg bodyweight 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-repeated exposure	Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard

: Not classified

11.2. Information on other hazards 11.2.1. Endocrine disrupting properties Adverse health effects caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

11.2.2 Other information	
Other information	: Information on Effects: refer to section 4
SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified
Not rapidly degradable	
styrene (100-42-5)	
LC50 - Fish [1]	10 mg/l Test organisms (species): Pimephales promelas
ECE0 Crustana [1]	4.7 mall Test organisms (species): Daphnia magna

EC50 - Crustacea [1]	4,7 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	4,9 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [1]	6,3 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
LOEC (chronic)	2,06 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	1,01 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) (25068-38-6)		
LC50 - Fish [1]	1,2 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)	
EC50 - Crustacea [1]	1,8 mg/l Daphnia magna	
EC50 72h - Algae [1]	9,4 mg/l Test organisms (species): Scenedesmus capricornutum	
EC50 72h - Algae [2]	> 11 mg/l Test organisms (species): Scenedesmus capricornutum	
ErC50 algae	11 mg/l Scenedesmus capricornutum	
LOEC (chronic)	1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	
NOEC (chronic)	0,3 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	

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 - Crustacea [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)

12.2. Persistence and degradability

styrene (100-42-5)	
Persistence and degradability	Readily biodegradable.
Biochemical oxygen demand (BOD)	1,96 g O ₂ /g substance
Chemical oxygen demand (COD)	2,8 g O ₂ /g substance
Biodegradation	70,9 %

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

reaction product: bisphenol-A-(epichlorhy	drin); epoxy resin (number average molecular weight ≤ 700) (25068-38-6)
Persistence and degradability	Not readily biodegradable.
Biodegradation	12 % 28 days, 302B OECD
maleic anhydride (108-31-6)	
Persistence and degradability	Readily biodegradable.
12.3. Bioaccumulative potential	
styrene (100-42-5)	
Partition coefficient n-octanol/water (Log Pow)	2,95
Bioaccumulative potential	Potential to bioaccumulate is low.
reaction product: hisphenol-A-(enichlorhy	drin); epoxy resin (number average molecular weight ≤ 700) (25068-38-6)
BCF - Fish [1]	
Partition coefficient n-octanol/water (Log Pow)	3 – 5 25°C
Bioaccumulative potential	Bioconcentration potential is moderate.
maleic anhydride (108-31-6)	
Bioaccumulative potential	No bioaccumulation data available.
12.4. Mobility in soil	
styrene (100-42-5)	
Partition coefficient n-octanol/water (Log Koc)	352
Ecology - soil	moderately.
reaction product: bisphenol-A-(epichlorhy	drin); epoxy resin (number average molecular weight ≤ 700) (25068-38-6)
Partition coefficient n-octanol/water (Log Koc)	1800 – 4400
Ecology - soil	low mobility.
maleic anhydride (108-31-6)	
Ecology - soil	No data available.
12.5. Results of PBT and vPvB assessmer	nt
Universal putty	
The product does not meet the PBT and vPvB clas	sification criteria
12.6. Endocrine disrupting properties	
Adverse effects on the environment caused by endocrine disrupting properties	: The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605
12.7. Other adverse effects	
No additional information available	

No additional information available

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

SECTION 13: Disposal considerations	s
Waste management (disposal and evaluation)	: Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain.
Waste treatment methods Additional information	 The holder of product waste and packaging waste is obliged to handle the waste in a manner consistent with the principles of waste management specified in the Act on the management of packaging and packaging waste, the Act on waste and environmental protection requirements. The resulting product waste and packaging waste should be stored, transported, collected and recovered, including recycling or neutralization, in accordance with the provisions of the Act on waste and related regulations. Unused product as well as contaminated packaging should be sent to an entity authorized to collect hazardous waste. The waste classification should be applied, using the appropriate codes and names in accordance with the applicable waste catalog. The disposal of waste to soil and ground, sewage systems, rivers, water reservoirs is prohibited. Dispose of contents/container in accordance with licensed collector's sorting instructions. Flammable vapours may accumulate in the container.
SECTION 14: Transport information	

```
ADR Certificate
```

: 125/IPO-BC/2011

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	ΙΑΤΑ	ADN	RID
14.1. UN number or ID n	umber		1	
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shippin	g name			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard o	class(es)	·		
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental haz	ards			
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information	on available	1	1	1

14.6. Special precautions for user

Overland transport No data available Transport by sea No data available Air transport No data available Inland waterway transport No data available Rail transport No data available

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

Reference code	Applicable on	Entry title or description
3(a)	Universal putty ; styrene	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 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, 2.15 types A to F
3(b)	Universal putty ; styrene ; reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 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
3(c)	styrene ; reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1
40.	styrene	Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

VOC content

: < 250 Directive 2004/42/CE Annex II B bodyfiller/stopper

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

15.1.2. National regulations

:	Act of 25 February 2011 on chemical substances and their mixtures (J. o L. No. 63, item 322 as amended; consolidated text J. o L. 2019, item 1225).
	Act of 19 August 2011 on the Carriage of Dangerous Goods (J. o L. 2011 No. 227, item
	1367 as amended; consolidated text J. o L. 2020, item 154).
	The ADR Agreement - Annex to the J. o L. of 26 April 2019 Government Statement of 18
	February 2019 on the entry into force of the amendments to Annex A and B to the European
	Agreement concerning the International Carriage of Dangerous Goods by Road (ADR),
	signed in Geneva on 30 September 1957 (J. o L. 2019, item 769).
	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18
	December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of
	Chemicals (REACH), establishing a European Chemicals Agency, amending Directive
	1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission
	Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission
	Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.
	Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16
	December 2008 on classification, labelling and packaging of substances and mixtures,
	amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation
	(EC) No 1907/2006.
	Regulation of the Minister of Health of 20 April 2012 on labelling of hazardous substances
	and hazardous mixtures and certain mixtures (consolidated text: J. o L. 2015, item 450).
	Regulation of the Minister of Family, Labour and Social Policy of 12 June 2018 on the
	highest permissible concentration and intensity of noxious agents for health at work
	environment (J. o L. item 1286 as amended).
	Regulation of the Minister of Climate of 2 January 2020 on the catalogue of waste (J. o L.
	2020, item 10).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

SECTION 1. SECTION 2. SECTION 3. SECTION 9.

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 Minimal Effect level		
DNEL	Derived-No Effect Level		
EC-No.	European Community number		
EC50	Median effective concentration		
EN	European Standard		
IARC	International Agency for Research on Cancer		
IATA	International Air Transport Association		
IMDG	International Maritime Dangerous Goods		

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

LC50	Median lethal concentration		
LD50	Median lethal dose		
LOAEL	Lowest Observed Adverse Effect Level		
NOAEC	No-Observed Adverse Effect Concentration		
NOAEL	No-Observed Adverse Effect Level		
NOEC	No-Observed Effect Concentration		
OECD	Organisation for Economic Co-operation and Development		
OEL	Occupational Exposure Limit		
РВТ	Persistent Bioaccumulative Toxic		
PNEC	Predicted No-Effect Concentration		
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail		
SDS	Safety Data Sheet		
STP	Sewage treatment plant		
ThOD	Theoretical oxygen demand (ThOD)		
TLM	Median Tolerance Limit		
VOC	Volatile Organic Compounds		
CAS-No.	Chemical Abstract Service number		
N.O.S.	Not Otherwise Specified		
vPvB	Very Persistent and Very Bioaccumulative		
ED	Endocrine disrupting properties		
Data sources Training advice	 Supplier's safety documents. ECHA (European Chemicals Agency). Workplace: required documents confirming completion of training in the field of health and safety and fire protection at the workplace. The employer is obliged to inform all employees who have contact with the product about bazards and personal protection measures specified in this safety data sheet 		

Other information

product about hazards and personal protection measures specified in this safety data sheet.
The above information is based on the current data characterizing the product as well as the experience and knowledge of the manufacturer in this field. They do not constitute a quality description of a product or a promise of specific properties. They should be treated as an aid for safe handling in transport, storage and use of the product. This does not release the user from responsibility for the improper use of the above information and from compliance with all legal standards in this field.

Full text of H- and EUH-statements:		
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2	
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3	
Asp. Tox. 1	Aspiration hazard, Category 1	
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	
Repr. 2	Reproductive toxicity, Category 2	
Resp. Sens. 1	Respiratory sensitisation, Category 1	
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Skin Sens. 1	Skin sensitisation, Category 1	
Skin Sens. 1A	Skin sensitisation, category 1A	
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1	
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	
H226	Flammable liquid and vapour.	
H302	Harmful if swallowed.	
H304	May be fatal if swallowed and enters airways.	
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.	
H332	Harmful if inhaled.	
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.	
H335	May cause respiratory irritation.	
H361d	Suspected of damaging the unborn child.	
H372	Causes damage to organs through prolonged or repeated exposure.	
H411	Toxic to aquatic life with long lasting effects.	
H412	Harmful to aquatic life with long lasting effects.	

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:					
Flam. Liq. 3	H226	On basis of test data			
Skin Irrit. 2	H315	Calculation method			
Eye Irrit. 2	H319	Calculation method			
Skin Sens. 1	H317	Calculation method			
Repr. 2	H361d	Calculation method			
STOT RE 1	H372	Calculation method			

The classification complies with : ATP 12

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.