

according to UK REACH Regulation

Multifix SE1000 Seismic, Comp. A

Revision date: 29.11.2022

Page 1 of 12

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

1.1. Product identifier

Multifix SE1000 Seismic, Comp. A

UFI:

D0RK-8TG4-2V80-JXMX

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

Use of the substance/mixture

Adhesive mortar for fastening elements A-component (resin)

Uses advised against

no restriction

1.3. Details of the supplier of the safety data sheet

Company name:	EJOT Baubefestigungen GmbH
	Geschäftsbereich Building Fasteners
Street:	In der Stockwiese 35
Place:	D-57334 Bad Laasphe
Telephone:	+46 19 20 65 00
e-mail:	www.ejot.de
<u>1.4. Emergency telephone</u> number:	Medical emergency information in the event of poisoning: Giftinformationszentrum Mainz - 24h - Tel .: +49 (0) 6131 19240 (advice in German or English)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1; H317 Aquatic Chronic 2; H411

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

2,2'-[(1-Methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane; 1,6-hexanediol diglycidyl ether

inal word: Warning

Signal word: Pictograms:



Hazard statements

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.

Page 2 of 12

Revision date: 29.11.2022 P280 Wear protective gloves/protective clothing/eye protection/face protection. P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P337+P313 If eye irritation persists: Get medical advice/attention. P391 Collect spillage.

2.3. Other hazards

People who are allergic to epoxide should avoid the use of the product. Use only outdoors or in a well-ventilated area.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			
	EC No	Index No	REACH No	
	Classification (GB CLP Regulat	ion)		
1675-54-3	675-54-3 2,2'-[(1-Methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane			30 - < 60 %
	216-823-5	603-073-00-2	01-2119456619-26	
	Skin Irrit. 2, Eye Irrit. 2, Skin Se	ns. 1, Aquatic Chronic 2; H315 F	1319 H317 H411	
933999-84-9	1,6-hexanediol diglycidyl ether			10 - < 15 %
	618-939-5		01-2119463471-41	
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, Aquatic Chronic 3; H315 H319 H317 H412			

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc.	Limits, M-factors and ATE	
1675-54-3	216-823-5	2,2'-[(1-Methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	30 - < 60 %
	dermal: LD50 Irrit. 2; H319: >	= 23000 mg/kg; oral: LD50 = 15000 mg/kg Skin Irrit. 2; H315: >= 5 - 100 Eye >= 5 - 100	
933999-84-9	618-939-5	1,6-hexanediol diglycidyl ether	10 - < 15 %
	dermal: LD50	= > 2000 mg/kg; oral: LD50 = 3010 mg/kg	

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

First aider: Pay attention to self-protection! Take off immediately all contaminated clothing and wash it before reuse. Get medical advice/attention if you feel unwell.

After inhalation

Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion

Do NOT induce vomiting. Rinse mouth thoroughly with water. Medical treatment necessary.

4.2. Most important symptoms and effects, both acute and delayed

Causes skin irritation.

May cause an allergic skin reaction.



according to UK REACH Regulation

Multifix SE1000 Seismic, Comp. A

Revision date: 29.11.2022

Causes serious eye irritation.

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Foam Extinguishing powder Water spray jet Carbon dioxide (CO2)

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Pyrolysis products, toxic Carbon monoxide

5.3. Advice for firefighters

In case of fire and/or explosion do not breathe fumes.

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Use personal protective equipment as required. Avoid contact with skin, eyes and clothes. Provide adequate ventilation.

6.2. Environmental precautions

Avoid release to the environment. Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Other information

Collect spillage. Take up mechanically, placing in appropriate containers for disposal. Suitable material for taking up: Sand

Treat the recovered material as prescribed in the section on waste disposal. Retain contaminated washing water and dispose it.

6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Use only outdoors or in a well-ventilated area. Wear personal protection equipment (refer to section 8). Avoid contact with skin, eyes and clothes. When using do not eat, drink or smoke. Page 3 of 12



according to UK REACH Regulation

Multifix SE1000 Seismic, Comp. A

Revision date: 29.11.2022

Page 4 of 12

Advice on general occupational hygiene

Take off contaminated clothing and wash it before reuse. Draw up and observe skin protection programme. Wash hands thoroughly after handling. When using do not eat, drink or smoke.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed.

Store in a place accessible by authorized persons only.

Keep only in the original container in a cool, well-ventilated place.

Hints on joint storage

Do not store together with: Oxidising agent, strong

Do not use for products which come into contact with the food stuffs.

Further information on storage conditions

storage temperature: 5 - 35°C

7.3. Specific end use(s)

Adhesive mortar for fastening elements A-component (resin)

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL/DMEL values

CAS No	Substance			
DNEL type	·	Exposure route	Effect	Value
933999-84-9	1,6-hexanediol diglycidyl ether			
Worker DNEL	_, long-term	inhalation	systemic	10,57 mg/m³
Worker DNEL	_, long-term	inhalation	local	0,44 mg/m³
Worker DNEL	_, long-term	dermal	systemic	6,0 mg/kg bw/day
Worker DNEL	_, long-term	dermal	local	0,0226 mg/cm ²
Consumer DN	NEL, long-term	inhalation	systemic	5,29 mg/m³
Consumer DN	NEL, long-term	inhalation	local	0,27 mg/m³
Consumer DN	NEL, long-term	dermal	systemic	3,0 mg/kg bw/day
Consumer DN	NEL, long-term	dermal	local	0,0136 mg/cm ²
Consumer DN	NEL, acute	inhalation	systemic	5,29 mg/m³
Consumer DN	NEL, acute	dermal	systemic	1,7 mg/kg bw/day
Consumer DN	NEL, acute	dermal	local	0,0136 mg/cm ²
Consumer DN	NEL, long-term	oral	systemic	1,5 mg/kg bw/day
Consumer DN	NEL, acute	oral	systemic	1,5 mg/kg bw/day

PNEC values

CAS No	Substance			
Environmental compartment Value				
933999-84-9	1,6-hexanediol diglycidyl ether			
Freshwater		0,0115 mg/l		
Marine water		0,00115 mg/l		
Freshwater s	ediment	0,283 mg/kg		
Marine sedin	nent	0,283 mg/kg		



according to UK REACH Regulation

Multifix SE1000 Seismic, Comp. A

Revision date: 29.11.2022

Page 5 of 12

Additional advice on limit values

This mixture contains quartz (inorganic filler) which is firmly bound in the pasty component, and thus not freely available during use, so that a risk of dust inhalation is excluded. Exposure limit values for respirable dusts are not relevant for this product.

8.2. Exposure controls







Appropriate engineering controls

Provide adequate ventilation. If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye/face protection. Wear safety glasses.

Hand protection

Recommended material: NBR (Nitrile rubber) Breakthrough time: > 480 min Thickness of the glove material: 0,7 mm DIN-/EN-Norms EN 374

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Respiratory protection with combination filter A1P2 (organic gases/vapors and particles) recommended.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

	Physical state: Colour: Odour: Odour threshold:	solid (pasty) light beige characteristic No data available		
	Changes in the physical state			
	Melting point/freezing point:			not determined
	Boiling point or initial boiling point and boiling range:			not determined
	Flash point:			not applicable
	Flammability Solid/liquid: Gas:			not determined not applicable
	Lower explosion limits:			not determined
	Upper explosion limits:			not determined
	Self-ignition temperature Solid:			not determined
/io	ion No. 1.07	CP	ENI	

Multifix SE1000 Seismic, Comp. A

Page 6 of 12

Revision date: 29.11.2022					
Gas:	not applicable				
Decomposition temperature:	not determined				
pH-Value:	not determined				
Water solubility:	The study does not need to be conducted because the substance is known to be insoluble in water.				
Solubility in other solvents not determined					
Partition coefficient n-octanol/water:	not determined				
Vapour pressure:	not determined				
Density (at 20 °C):	1,45 g/cm³				
Relative vapour density:	not determined				
9.2. Other information					
Information with regard to physical haz Oxidizing properties Not oxidising.	zard classes				
Other safety characteristics					
Solid content:	not determined				
Evaporation rate:	not determined				
SECTION 10: Stability and reactivity					
<u>10.1. Reactivity</u> No hazardous reaction when handled	and stored according to provisions.				
10.2. Chemical stability					
The product is stable under storage at normal ambient temperatures.					
10.3. Possibility of hazardous reactions					
Violent reaction with: Oxidising agent,	strong				
10.4. Conditions to avoid					

Heat. Keep cool. Protect from sunlight.

10.5. Incompatible materials

Keep away from: Oxidizing agent

<u>10.6. Hazardous decomposition products</u> No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Acute toxicity

Based on available data, the classification criteria are not met.



according to UK REACH Regulation

Multifix SE1000 Seismic, Comp. A

Revision date: 29.11.2022

Page 7 of 12

CAS No	Chemical name						
	Exposure route	Dose		Species	Source	Method	
1675-54-3	2,2'-[(1-Methylethyliden	ne)bis(4,1-p	henyleneo	xymethylene)]bisoxiran	e		
		LD50 mg/kg	15000	Rat			
		LD50 mg/kg	23000	Rabbit			
933999-84-9	1,6-hexanediol diglycid	yl ether					
	oral	LD50 mg/kg	3010	Rat			
	dermal	LD50 mg/kg	> 2000	Rat		OECD 402	

Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

Sensitising effects

May cause an allergic skin reaction. (2,2'-[(1-Methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane; 1,6-hexanediol diglycidyl ether)

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2. Information on other hazards

Other information

No information available.

SECTION 12: Ecological information

12.1. Toxicity

Toxic to aquatic life with long lasting effects.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method
1675-54-3	2,2'-[(1-Methylethylidene	e)bis(4,1-pł	nenyleneox	kymethy	lene)]bisoxirane		
	Acute fish toxicity	LC50	2 mg/l		Oncorhynchus mykiss (Rainbow trout)		
	Acute algae toxicity	ErC50	11 mg/l	72 h			
	Acute crustacea toxicity	EC50	1.8 mg/l		Daphnia magna (Big water flea)		
933999-84-9	1,6-hexanediol diglycidy	l ether					
	Acute fish toxicity	LC50	30 mg/l		Oncorhynchus mykiss (Rainbow trout)		
	Acute crustacea toxicity	EC50	47 mg/l		Daphnia magna (Big water flea)		

12.2. Persistence and degradability

The product has not been tested.



Page 8 of 12

according to UK REACH Regulation

Multifix SE1000 Seismic, Comp. A

Revision date: 29.11.2022

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
933999-84-9	1,6-hexanediol diglycidyl ether			
	OECD 301D	71 %	28	

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
933999-84-9	1,6-hexanediol diglycidyl ether	0,822

BCF

CAS No	Chemical name	BCF	Species	Source
933999-84-9	1,6-hexanediol diglycidyl ether	3,57		

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

The product has not been tested.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Subsequent waste code numbers of the European Waste Catalogue are considered as recommendations. Dispose of waste according to applicable legislation. Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

List of Wastes Code - residues/unused products

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

List of Wastes Code - used product

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

List of Wastes Code - contaminated packaging



according to UK REACH Regulation

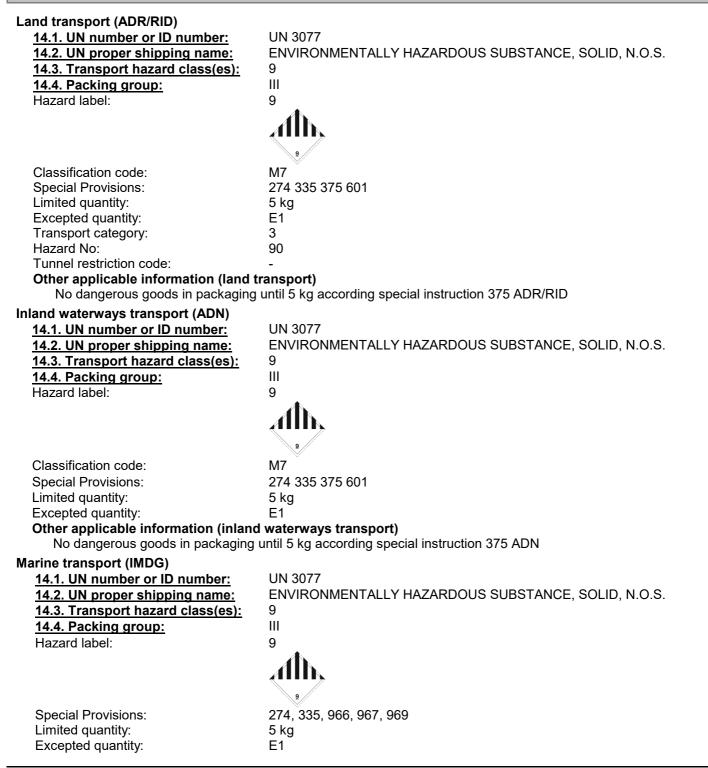
Multifix SE1000 Seismic, Comp. A

Revision date: 29.11.2022

Page 9 of 12

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

SECTION 14: Transport information





according to UK REACH Regulation Multifix SE1000 Seismic, Comp. A Revision date: 29.11.2022 Page 10 of 12 EmS: F-A, S-F Other applicable information (marine transport) No dangerous goods in packaging until 5kg according 2.10.2.7 IMDG Code Air transport (ICAO-TI/IATA-DGR) 14.1. UN number or ID number: UN 3077 14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. 14.3. Transport hazard class(es): 9 Ш 14.4. Packing group: Hazard label: 9 Special Provisions: A97 A158 A179 A197 A215 Limited quantity Passenger: 30 kg G Passenger LQ: Y956 Excepted quantity: E1 IATA-packing instructions - Passenger: 956 IATA-max. quantity - Passenger: 400 kg IATA-packing instructions - Cargo: 956 IATA-max. quantity - Cargo: 400 kg Other applicable information (air transport) No dangerous goods in packaging until 5 kg according A197 IATA-DGA 14.5. Environmental hazards ENVIRONMENTALLY HAZARDOUS: Yes 14.6. Special precautions for user No information available. 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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 75

Information according to 2012/18/EU E2 Hazardous to the Aquatic Environment

(SEVESO III):

Additional information

VOC content: < 0,1 % (DIN EN ISO 11890-2)

To follow: 850/2004/EC , 79/117/EEC , 689/2008/EC

National regulatory information

Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juvenile
	work protection guideline' (94/33/EC).
Water hazard class (D):	2 - obviously hazardous to water
Skin resorption/Sensitization:	Causes allergic hypersensitivity reactions.



according to UK REACH Regulation

Multifix SE1000 Seismic, Comp. A

Page 11 of 12

Revision date: 29.11.2022

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

ADN: Accord européen relativ au transport international des marchandises Dangereuses par voie de Navigation

(European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways) ADR: Accord européen sur le transport des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road) BCF: Bioconcentration factor CAS: Chemical Abstracts Service CLP: Classification, Labeling and Packaging DMEL: Derived Minimal Effect level DNEL: Derived No Effect Level EC50: Effective concentration, 50% IATA: International Air Transport Association IATA-DGR: Dangerous Goods Regulations (DRG) for the air transport (IATA) ICAO: International Civil Aviation Organization IC50: Inhibitory concentration, 50% IMDG: International Maritime Code for Dangerous Goods LC50: Lethal concentration, 50% LD50: Lethal dose, 50% NOEC: No Observed Effect Concentration OECD: Oragnisation for Economic Co-operation and Development PBT: persistent, bioaccumulative and toxic vPvB: very persistent and very bioaccumulative PNEC: Predicted No Effect Concentration REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals RID: Règlement concernant le transport international ferroviaire de marchandises dangereuses (Regulations Concerning the International Carriage of Dangerous Goods by Rail) VOC: Volatile organic compound Aquatic Chronic 2: Long-term aquatic hazard, Category 2 Aquatic Chronic 3: Long-term aquatic hazard, Category 3 Eve Irrit. 2: Serious eve damage/eve irritation. Category 2 Skin Irrit. 2: Serious eye damage/eye irritation, Category 2 Skin Sens. 1: Skin sensitilization, Category 1 Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method
Skin Sens. 1; H317	Calculation method
Aquatic Chronic 2; H411	Calculation method

Relevant H and EUH statements (number and full text)

- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H411 Toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product



according to UK REACH Regulation

Multifix SE1000 Seismic, Comp. A

Revision date: 29.11.2022

Page 12 of 12

named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)



according to UK REACH Regulation

Multifix SE1000 Seismic, Comp. B

Revision date: 29.11.2022

Page 1 of 13

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

1.1. Product identifier

Multifix SE1000 Seismic, Comp. B

UFI:

D3RK-ST5H-CV8H-6970

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

Use of the substance/mixture

compound mortar B-component (hardener)

Uses advised against

no restriction

1.3. Details of the supplier of the safety data sheet

Company name:	EJOT Baubefestigungen GmbH
	Geschäftsbereich Building Fasteners
Street:	In der Stockwiese 35
Place:	D-57334 Bad Laasphe
Telephone:	+46 19 20 65 00
e-mail:	www.ejot.de
1.4. Emergency telephone	Medical emergency information in the event of poisoning:
number:	Giftinformationszentrum Mainz - 24h - Tel .: +49 (0) 6131 19240 (advice in
	German or English)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Acute Tox. 4; H302 Skin Corr. 1A; H314 Eye Dam. 1; H318 Skin Sens. 1; H317

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

2,2,4(or 2,4,4)-Trimethylhexane-1,6-diamine; m-Phenylenebis(methylamine); 2,4,6-Tris(dimethylaminomethyl)phenol Danger

Signal word:

Pictograms:



Hazard statements

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.

Precautionary statements

ooddiionary oldlon	
P260	Do not breathe dusts or mists.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

according to UK REACH Regulation

Multifix SE1000 Seismic, Comp. B

 Revision date: 29.11.2022
 Page 2 of 13

 P301+P330+P331
 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

 P303+P361+P353
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

 P333+P313
 If skin irritation or rash occurs: Get medical advice/attention.

 P501
 Dispose of contents/container to an approved waste disposal plant in accordance with local/national regulation.

2.3. Other hazards

Contains Amines. May produce an allergic reaction. Use only outdoors or in a well-ventilated area.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity	
	EC No	Index No	REACH No		
	Classification (GB CLP Regul	ation)			
25513-64-8	2,2,4(or 2,4,4)-Trimethylhexa	ne-1,6-diamine		25 - < 35 %	
	247-063-2		01-2119560598-25		
	Acute Tox. 4, Skin Corr. 1A, E	ye Dam. 1, Skin Sens. 1A	A; H302 H314 H318 H317		
1477-55-0	m-Phenylenebis(methylamine	·)		1 - < 8 %	
	216-032-5		01-2119480150-50		
	Acute Tox. 4, Acute Tox. 4, Skin Corr. 1B, Eye Dam. 1, Skin Sens. 1B, Aquatic Chronic 3; H332 H302 H314 H318 H317 H412				
90-72-2	2,4,6-Tris(dimethylaminomethyl)phenol			5 - < 10 %	
	202-013-9	603-069-00-0	01-2119560597-27		
	Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2; H302 H315 H319				
104-15-4	p-Toluenesulphonic acid			1 - < 5 %	
	203-180-0	016-030-00-2	01-2119538811-39		
	Skin Irrit. 2, Eye Irrit. 2, STOT SE 3; H315 H319 H335				
	Land EUU statements, as a				

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc	. Limits, M-factors and ATE	
25513-64-8	247-063-2	2,2,4(or 2,4,4)-Trimethylhexane-1,6-diamine	25 - < 35 %
	oral: ATE = 5	00 mg/kg	
1477-55-0	216-032-5	m-Phenylenebis(methylamine)	1 - < 8 %
	inhalation: LC LD50 = 2000	C50 = 3,89 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: mg/kg; oral: LD50 = 930 mg/kg	
90-72-2	202-013-9	2,4,6-Tris(dimethylaminomethyl)phenol	5 - < 10 %
	oral: ATE = 500 mg/kg		
104-15-4	203-180-0	p-Toluenesulphonic acid	1 - < 5 %
	STOT SE 3; H	1335: >= 20 - 100	

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

First aider: Pay attention to self-protection! Remove affected person from the danger area and lay down. Take off immediately all contaminated clothing and wash it before reuse. Get medical advice/attention if you feel



Page 3 of 13

according to UK REACH Regulation

Multifix SE1000 Seismic, Comp. B

Revision date: 29.11.2022

unwell.

After inhalation

Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion

Do NOT induce vomiting. Rinse mouth thoroughly with water. Medical treatment necessary.

4.2. Most important symptoms and effects, both acute and delayed

Harmful if swallowed.

Causes severe skin burns and eye damage. May cause an allergic skin reaction.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Foam Extinguishing powder Water spray jet Carbon dioxide (CO2)

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Pyrolysis products, toxic Carbon monoxide

5.3. Advice for firefighters

In case of fire and/or explosion do not breathe fumes.

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Use personal protective equipment as required. Avoid contact with skin, eyes and clothes. Provide adequate ventilation.

6.2. Environmental precautions

Avoid release to the environment. Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Other information

Collect spillage. Take up mechanically, placing in appropriate containers for disposal. Suitable material for taking up: Sand

Treat the recovered material as prescribed in the section on waste disposal.



according to UK REACH Regulation

Multifix SE1000 Seismic, Comp. B

Revision date: 29.11.2022

Page 4 of 13

Retain contaminated washing water and dispose it.

6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Use only outdoors or in a well-ventilated area. Wear personal protection equipment (refer to section 8). Avoid contact with skin, eyes and clothes. When using do not eat, drink or smoke.

Advice on general occupational hygiene

Take off contaminated clothing and wash it before reuse. Draw up and observe skin protection programme. Wash hands thoroughly after handling. When using do not eat, drink or smoke.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed.

Store in a place accessible by authorized persons only.

Keep only in the original container in a cool, well-ventilated place.

Hints on joint storage

Do not store together with: Oxidising agent, strong, Organic peroxides Do not use for products which come into contact with the food stuffs.

Further information on storage conditions

Keep container tightly closed in a cool place. storage temperature: 5 - 35°C

7.3. Specific end use(s)

see section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters



according to UK REACH Regulation

Multifix SE1000 Seismic, Comp. B

Revision date: 29.11.2022

Page 5 of 13

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
25513-64-8	2,2,4(or 2,4,4)-Trimethylhexane-1,6-diamine			
Consumer DI	NEL, long-term	oral	systemic	0,05 mg/kg bw/day
1477-55-0	m-Phenylenebis(methylamine)			
Worker DNE	L, long-term	inhalation	systemic	1,2 mg/m³
Worker DNE	L, long-term	inhalation	local	0,2 mg/m³
Worker DNEL, long-term		dermal	systemic	0,33 mg/kg bw/day
104-15-4	p-Toluenesulphonic acid			
Worker DNE	L, long-term	dermal	systemic	7,6 mg/kg bw/day
Worker DNE	L, long-term	inhalation	systemic	53,6 mg/m³
Consumer DI	NEL, long-term	dermal	systemic	2,5 mg/kg bw/day
Consumer DI	NEL, long-term	inhalation	systemic	8,7 mg/m³
Consumer DI	NEL, long-term	oral	systemic	0,05 mg/kg bw/day

PNEC values

CAS No	Substance	
Environmen	tal compartment	Value
25513-64-8	2,2,4(or 2,4,4)-Trimethylhexane-1,6-diamine	
Freshwater		0,102 mg/l
Marine wate	er	0,01 mg/l
Freshwater	sediment	0,662 mg/kg
Marine sedi	ment	0,062 mg/kg
Micro-organ	isms in sewage treatment plants (STP)	72 mg/l
1477-55-0	m-Phenylenebis(methylamine)	
Freshwater	0,094 mg/l	
Marine water		0,009 mg/l
Freshwater sediment		0,43 mg/kg
Marine sediment		0,043 mg/kg
Micro-organ	isms in sewage treatment plants (STP)	10 mg/l
Soil		0,045 mg/kg
104-15-4	p-Toluenesulphonic acid	
Freshwater		0,073 mg/l
Marine water		0,0073 mg/l
Freshwater sediment		0,0577 mg/kg
Marine sediment 0,		0,00577 mg/kg
Soil 0,016		0,016 mg/kg

Additional advice on limit values

This mixture contains quartz (inorganic filler) which is firmly bound in the pasty component, and thus not freely available during use, so that a risk of dust inhalation is excluded. Exposure limit values for respirable dusts are not relevant for this product.



according to UK REACH Regulation

Multifix SE1000 Seismic, Comp. B

Page 6 of 13

Revision date: 29.11.2022

8.2. Exposure controls





Appropriate engineering controls

Provide adequate ventilation. If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye/face protection. Wear safety glasses.

Hand protection

Recommended material: NBR (Nitrile rubber) Breakthrough time: > 480 min Thickness of the glove material: 0,7 mm DIN-/EN-Norms EN 374

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Respiratory protection with combination filter A1P2 (organic gases/vapors and particles) recommended.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

1. Information on basic physical and	i chemical properties	
Physical state: Colour:	solid (pasty)	
• • • • • • • • • • • • • • • • • • • •	grey / red	
Odour:	characteristic	
Odour threshold:	No data available	
Changes in the physical state		
Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		not determined
Flash point:		not applicable
Flammability		
Solid/liquid:		not determined
Gas:		not applicable
Lower explosion limits:		not determined
Upper explosion limits:		not determined
Self-ignition temperature		
Solid:		not determined
Gas:		not applicable
Decomposition temperature:		not determined
pH-Value:		not determined



according to UK REACH Regulation

Mul	tifix SE1000 Seismic, Comp. B	
Revision date: 29.11.2022		Page 7 of 13
Water solubility:	The study does not need to be conducted because the substance is known to be insoluble in water.	
Solubility in other solvents not determined		
Partition coefficient n-octanol/water:	not determined	
Vapour pressure:	not determined	
Density (at 20 °C):	1,42 g/cm³	
Relative vapour density:	not determined	
9.2. Other information		
Information with regard to physical h	azard classes	
Oxidizing properties Not oxidising.		
Other safety characteristics		
Solid content:	not determined	
Evaporation rate:	not determined	
SECTION 10: Stability and reactivity	,	
10.1. Reactivity		
see section 10.3		
10.2. Chemical stability		
The product is stable under storage	at normal ambient temperatures.	
10.3. Possibility of hazardous reactions		
Violent reaction with: Oxidising agen	t	
10.4. Conditions to avoid		
see section 7.2		
10.5. Incompatible materials Oxidising agent, strong		
10.6. Hazardous decomposition product No known hazardous decomposition		
SECTION 11: Toxicological informat	tion	
11.1. Information on hazard classes as a Acute toxicity Harmful if swallowed. ATEmix calculated		st/mist) 15,100 mg/l



Page 8 of 13

according to UK REACH Regulation

Multifix SE1000 Seismic, Comp. B

Revision date: 29.11.2022

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
25513-64-8	2,2,4(or 2,4,4)-Trimethylhexane-1,6-diamine					
		ATE mg/kg	500			
1477-55-0	m-Phenylenebis(methylamine)					
		LD50 mg/kg	930	Rat		
		LD50 mg/kg	2000	Rabbit		
	inhalation (1 h) vapour	LC50	3,89 mg/l	Rat		
	inhalation dust/mist	ATE	1,5 mg/l			
90-72-2	2,4,6-Tris(dimethylaminomethyl)phenol					
		ATE mg/kg	500			

Irritation and corrosivity

Causes severe skin burns and eye damage. Causes serious eye damage.

Sensitising effects

May cause an allergic skin reaction. (2,2,4(or 2,4,4)-Trimethylhexane-1,6-diamine; m-Phenylenebis(methylamine))

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2. Information on other hazards

Other information

No information available.

SECTION 12: Ecological information

12.1. Toxicity

The product is not: Ecotoxic.



Page 9 of 13

according to UK REACH Regulation

Multifix SE1000 Seismic, Comp. B

Revision date: 29.11.2022

CAS No	Chemical name							
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method	
25513-64-8	2,2,4(or 2,4,4)-Trimethy	2,2,4(or 2,4,4)-Trimethylhexane-1,6-diamine						
	Acute algae toxicity	ErC50 mg/l	43,5	72 h	Selenastrum capricornutum		OECD 201	
	Fish toxicity	NOEC mg/l	10,9	30 d	Danio rerio (zebrafish)		OECD 210	
	Crustacea toxicity	NOEC mg/l	1,02	21 d	Daphnia magna (Big water flea)		OECD 211	
1477-55-0	m-Phenylenebis(methylamine)							
	Acute fish toxicity	LC50 mg/l	87,6	96 h	Oryzias latipes (Ricefish)		OECD 203	
	Acute algae toxicity	ErC50 mg/l	32,1	72 h	Selenastrum capricornutum		OECD 201	
	Acute crustacea toxicity	EC50 mg/l	15,2	48 h	Daphnia magna (Big water flea)		OECD 202	
	Crustacea toxicity	NOEC	4,7 mg/l	21 d	Daphnia magna (Big water flea)		OECD 211	

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
25513-64-8	2,2,4(or 2,4,4)-Trimethylhexane-1,6-diamine			
		7 %	28	

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

0.2
-0,3
0,18
0,93

BCF

CAS No	Chemical name	BCF	Species	Source
1477-55-0	m-Phenylenebis(methylamine)	2,69		

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH. The product has not been tested.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.



according to UK REACH Regulation

Multifix SE1000 Seismic, Comp. B

Revision date: 29.11.2022

Page 10 of 13

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Subsequent waste code numbers of the European Waste Catalogue are considered as recommendations. Dispose of waste according to applicable legislation. Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

List of Wastes Code - residues/unused products

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

List of Wastes Code - used product

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances; hazardous waste

List of Wastes Code - contaminated packaging

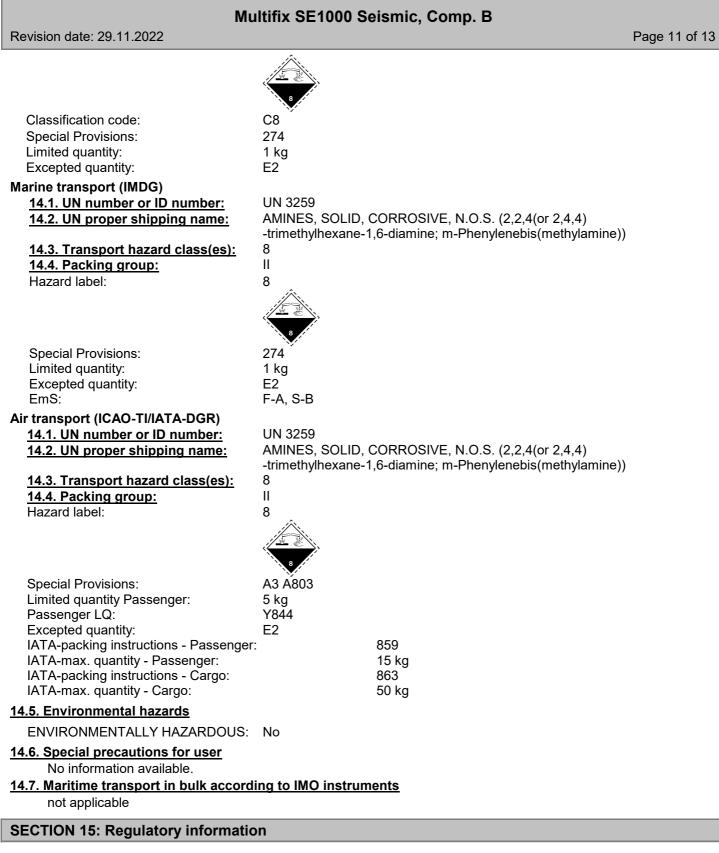
150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

SECTION 14: Transport information

Land transport (ADR/RID)	UN 3259
<u>14.1. UN number or ID number:</u>	AMINES, SOLID, CORROSIVE, N.O.S. (2,2,4(or 2,4,4)
<u>14.2. UN proper shipping name:</u>	-Trimethylhexane-1,6-diamine; m-Phenylenebis(methylamine))
<u>14.3. Transport hazard class(es):</u>	8
<u>14.4. Packing group:</u>	II
Hazard label:	8
Classification code:	C8
Special Provisions:	274
Limited quantity:	1 kg
Excepted quantity:	E2
Transport category:	2
Hazard No:	80
Tunnel restriction code:	E
Inland waterways transport (ADN)	UN 3259
<u>14.1. UN number or ID number:</u>	AMINES, SOLID, CORROSIVE, N.O.S. (2,2,4(or 2,4,4)
<u>14.2. UN proper shipping name:</u>	-Trimethylhexane-1,6-diamine; m-Phenylenebis(methylamine))
<u>14.3. Transport hazard class(es):</u>	8
<u>14.4. Packing group:</u>	II
Hazard label:	8



according to UK REACH Regulation



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

EU regulatory information



according to UK REACH Regulation

Multifix SE1000 Seismic, Comp. B

Revision date: 29.11.2022

Page 12 of 13

Restrictions on use (REACH, annex XVII):

Entry 75

Information according to 2012/18/EU Not subject to 2012/18/EU (SEVESO III)

(SEVESO III):

Additional information

VOC content: 21,7 % (DIN EN ISO 11890-2)

To follow: 850/2004/EC , 79/117/EEC , 689/2008/EC

National regulatory information

Employment restrictions:

Water hazard class (D): Skin resorption/Sensitization: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). 2 - obviously hazardous to water Causes allergic hypersensitivity reactions.

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

ADN: Accord européen relativ au transport international des marchandises Dangereuses par voie de Navigation (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways) ADR: Accord européen sur le transport des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road) BCF: Bioconcentration factor CAS: Chemical Abstracts Service CLP: Classification, Labeling and Packaging DMEL: Derived Minimal Effect level DNEL: Derived No Effect Level EC50: Effective concentration, 50% IATA: International Air Transport Association IATA-DGR: Dangerous Goods Regulations (DRG) for the air transport (IATA) ICAO: International Civil Aviation Organization IC50: Inhibitory concentration, 50% IMDG: International Maritime Code for Dangerous Goods LC50: Lethal concentration, 50% LD50: Lethal dose, 50% NOEC: No Observed Effect Concentration OECD: Oragnisation for Economic Co-operation and Development PBT: persistent, bioaccumulative and toxic vPvB: very persistent and very bioaccumulative PNEC: Predicted No Effect Concentration REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals RID: Règlement concernant le transport international ferroviaire de marchandises dangereuses (Regulations Concerning the International Carriage of Dangerous Goods by Rail) VOC: Volatile organic compound Acute Tox. 4: Acute toxicity, Category 4 Aquatic Chronic 3: Long-term aquatic hazard, Category 3 Eye Dam. 1: Serious eye damage/eye irritation, Category 1 Eye Irrit. 2: Serious eye damage/eye irritation, Category 2 Skin Corr. 1B: Skin corrosion/irritation, Category 1B Skin Irrit. 2: Serious eye damage/eye irritation, Category 2 Skin Sens. 1: Skin sensitilization, Category 1



according to UK REACH Regulation

Multifix SE1000 Seismic, Comp. B

Revision date: 29.11.2022

Page 13 of 13

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Acute Tox. 4; H302	Calculation method
Skin Corr. 1A; H314	Calculation method
Eye Dam. 1; H318	Calculation method
Skin Sens. 1; H317	Calculation method

Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
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.
H335	May cause respiratory irritation.
11440	Lemental to equiptic life with lever lection officeto

H412 Harmful to aquatic life with long lasting effects.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)