Safety data sheet
according to Regulation (EC) No 1907/2006, Annex II

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

1.1 Product identifier

MULTI-FUNCTIONAL PUTTY SP 4000 2900 g
Art.: 155.701

1.2 Relevant identified uses of the substance or mixture and uses advised against
Relevant identified uses of the substance or mixture:
Filler
Uses advised against:
No information available at present.

1.3 Details of the supplier of the safety data sheet
WM SE
Pagenstecherstraße 121
49090 Osnabrück
Tel.: +49 (0) 541 9989-0
Fax: +49 (0)541 9989 – 14015
Email: info@wm.de
Web: www.wm.de

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets.

1.4 Emergency telephone number
Emergency information services / official advisory body:

Telephone number of the company in case of emergencies:
+49 (0) 700 / 24 112 112 (WMR)
+1 872 5888271 (WMR)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) 1272/2008 (CLP)

Hazard class	Hazard category	Hazard statement
Flam. Liq.	3	H226-Flammable liquid and vapour.
Eye Irrit.	2	H319-Causes serious eye irritation.
Skin Irrit.	2	H315-Causes skin irritation.
Skin Sens.	1	H317-May cause an allergic skin reaction.
STOT RE	1	H372-Causes damage to organs through prolonged or repeated exposure (organs of hearing).
Repr.	2	H361d-Suspected of damaging the unborn child.

2.2 Label elements
Labeling according to Regulation (EC) 1272/2008 (CLP)

Danger

H226-Flammable liquid and vapour. H319-Causes serious eye irritation. H315-Causes skin irritation. H317-May cause an allergic skin reaction. H372-Causes damage to organs through prolonged or repeated exposure (organs of hearing). H361d-Suspected of damaging the unborn child.

P101-If medical advice is needed, have product container or label at hand. P102-Keep out of reach of children.
P201-Obtain special instructions before use. P210-Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P260-Do not breathe vapours or spray. P271-Use only outdoors or in a well-ventilated area. P280-Wear protective gloves / protective clothing / eye protection / face protection.
P305+P351+P338-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P313-IF exposed or concerned: Get medical advice / attention.
P405-Store locked up.
P501-Dispose of contents / container to an approved waste disposal facility.

Styrene
Maleic anhydride
2,2'-(m-tolylimino)diethanol
Reaction mass of 2-{[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino}ethanol and 2,2'-[(4-methylphenyl)imino]diethanol

2.3 Other hazards
The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).
The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).
The mixture does not contain any substance with endocrine disrupting properties (< 0,1 %).

SECTION 3: Composition/information on ingredients

3.1 Substances
n.a.
3.2 Mixtures

Styrene	
Registration number (REACH)	01-2119457861-32-XXXX
Index	601-026-00-0
EINECS, ELINCS, NLP, REACH-IT List-No.	202-851-5
CAS	100-42-5
content %	10-<15

Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Flam. Liq. 3, H226 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 2, H361d STOT SE 3, H335 STOT RE 1, H372 (organs of hearing) Asp. Tox. 1, H304 Aquatic Chronic 3, H412
Specific Concentration Limits and ATE	ATE (as inhalation, Dusts or mist): 1,5 mg/l/4h ATE (as inhalation, Vapours): 11,8 mg/l/4h

2,2'-(m-tolylimino)diethanol	
Registration number (REACH)	---
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	202-114-8
CAS	91-99-6
content %	0,1-<1
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1B, H317 STOT RE 2, H373 (kidneys) (oral)
Specific Concentration Limits and ATE	ATE (oral): 500 mg/kg

Reaction mass of 2-{[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino}ethanol and 2,2'-[(4-methylphenyl)imino]diethanol	
Registration number (REACH)	---
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	911-490-9
CAS	---
content %	0,1-<1
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412
Specific Concentration Limits and ATE	ATE (oral): 619 mg/kg

Maleic anhydride	
Registration number (REACH)	01-2119472428-31-XXXX
Index	607-096-00-9
EINECS, ELINCS, NLP, REACH-IT List-No.	203-571-6
CAS	108-31-6
content %	0,001-<0,1
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	EUH071 Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Resp. Sens. 1, H334 Skin Sens. 1A, H317 STOT RE 1, H372 (respiratory system) (as inhalation)
Specific Concentration Limits and ATE	Skin Sens. 1A, H317: >=0,001 % ATE (oral): 1090 mg/kg

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.
The substances named in this section are given with their actual, appropriate classification!
For substances that are listed in appendix VI, table 3.1 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

The addition of the highest concentrations listed here can result in a classification. Only when this classification is listed in Section 2 does it apply. In all other cases the total concentration is below the classification.

SECTION 4: First aid measures

4.1 Description of first aid measures
First-aiders should ensure they are protected!
Never pour anything into the mouth of an unconscious person!

Inhalation
Remove person from danger area.
Supply person with fresh air and consult doctor according to symptoms.
If the person is unconscious, place in a stable side position and consult a doctor.

Skin contact
Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

Eye contact
Remove contact lenses.
Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

Ingestion
Rinse the mouth thoroughly with water.
Do not induce vomiting. Consult doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed
If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.
In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

4.3 Indication of any immediate medical attention and special treatment needed
Symptomatic treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing media
Water jet spray/foam/CO2/dry extinguisher

Unsuitable extinguishing media
High volume water jet

5.2 Special hazards arising from the substance or mixture
In case of fire the following can develop:
Oxides of carbon
Oxides of nitrogen
Toxic gases
Possible build up of explosive/highly flammable vapour/air mixture.

5.3 Advice for firefighters
For personal protective equipment see Section 8.
In case of fire and/or explosion do not breathe fumes.
Protective respirator with independent air supply.
According to size of fire
Full protection, if necessary.
Cool container at risk with water.
Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
6.1.1 For non-emergency personnel
In case of spillage or accidental release, wear personal protective equipment as specified in section 8 to prevent contamination.
Ensure sufficient ventilation, remove sources of ignition.

Avoid dust formation with solid or powder products.
Leave the danger zone if possible, use existing emergency plans if necessary.
Keep unprotected persons away.
Avoid contact with eyes or skin.
If applicable, caution - risk of slipping.

6.1.2 For emergency responders

See section 8 for suitable protective equipment and material specifications.

6.2 Environmental precautions

If leakage occurs, dam up.
Resolve leaks if this possible without risk.
Prevent surface and ground-water infiltration, as well as ground penetration.
Prevent from entering drainage system.
If accidental entry into drainage system occurs, inform responsible authorities.

6.3 Methods and material for containment and cleaning up

Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth) and dispose of according to Section 13.
Do not wash away with water or watery cleaning agents.

6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

7.1 Precautions for safe handling

7.1.1 General recommendations

Ensure good ventilation.
Keep away from sources of ignition - Do not smoke.
Take measures against electrostatic charging, if appropriate.
Avoid contact with eyes or skin.
Pregnant women should avoid contact with this product.
Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.
Observe directions on label and instructions for use.
Use working methods according to operating instructions.

7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.
Wash hands before breaks and at end of work.
Keep away from food, drink and animal feedingstuffs.
Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

7.2 Conditions for safe storage, including any incompatibilities

Keep locked away.
Keep out of access to unauthorised individuals.
Store product closed and only in original packing.
Not to be stored in gangways or stair wells.
Observe special storage conditions.
Do not store with flammable or self-igniting materials.
Protect from direct sunlight and warming.
Store in a well-ventilated place.
Store cool.

7.3 Specific end use(s)

No information available at present.
Observe the instructions for good working practice and the recommendations for risk assessment.
Consult hazardous substance information systems, e.g. from the professional associations, the chemical industry or different industries,
depending on the application (building materials, wood, chemistry, laboratory, leather, metal).

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revision date / version: 22.01.2024 / 0010
Replacing version dated / version: 20.10.2023 / 0009
Valid from: 22.01.2024
PDF print date: 22.01.2024
MULTI-FUNCTIONAL PUTTY SP 4000 2900 g
Art.: 155.701

GB **Chemical Name**	Styrene	
WEL-TWA: 430 mg/m3 (100 ppm)	WEL-STEL: 1080 mg/m3 (250 ppm)	---
Monitoring procedures:	- Draeger - Styrene 10/a (67 23 301) - Draeger - Styrene 10/b (67 33 141) - Draeger - Styrene 50/a (CH 27 601) - Compur - KITA-158 S (550 218) - Compur - KITA-158 SB (549 278) - DFG Meth. Nr. 3 (D) (Styrol), DFG Method No. 3 (E) (Styrene) - 1994, 2002 - DFG Meth. Nr. 4 (D) (Styrol) - 1994 - NIOSH 1501 (HYDROCARBONS, AROMATIC) - 2003 - NIOSH 3800 (ORGANIC AND INORGANIC GASES BY EXTRACTIVE FTIR SPECTROMETRY) - 2016 - OSHA 1014 (Styrene (Diffusive Samplers)) - 2009 - OSHA 89 (Divinylbenzene Ethylvinylbenzene Styrene) - 1991	
BMGV: ---	Other information: ---	

GB **Chemical Name**	Maleic anhydride	
WEL-TWA: 1 mg/m3	WEL-STEL: 3 mg/m3	---
Monitoring procedures:	---	
BMGV: ---	Other information: Sen	

Styrene

Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	0,028	mg/l	
	Environment - marine		PNEC	0,014	mg/l	
	Environment - sediment, freshwater		PNEC	0,614	mg/kg dry weight	
	Environment - sediment, marine		PNEC	0,307	mg/kg dry weight	
	Environment - sporadic (intermittent) release		PNEC	0,04	mg/l	
	Environment - soil		PNEC	0,2	mg/kg dry weight	
	Environment - sewage treatment plant		PNEC	5	mg/l	
	Environment - periodic release		PNEC	0,04	mg/l	
Consumer	Human - oral	Long term, systemic effects	DNEL	2,1	mg/kg bw/day	
Consumer	Human - dermal	Long term, systemic effects	DNEL	343	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	10,2	mg/m3	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	174,25	mg/m3	
Consumer	Human - inhalation	Short term, local effects	DNEL	182,75	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	406	mg/kg bw/day	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	289	mg/m3	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	85	mg/m3	
Workers / employees	Human - inhalation	Short term, local effects	DNEL	306	mg/m3	

Maleic anhydride						
Area of application	**Exposure route / Environmental compartment**	**Effect on health**	**Descriptor**	**Value**	**Unit**	**Note**
	Environment - freshwater		PNEC	0,038	mg/l	
	Environment - marine		PNEC	0,0038	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	0,379	mg/l	
	Environment - sediment, freshwater		PNEC	0,296	mg/kg	
	Environment - sediment, marine		PNEC	0,0296	mg/kg	
	Environment - soil		PNEC	0,037	mg/kg	
	Environment - sewage treatment plant		PNEC	44,6	mg/l	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	0,081	mg/m3	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	0,2	mg/m3	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	0,4	mg/m3	
Workers / employees	Human - inhalation	Short term, local effects	DNEL	0,8	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	0,04	mg/kg bw/d	
Workers / employees	Human - dermal	Long term, local effects	DNEL	0,04	mg/kg bw/d	
Workers / employees	Human - dermal	Short term, systemic effects	DNEL	0,04	mg/kg bw/d	
Workers / employees	Human - dermal	Short term, local effects	DNEL	0,04	mg/kg bw/d	

GB - United Kingdom | WEL-TWA = Workplace Exposure Limit - Long-term exposure limit - 8-hour TWA (= time weighted average) reference period (EH40/2005 Workplace exposure limits (Fourth Edition 2020)).
(EU) = Directive 91/322/EEC, 98/24/EC, 2000/39/EC, 2004/37/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU or 2019/1831/EU:
(8) = Inhalable fraction (2004/37/CE, 2017/164/EU). (9) = Respirable fraction (2004/37/CE, 2017/164/EU). (11) = Inhalable fraction (2004/37/CE). (12) = Inhalable fraction. Respirable fraction in those Member States that implement, on the date of the entry into force of this Directive, a biomonitoring system with a biological limit value not exceeding 0,002 mg Cd/g creatinine in urine (2004/37/CE). |
| WEL-STEL = Workplace Exposure Limit - Short-term exposure limit - 15-minute reference period (EH40/2005 Workplace exposure limits (Fourth Edition 2020)).
(EU) = Directive 91/322/EEC, 98/24/EC, 2000/39/EC, 2004/37/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU or 2019/1831/EU:
(8) = Inhalable fraction (2004/37/EC, 2017/164/EU). (9) = Respirable fraction (2004/37/EC, 2017/164/EU). (10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU). |
| BMGV = Biological monitoring guidance value (EH40/2005 Workplace exposure limits (Fourth Edition 2020)).
(EU) = Directive 98/24/EC or 2004/37/EC or SCOEL (Biological Limit Value - BLV, Recommendation from the Scientific Committee on Occupational Exposure Limits (SCOEL)) |
| Other information (EH40/2005 Workplace exposure limits (Fourth Edition 2020)): Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.
(EU) = Directive 91/322/EEC, 98/24/EC, 2000/39/EC, 2004/37/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU or 2019/1831/EU:
(13) = The substance can cause sensitisation of the skin and of the respiratory tract (2004/37/CE), (14) = The substance can cause sensitisation of the skin (2004/37/CE). |

8.2 Exposure controls
8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.
If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.
Applies only if maximum permissible exposure values are listed here.

Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and non-metrological investigative techniques.
These are specified by e.g. EN 14042.
EN 14042 "Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents".

8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.
Wash hands before breaks and at end of work.
Keep away from food, drink and animal feedingstuffs.
Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:
Tight fitting protective goggles with side protection (EN 166).

Skin protection - Hand protection:
Chemical resistant protective gloves (EN ISO 374).
Recommended
Protective gloves made of fluorocarbon rubber (EN ISO 374).
Minimum layer thickness in mm:
>= 0,4
Permeation time (penetration time) in minutes:
> 480
Protective hand cream recommended.
The breakthrough times determined in accordance with EN 16523-1 were not obtained under practical conditions.
The recommended maximum wearing time is 50% of breakthrough time.

Skin protection - Other:
Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments).

Respiratory protection:
If OES or MEL is exceeded.
Filter A P2 (EN 14387), code colour brown, white
Observe wearing time limitations for respiratory protection equipment.

Thermal hazards:
Not applicable

Additional information on hand protection - No tests have been performed.
In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents.
Selection of materials derived from glove manufacturer's indications.
Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.
Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.
In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.
The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

8.2.3 Environmental exposure controls

No information available at present.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	Liquid, Viscous
Colour:	Beige
Odour:	Characteristic
Melting point/freezing point:	There is no information available on this parameter.
Boiling point or initial boiling point and boiling range:	145,2 °C (Styrene)
Flammability:	There is no information available on this parameter.
Lower explosion limit:	1,2 Vol-% (Styrene)

Upper explosion limit:	8,9 Vol-% (Styrene)
Flash point:	34 °C (DIN 53213 (Pensky-Martens, closed cup))
Auto-ignition temperature:	480 °C (DIN 51794, Styrene)
Decomposition temperature:	There is no information available on this parameter.
pH:	Mixture is non-soluble (in water).
Kinematic viscosity:	70000-80000 mPas (20°C, Dynamic viscosity)
Solubility:	Not miscible
Partition coefficient n-octanol/water (log value):	Does not apply to mixtures.
Vapour pressure:	6 hPa (20°C, Styrene)
Vapour pressure:	35 hPa (50°C)
Density and/or relative density:	1,81 g/cm3 (20°C, DIN 53217)
Relative vapour density:	There is no information available on this parameter.
Particle characteristics:	Does not apply to liquids.

9.2 Other information

Explosives:	Product is not explosive. When using: development of explosive vapour/air mixture possible.
Oxidising liquids:	No

SECTION 10: Stability and reactivity

10.1 Reactivity
The product has not been tested.

10.2 Chemical stability
Stable with proper storage and handling.

10.3 Possibility of hazardous reactions
No dangerous reactions are known.

10.4 Conditions to avoid
Heating, open flame, ignition sources

10.5 Incompatible materials
Avoid contact with strong alkalis.
Avoid contact with strong oxidizing agents.
Avoid contact with strong acids.

10.6 Hazardous decomposition products
No decomposition when used as directed.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008
Possibly more information on health effects, see Section 2.1 (classification).

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Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:						n.d.a.
Acute toxicity, by dermal route:						n.d.a.
Acute toxicity, by inhalation:	ATE	>20	mg/l			calculated value, Vapours
Acute toxicity, by inhalation:	ATE	>5	mg/l			calculated value, Aerosol
Skin corrosion/irritation:						n.d.a.
Serious eye damage/irritation:						n.d.a.
Respiratory or skin sensitisation:						n.d.a.
Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						n.d.a.
Reproductive toxicity:						n.d.a.

Specific target organ toxicity - single exposure (STOT-SE):						n.d.a.
Specific target organ toxicity - repeated exposure (STOT-RE):						n.d.a.
Aspiration hazard:						n.d.a.
Symptoms:						n.d.a.

Styrene						
Toxicity / effect	**Endpoint**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
Acute toxicity, by oral route:	LD50	5000	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat	OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	11,8	mg/l/4h	Rat		Vapours
Acute toxicity, by inhalation:	ATE	11,8	mg/l/4h			Vapours
Acute toxicity, by inhalation:	ATE	1,5	mg/l/4h			Dusts or mist
Skin corrosion/irritation:				Rabbit		Skin Irrit. 2
Serious eye damage/irritation:				Rabbit		Eye Irrit. 2
Respiratory or skin sensitisation:				Guinea pig		Not sensitizising
Germ cell mutagenicity:				Mouse	OECD 474 (Mammalian Erythrocyte Micronucleus Test)	Negative(6h)
Germ cell mutagenicity:				Mouse	OECD 486 (Unscheduled DNA Synthesis (UDS) Test with Mammalian Liver Cells In Vivo)	Negative
Carcinogenicity:	NOAEC	>=0,00434	mg/m3	Rat	OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies)	Negativeinhalation
Reproductive toxicity (Developmental toxicity):	LOAEL	1,28	mg/l	Rat	OECD 414 (Prenatal Developmental Toxicity Study)	Positiveinhalation
6-15d						
Reproductive toxicity (Developmental toxicity):	NOAEC	1,08-2,15	mg/l	Rat		Positiveinhalation
> 50d						
Reproductive toxicity (Effects on fertility):	NOAEL	100-200	mg/kg bw/d	Rat		Positiveinhalation
60 d						
Aspiration hazard:						Yes
Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.:	NOAEL	0,8	mg/l	Rat	OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies)	
Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.:	NOAEC	0,688-3,47	mg/l	Rat		Positive(28d)

Symptoms:						drowsiness, headaches, fatigue, muscle weakness, mucous membrane irritation, dizziness, nausea and vomiting., mental confusion
Specific target organ toxicity - single exposure (STOT-SE), inhalative:				Mammalian		STOT SE 3, H335
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	1000	mg/kg bw/d			Positive

2,2'-(m-tolylimino)diethanol

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>300-<2000	mg/kg	Rat	OECD 423 (Acute Oral Toxicity - Acute Toxic Class Method)	
Acute toxicity, by oral route:	ATE	500	mg/kg			
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat	OECD 402 (Acute Dermal Toxicity)	
Skin corrosion/irritation:				Human being	OECD 431 (In Vitro Skin Corrosion - Human Skin Model Test)	Irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Eye Dam. 1
Respiratory or skin sensitisation:				Mouse	OECD 429 (Skin Sensitisation - Local Lymph Node Assay)	Skin Sens. 1B
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Germ cell mutagenicity:				Human being	OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Negative
Germ cell mutagenicity:				Mouse	OECD 490 (In vitro Thymidine Kinase Mutation Test)	Negative
Reproductive toxicity:	NOAEL	300	mg/kg bw/d	Rat	OECD 421 (Reproduction/Developmental Toxicity Screening Test)	
Reproductive toxicity (Developmental toxicity):					OECD 421 (Reproduction/Developmental Toxicity Screening Test)	Negative
Specific target organ toxicity - repeated exposure (STOT-RE), oral:				Rat	OECD 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)	STOT RE 2, Target organ(s): kidneys

Reaction mass of 2-{[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino}ethanol and 2,2'-[(4-methylphenyl)imino]diethanol

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	619	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by oral route:	ATE	619	mg/kg			
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat	OECD 402 (Acute Dermal Toxicity)	
Skin corrosion/irritation:				Human being	OECD 439 (In Vitro Skin Irritation - Reconstructed Human Epidermis Test Method)	Skin Irrit. 2
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Eye Dam. 1
Respiratory or skin sensitisation:				Mouse	OECD 429 (Skin Sensitisation - Local Lymph Node Assay)	Skin Sens. 1
Germ cell mutagenicity:				Human being	OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Negative
Reproductive toxicity (Developmental toxicity):				Rat	OECD 414 (Prenatal Developmental Toxicity Study)	Negative
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	100	mg/kg bw/d	Rat	OECD 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)	

Maleic anhydride

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	1090	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by oral route:	ATE	1090	mg/kg			
Acute toxicity, by dermal route:	LD50	2620	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	>4,35	mg/l/4h	Mouse		
Skin corrosion/irritation:				Human being		Corrosive
Skin corrosion/irritation:				Rat		Corrosive
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Eye Dam. 1
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	Sensitising (skin contact)
Respiratory or skin sensitisation:				Rat		Sensitising (inhalation)
Germ cell mutagenicity:					bacterial	References, Negative
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative
Germ cell mutagenicity:				Rat	OECD 475 (Mammalian Bone Marrow Chromosome Aberration Test)	Negative
Carcinogenicity:	NOAEL	>100	mg/kg bw/d	Rat		oral
Reproductive toxicity:	NOAEC	650	mg/kg bw/d	Rat		

Reproductive toxicity:	NOAEL	55	mg/kg	Rat	OECD 416 (Two-generation Reproduction Toxicity Study)	
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	10	mg/kg/d	Rat	OECD 452 (Chronic Toxicity Studies)	
Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.:	NOAEC	3,3	mg/m3	Rat	OECD 413 (Subchronic Inhalation Toxicity - 90-Day Study)	Vapours
Symptoms:						asthmatic symptoms, breathing difficulties, respiratory distress, burning of the membranes of the nose and throat, blisters, coughing, headaches, gastrointestinal disturbances, mucous membrane irritation, watering eyes, nausea

11.2. Information on other hazards

MULTI-FUNCTIONAL PUTTY SP 4000 2900 g
Art.: 155.701

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Endocrine disrupting properties:						Does not apply to mixtures.
Other information:						No other relevant information available on adverse effects on health.

SECTION 12: Ecological information

Possibly more information on environmental effects, see Section 2.1 (classification).

MULTI-FUNCTIONAL PUTTY SP 4000 2900 g
Art.: 155.701

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:							n.d.a.
12.1. Toxicity to daphnia:							n.d.a.
12.1. Toxicity to algae:							n.d.a.
12.2. Persistence and degradability:							n.d.a.
12.3. Bioaccumulative potential:							n.d.a.
12.4. Mobility in soil:							n.d.a.

12.5. Results of PBT and vPvB assessment							n.d.a.
12.6. Endocrine disrupting properties:							Does not apply to mixtures.
12.7. Other adverse effects:							No information available on other adverse effects on the environment.
Other information:							DOC-elimination degree(complexing organic substance)>= 80%/28d: n.a.

Styrene							
Toxicity / effect	**Endpoint**	**Time**	**Value**	**Unit**	**Organism**	**Test method**	**Notes**
12.1. Toxicity to fish:	LC50	96h	4,02-10	mg/l	Pimephales promelas	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	4,7	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	1,01	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
12.1. Toxicity to daphnia:	LC50	96h	9,5	mg/l			Hyalella azteka, EPA OTS 797.1300
12.1. Toxicity to algae:	EC10	96h	0,28	mg/l	Pseudokirchneriella subcapitata		EPA OTS 797.1050
12.1. Toxicity to algae:	EC50	72h	4,9	mg/l	Pseudokirchneriella subcapitata		EPA OTS 797.1050
12.2. Persistence and degradability:	ThOD		70,9	%	activated sludge	ISO 9408	Readily biodegradable
12.2. Persistence and degradability:		20d	87	%		OECD 301 D (Ready Biodegradability - Closed Bottle Test)	References, Readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		2,96			OECD 107 (Partition Coefficient (n-octanol/water) - Shake Flask Method)	A notable biological accumulation potential is not to be expected (LogPow 1-3).25°C
12.3. Bioaccumulative potential:	BCF		13,49-74				Low
12.4. Mobility in soil:	Koc		352				
12.4. Mobility in soil:	Log Koc		2,55				
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance

Toxicity to bacteria:	EC50	30min	500	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	
Toxicity to annelids:	NOEC/NOEL	14d	34	mg/kg	Eisenia foetida	OECD 207 (Earthworm, Acute Toxicity Tests)	

2,2'-(m-tolylimino)diethanol

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	102	mg/l	Brachydanio rerio	84/449/EEC C.1	
12.1. Toxicity to daphnia:	EC50	48h	107	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	NOEC/NOEL	72h	100	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	EC50	72h	>100	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.3. Bioaccumulative potential:	Log Pow		1,9			OECD 117 (Partition Coefficient (n-octanol/water) - HPLC method)	A notable biological accumulation potential is not to be expected (LogPow 1-3).
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC10	3h	817	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	

Reaction mass of 2-{[2-(2-hydroxyethoxy)ethyl](4-methylphenyl)amino}ethanol and 2,2'-[(4-methylphenyl)imino]diethanol

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	>100	mg/l	Cyprinus carpio	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	48	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EC50	72h	100	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	

Maleic anhydride

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes

12.1. Toxicity to fish:	LC50	96h	75	mg/l	Oncorhynchus mykiss		EPA-660/3-75-009
12.1. Toxicity to fish:	LC50	96h	75	mg/l	Lepomis macrochirus		EPA-660/3-75-009
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	10	mg/l	Daphnia magna		
12.1. Toxicity to daphnia:	EC50	48h	42,81	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EC50	72h	74,32	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	EC10	72h	11,8	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	EC50	72h	29	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	EC10	72h	23	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		7d	98	%		OECD 301 E (Ready Biodegradability - Modified OECD Screening Test)	Hydrolysis
12.3. Bioaccumulative potential:	Log Pow		-2,61 - (-2,16)				Not to be expected
12.4. Mobility in soil:	Koc		1				Not to be expected
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC10	18h	44,6	mg/l	Pseudomonas putida	IUCLID Chem. Data Sheet (ESIS)	References
Other information:	Log Pow		1,62				

SECTION 13: Disposal considerations

13.1 Waste treatment methods

For the substance / mixture / residual amounts

EC disposal code no.:
The waste codes are recommendations based on the scheduled use of this product.
Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2014/955/EU)
08 01 11 waste paint and varnish containing organic solvents or other hazardous substances
Recommendation:
Sewage disposal shall be discouraged.
Pay attention to local and national official regulations.
E.g. suitable incineration plant.
E.g. dispose at suitable refuse site.

For contaminated packing material

Pay attention to local and national official regulations.
Empty container completely.

Uncontaminated packaging can be recycled.
Dispose of packaging that cannot be cleaned in the same manner as the substance.

SECTION 14: Transport information

General statements

Transport by road/by rail (ADR/RID)

14.1. UN number or ID number:	3269
14.2. UN proper shipping name:	
UN 3269 POLYESTER RESIN KIT	
14.3. Transport hazard class(es):	3
14.4. Packing group:	III
Factor:	1
14.5. Environmental hazards:	Not applicable
Tunnel restriction code:	E
Classification code:	F3
LQ:	5 L
Transport category:	3

Transport by sea (IMDG-code)

14.1. UN number or ID number:	3269
14.2. UN proper shipping name:	
UN 3269 POLYESTER RESIN KIT	
14.3. Transport hazard class(es):	3
14.4. Packing group:	III
14.5. Environmental hazards:	Not applicable
Marine Pollutant:	Not applicable
EmS:	F-E, S-D

Transport by air (IATA)

14.1. UN number or ID number:	3269
14.2. UN proper shipping name:	
UN 3269 Polyester resin kit	
14.3. Transport hazard class(es):	3
14.4. Packing group:	III
14.5. Environmental hazards:	Not applicable

14.6. Special precautions for user

Persons employed in transporting dangerous goods must be trained.
All persons involved in transporting must observe safety regulations.
Precautions must be taken to prevent damage.

14.7. Maritime transport in bulk according to IMO instruments

Freighted as packaged goods rather than in bulk, therefore not applicable.
Minimum amount regulations have not been taken into account.
Danger code and packing code on request.
Comply with special provisions.

SECTION 15: Regulatory information

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

Observe restrictions:
Comply with national regulations/laws governing the protection of young people at work (national implementation of the Directive 94/33/EC)!
Comply with national regulations/laws governing maternity protection (national implementation of the Directive 92/85/EEC)!
Comply with trade association/occupational health regulations.

Directive 2012/18/EU ("Seveso III"), Annex I, Part 1 - The following categories apply to this product (others may also need to be considered according to storage, handling etc.):

Hazard categories	Notes to Annex I	Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of - Lower-tier requirements	Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of - Upper-tier requirements
P5c		5000	50000

The Notes to Annex 1 of Directive 2012/18/EU, in particular those named in the tables here and notes 1-6, must be taken into account when assigning categories and qualifying quantities.

Directive 2010/75/EU (VOC): 1,03 %

Observe incident regulations.

National requirements/regulations on safety and health protection must be applied when using work equipment.

15.2 Chemical safety assessment
A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

Revised sections: 2, 3, 7, 8, 11, 12, 13, 14, 15, 16
Employee training in handling dangerous goods is required.
These details refer to the product as it is delivered.
Employee instruction/training in handling hazardous materials is required.

Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

Classification in accordance with regulation (EC) No. 1272/2008 (CLP)	Evaluation method used
Flam. Liq. 3, H226	Classification based on test data.
Eye Irrit. 2, H319	Classification according to calculation procedure.
Skin Irrit. 2, H315	Classification according to calculation procedure.
Skin Sens. 1, H317	Classification according to calculation procedure.
STOT RE 1, H372	Classification according to calculation procedure.
Repr. 2, H361d	Classification according to calculation procedure.

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents.
H361d Suspected of damaging the unborn child.
H226 Flammable liquid and vapour.
H372 Causes damage to organs through prolonged or repeated exposure by inhalation.
H373 May cause damage to organs through prolonged or repeated exposure if swallowed.
H317 May cause an allergic skin reaction.
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.
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.
H412 Harmful to aquatic life with long lasting effects.
EUH071 Corrosive to the respiratory tract.

Flam. Liq. — Flammable liquid
Eye Irrit. — Eye irritation

Skin Irrit. — Skin irritation
Skin Sens. — Skin sensitization
STOT RE — Specific target organ toxicity - repeated exposure
Repr. — Reproductive toxicity
Acute Tox. — Acute toxicity - inhalation
STOT SE — Specific target organ toxicity - single exposure - respiratory tract irritation
Asp. Tox. — Aspiration hazard
Aquatic Chronic — Hazardous to the aquatic environment - chronic
Acute Tox. — Acute toxicity - oral
Eye Dam. — Serious eye damage
Skin Corr. — Skin corrosion
Resp. Sens. — Respiratory sensitization

Key literature references and sources for data:

Regulation (EC) No 1907/2006 (REACH) and Regulation (EC) No 1272/2008 (CLP) as amended.
Guidelines for the preparation of safety data sheets as amended (ECHA).
Guidelines on labelling and packaging according to the Regulation (EG) Nr. 1272/2008 (CLP) as amended (ECHA).
Safety data sheets for the constituent substances.
ECHA Homepage - Information about chemicals.
GESTIS Substance Database (Germany).
German Environment Agency "Rigoletto" information site on substances that are hazardous to water (Germany).
EU Occupation Exposure Limits Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164, (EU) 2019/1831, each as amended.
National Lists of Occupational Exposure Limits for each country as amended.
Regulations on the transport of hazardous goods by road, rail, sea and air (ADR, RID, IMDG, IATA) as amended.

Any abbreviations and acronyms used in this document:

acc., acc. to — according, according to
ADR — Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)
AOX — Adsorbable organic halogen compounds
approx. — approximately
Art., Art. no. — Article number
ASTM — ASTM International (American Society for Testing and Materials)
ATE — Acute Toxicity Estimate
BAM — Bundesanstalt für Materialforschung und -prüfung (= Federal Institute for Materials Research and Testing, Germany)
BAuA — Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)
BCF — Bioconcentration factor
BSEF — The International Bromine Council
CAS — Chemical Abstracts Service
CLP — Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)
CMR — carcinogenic, mutagenic, reproductive toxic
DMEL — Derived Minimum Effect Level
DNEL — Derived No Effect Level
DOC — Dissolved organic carbon
e.g. — for example (abbreviation of Latin 'exempli gratia'), for instance
EbCx, EyCx, EbLx (x = 10, 50) — Effect Concentration/Level of x % on reduction of the biomass (algae, plants)
EC — European Community
ECHA — European Chemicals Agency
ECx, ELx (x = 0, 3, 5, 10, 20, 50, 80, 100) — Effect Concentration/Level for x % effect
EEC — European Economic Community
EINECS — European Inventory of Existing Commercial Chemical Substances
ELINCS — European List of Notified Chemical Substances
EN — European Norms
EPA — United States Environmental Protection Agency (United States of America)
ErCx, EμCx, ErLx (x = 10, 50) — Effect Concentration/Level of x % on inhibition of the growth rate (algae, plants)
etc. — et cetera

EU European Union
EVAL Ethylene-vinyl alcohol copolymer
Fax. Fax number
gen. general
GHS Globally Harmonized System of Classification and Labelling of Chemicals
GWP Global warming potential
Koc Adsorption coefficient of organic carbon in the soil
Kow octanol-water partition coefficient
IARC International Agency for Research on Cancer
IATA International Air Transport Association
IBC (Code) International Bulk Chemical (Code)
IMDG-code International Maritime Code for Dangerous Goods
incl. including, inclusive
IUCLID International Uniform Chemical Information Database
IUPAC International Union for Pure Applied Chemistry
LC50 Lethal Concentration to 50 % of a test population
LD50 Lethal Dose to 50% of a test population (Median Lethal Dose)
Log Koc Logarithm of adsorption coefficient of organic carbon in the soil
Log Kow, Log Pow Logarithm of octanol-water partition coefficient
LQ Limited Quantities
MARPOL International Convention for the Prevention of Marine Pollution from Ships
mg/kg bw mg/kg body weight
mg/kg bw/d, mg/kg bw/day mg/kg body weight/day
mg/kg dw mg/kg dry weight
mg/kg wwt mg/kg wet weight
n.a. not applicable
n.av. not available
n.c. not checked
n.d.a. no data available
NIOSH National Institute for Occupational Safety and Health (USA)
NLP No-longer-Polymer
NOEC, NOEL No Observed Effect Concentration/Level
OECD Organisation for Economic Co-operation and Development
org. organic
OSHA Occupational Safety and Health Administration (USA)
PBT persistent, bioaccumulative and toxic
PE Polyethylene
PNEC Predicted No Effect Concentration
ppm parts per million
PVC Polyvinylchloride
REACH Registration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)
REACH-IT List-No. 6/7/8/9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.
RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)
SVHC Substances of Very High Concern
Tel. Telephone
TOC Total organic carbon
UN RTDG United Nations Recommendations on the Transport of Dangerous Goods
VOC Volatile organic compounds
vPvB very persistent and very bioaccumulative

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.
No responsibility.
These statements were made by:
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