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

1.1 Product identifier

Commercial Product Name	**Sealoflex Endura BT Resin (Summer)**

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

Relevant identified uses	grout resin
Recommended restrictions	Reserved for industrial and professional use.

1.3 Details of the supplier of the safety data sheet

Company designation	BMI Group Operations, SARL; LUXEMBOURG Albert Borschette, 2B; P.O.Box 99137 1246 LUXEMBOURG Telephone: +33254737072
Marketer	BMI Group UK Ltd; BMI House 2 Pitfield; Kiln Farm Milton Keynes MK11 3LW Telephone: +44 (0)1473 257671
E-mail (competent person)	bmi.sds@bmigroup.com

1.4 Emergency telephone number

Great Britain	NCEC +44 (0)1865 407 333 - English speaking (24 hours, 7 days)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008	Flam. Liq. 2; H225 Skin Irrit. 2; H315 Skin Sens. 1; H317 STOT SE 3; H335

2.2 Label elements

Hazard pictogram

GHS02

GHS07

Signal word	Danger
Hazardous component(s) to be indicated on label	methyl methacrylate , 2-ethylhexyl acrylate
H-statement(s)	H225: Highly flammable liquid and vapour. H315: Causes skin irritation. H317: May cause an allergic skin reaction. H335: May cause respiratory irritation.
P-statement(s)	P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261: Avoid breathing dust/fume/gas/mist/vapours/spray. P264: Wash thoroughly after handling. P280: Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

P312: Call a POISON CENTER/doctor if you feel unwell.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P362+P364: Take off contaminated clothing and wash it before reuse.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous ingredients

Ingredient	Numbers	Classification (EC) 1272/2008	Concentration
methyl methacrylate	CAS No.: 80-62-6 EC-No.: 201-297-1 Index-No.: 607-035-00-6 REACH No.: 01-2119452498-28-XXXX	Flam. Liq. 2; H225 STOT SE 3; H335 Skin Irrit. 2; H315 Skin Sens. 1; H317	35.0 - 40.0 % by weight
2-ethylhexyl acrylate	CAS No.: 103-11-7 EC-No.: 203-080-7 Index-No.: 607-107-00-7 REACH No.: 01-2119453158-37-XXXX	Skin Irrit. 2; H315 Skin Sens. 1; H317 STOT SE 3; H335 Aquatic Chronic 3; H412	20.0 - 25.0 % by weight
aliphatic urethanacrylate		Skin Irrit. 2; H315 Eye Irrit. 2; H319	5.0 - 10.0 % by weight
1,1`-(p-Tolylimino)dipropan-2-ol	CAS No.: 38668-48-3 EC-No.: 254-075-1 REACH No.: 01-2119980937-17-XXXX	Acute Tox. 2; H300 Eye Irrit. 2; H319 Aquatic Chronic 3; H412	0.1 - 1.0 % by weight

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice	Move out of dangerous area.Take off all contaminated clothing immediately.Do not leave the victim unattended.Show this safety data sheet to the doctor in attendance.
If inhaled	Move to fresh air. If symptoms persist, call a physician. Show this safety data sheet to the doctor in attendance.
In case of skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.If skin irritation occurs, seek medical advice/attention.
In case of eye contact	Bei anhaltenden Beschwerden Augenarzt hinzuziehen. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
If swallowed	Rinse mouth.Do NOT induce vomiting.Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms	None known

4.3 Indication of any immediate medical attention and special treatment needed

Immediate medical attention	Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	Feuerlöscher (Pulver, Schaum, CO2) Carbon dioxide (CO2), Foam, Water spray, Dry powder
Extinguishing media which must not be used for safety reasons	High volume water jet

5.2 Special hazards arising from the substance or mixture

Special exposure hazards arising from the substance or preparation it	Violent polymerization may be caused by: Extremes of temperature and direct sunlight. Decomposition products not known in detail.

5.3 Advice for firefighters

Special protective equipment for fire-fighting	In the event of fire, wear self-contained breathing apparatus.
Additional information on firefighting	Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	Use personal protective equipment. Ensure adequate ventilation. Vapours are heavier than air and may spread along floors.

6.2 Environmental precautions

Environmental precautions	Prevent further leakage or spillage if safe to do so.Do not flush into surface water or sanitary sewer system.Avoid subsoil penetration.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).Clean contaminated surface thoroughly.

6.4 Reference to other sections

Reference to other sections	Disposal considerations

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling	Handle and open container with care. Avoid contact with skin and eyes. Processing may lead to evolution of flammable volatiles. In case of insufficient ventilation, wear suitable respiratory equipment. Keep product and empty container away from heat and sources of ignition.
Precautions	Smoking, eating and drinking should be prohibited in the application area.For personal protection see section 8.Observe label precautions.

7.2 Conditions for safe storage, including any incompatibilities

Storage space and container requirements	Keep in properly labelled containers.Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in accordance with the particular national regulations. Keep in a cool, well-ventilated place.
TRGS 510	3
Recommended storage temperature	Keep in a dry, cool place.
Advice on protection against fire and explosion	Take precautionary measures against static discharge. Vapours may form explosive mixture with air. Use water spray to cool unopened containers.

7.3 Specific end use(s)

Specific use(s) Protect from sunlight and store in well-ventilated place.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

methyl methacrylate

Great Britain				
Long-term exposure value/ ppm	Long-term exposure value/ mg/m3	Short-term exposure value / ppm	Short-term exposure value / mg/m3	Source
50	208	100	416	EH40/2005 Workplace exposure limits (2011)

Europe			
Long-term exposure value/ ppm	Short-term exposure value / ppm	Issuing date	Source
50	100	2009/161	DIRECTIVE 2009/161/EU

DNEL	Target group	Exposure route	Exposure frequency	Source
210 mg/m³	Workers	Inhalation	Long term effects Local	Company data
210 mg/m³	Workers	Inhalation	Long term effects systemic	Company data
1,5 mg/cm²	Workers	Skin	Long term effects Local	Company data
13,67 mg/kg	Workers	Skin	Long term effects systemic	Company data
105 mg/m³	Consumers	Inhalation	Long term effects Local	Company data
74,3 mg/m³	Consumers	Inhalation	Long term effects, systemic	Company data
1,5 mg/cm²	Consumers	Skin	Long term effects Local	Company data
8,2 mg/kg	Consumers	Skin	Long term effects systemic	Company data
1,5 mg/cm²	Consumers	Skin	Short-term effects Local	Company data

PNEC	Exposure route	Source
0,94 mg/l	freshwater	Company data
0,094 mg/l	marine water	Company data
5,74 mg/kg	sediment	Company data
1,47 mg/kg	Soil	Company data

2-ethylhexyl acrylate

DNEL	Target group	Exposure route	Exposure frequency	Source
37,5 mg/m³	Workers	Inhalation	Long term effects Local	Company data
0,242 mg/cm²	Workers	Skin	Long term effects Local	Company data
0,242 mg/cm²	Workers	Skin	Short-term effects Local	Company data
4,5 mg/m³	Consumers	Inhalation	Long term effects Local	Company data

PNEC	Exposure route	Source
0,002752 mg/l	fresh water	Company data
0,000272 mg/l	seawater	Company data

2,3 mg/l	wastewater treatment plant	Company data
0,126 mg/kg	sediment Water	Company data
0,126 mg/kg	sediment seawater	Company data
1,0 mg/kg	Soil	Company data
0,0023 mg/kg	Intermittent release.	Company data

1,1`-(p-Tolylimino)dipropan-2-ol

DNEL	Target group	Exposure route	Exposure frequency	Source
2 mg/m³	Workers	Inhalation	Long term effects	Company data
0,6 mg/kg	Workers	Skin	Long term effects	Company data

PNEC	Exposure route	Source
199,5 mg/l	Waste water treatment	Company data
0,0072 mg/kg	marine water	Company data
0,017 mg/l	freshwater	Company data

8.2 Exposure controls

Respiratory protection	In interiors and during exceeding of the air limit values carrying of protectiv masks is absolutely necessary. In case of inadequate ventilation wear respiratory protection. Respirator with filter ABEK-P (brown / gray / yellow / green / white stripes) Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust). Vapour during processing may be irritating to the respiratory tract and to the eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Remarks	Recommended Filter type: A1, A2 (in case of higher concentration)
Hand protection	Protective gloves complying with EN 374.Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
Unsuitable material	woven fabric, Leather gloves, Nitrile rubber
Suitable material	butyl-rubber
Material thickness	0,7 mm
Break through time	120 min
Eye protection	Safety glasses Tightly fitting safety goggles
Skin and body protection	Wear suitable protective equipment.Long sleeved clothing
General protective and hygiene measures	Handle in accordance with good industrial hygiene and safety practice.Keep away from food, drink and animal feedingstuffs.Wash hands before breaks and at the end of workday.Use protective skin cream before handling the product.Avoid contact with the skin and the eyes.
Engineering measures	Ensure adequate ventilation, especially in confined areas. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Other information (chapter 8.)	Assumes a good basic standard of occupational hygiene is implemented.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid
Colour	milky
Odour	smell of Methylmethacrylate
Melting point [°C] / Freezing point [°C]	not determined
Boiling point [°C]	> 100 °C
Explosion limits [Vol-%]	The product itself has not been tested. methyl methacrylate
Lower limit	1,7 vol. %
Upper limit	12,5 vol. % 2-ethylhexyl acrylate
Lower limit	0,9 vol. %
Upper limit	6,4 vol. %
Flash point [°C]	10 °C
Ignition temperature [°C]	not determined
pH (max)	Not applicable.
Viscosity, kinematic [mm²/s]	365 mm²/s
Water solubility [g/l]	
Remarks	insoluble
Partition coefficient n-octanol /water (log P O/W)	not determined
Vapour pressure [kPa]	not determined
Density [g/cm³]	0,98 g/cm³
Temperature [°C]	20 °C
Vapour density	not determined

9.2 Other information

9.2.2 Other safety-related parameters

Evaporation rate [kg/(s*m²)]	not determined
Explosive properties	Not relevant In use, may form flammable/explosive vapour-air mixture.
Form	Liquid
Flow time [s]	55 sec
Temperature [°C]	20 °C
Measuring method	DIN cup 6 mm

SECTION 10: Stability and reactivity

10.1 Reactivity

Reactivity	No decomposition if stored and applied as directed.

10.2 Chemical stability

Chemical stability — The product is stable under the usual processing conditions

10.3 Possibility of hazardous reactions

Hazardous reactions — The product is normally supplied in a stabilized form. If the permissible storage period and/or storage temperature is noticeably exceeded, the product may polymerize with heat evolution. Risk of receptacle bursting.

10.4 Conditions to avoid

Conditions to avoid — Extremes of temperature and direct sunlight.

10.5 Incompatible materials

Materials to avoid — Reacts violently with peroxides. Reducing agents, Strong bases, Amines, Oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition products — Decomposition products not known in detail.

SECTION 11: Toxicological information

11.1 Information on the hazard classes within the meaning of Regulation (EU) No. 1272/2008

Oral toxicity [mg/kg]

Hazardous ingredients

methyl methacrylate				
Value	Test criterion	Test species	Measuring method	Source
>5001 mg/kg	LD50	rat	OECD Test Guideline 401	Company data

2-ethylhexyl acrylate			
Value	Test criterion	Test species	Source
4435 mg/kg	LD50	rat	Company data

aliphatic urethanacrylate			
Value	Test criterion	Test species	Source
>2001 mg/kg	LD50	rat	Company data

1,1`-(p-Tolylimino)dipropan-2-ol				
Value	Test criterion	Test species	Measuring method	Source
26 mg/kg	LD50	rat	OECD Test Guideline 423	Company data

Dermal toxicity [mg/kg]

Hazardous ingredients

methyl methacrylate			
Value	Test criterion	Test species	Source
>5001 mg/kg	LD50	rabbit	Company data

2-ethylhexyl acrylate			
Value	Test criterion	Test species	Source
7522 mg/kg	LD50	rabbit	Company data

1,1`-(p-Tolylimino)dipropan-2-ol			
Value	Test criterion	Test species	Source
2001 mg/kg	LD50	rat	Company data

Inhalative toxicity [mg/l]

Hazardous ingredients

2-ethylhexyl acrylate			
Value	Test species	Exposure duration [h]	Source
1,19 mg/l	rat	8 hours	Company data

LC50 Inhalation 4h for vapours [mg/l]

Hazardous ingredients

methyl methacrylate			
Value	Test criterion	Test species	Source
29,8 mg/l	LC50	rat	Company data

Irritant effect on skin

Hazardous ingredients

methyl methacrylate		
Value	Test species	Source
irritating	rabbit	Company data

2-ethylhexyl acrylate			
Value	Test species	Exposure duration [h]	Source
Skin irritation	rabbit	4 h	Company data

aliphatic urethanacrylate	
Value	Source
May cause skin irritation.	Company data

1,1`-(p-Tolylimino)dipropan-2-ol	
Value	Source
No skin irritation	Company data

Irritant effect on eyes

Hazardous ingredients

methyl methacrylate		
Value	Test species	Source
Irritant	rabbit	Company data

2-ethylhexyl acrylate			
Value	Measuring method	Test species	Source

slightly irritating	OECD Test Guideline 405	rabbit	Company data

aliphatic urethanacrylate	
Value	Source
Causes serious eye irritation.	Company data

1,1`-(p-Tolylimino)dipropan-2-ol	
Value	Source
Irritant	Company data

Sensitization

Hazardous ingredients

methyl methacrylate		
Value	Test species	Source
Skin sensitization	mouse	Company data

2-ethylhexyl acrylate	
Value	Source
Skin sensitization	Company data

1,1`-(p-Tolylimino)dipropan-2-ol	
Value	Source
No sensitization responses were observed.	Company data

Mutagenicity

Hazardous ingredients

methyl methacrylate	
Value	Source
not mutagenic	Company data

2-ethylhexyl acrylate	
Value	Source
No known effect.	Company data

1,1`-(p-Tolylimino)dipropan-2-ol	
Value	Source
negative	Company data

Carcinogenic effects

Hazardous ingredients

methyl methacrylate		
Value	Test species	Source
not a carcinogen	rat, mouse	Company data

2-ethylhexyl acrylate	
Value	Source

No known effect.	Company data

Reproduction toxicity

Hazardous ingredients

methyl methacrylate	
Value	Source
not toxic to reproduction	Company data

2-ethylhexyl acrylate	
Value	Source
No known effect.	Company data

Specific target organ toxicity (single exposure) [mg/kg]

Hazardous ingredients

methyl methacrylate	
Value	Source
Causes respiratory tract irritation.	Company data

2-ethylhexyl acrylate	
Value	Source
Causes respiratory tract irritation.	Company data

Specific target organ toxicity (repeated exposure) [mg/kg]

Hazardous ingredients

methyl methacrylate	
Value	Source
No known effect.	Company data

2-ethylhexyl acrylate	
Value	Source
No known effect.	Company data

11.2 Information about other hazards

Experience in practice: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Irritating to eyes, respiratory system and skin. Irritating to mucous membranes

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish [mg/l]

Hazardous ingredients

methyl methacrylate					
Value	Test criterion	Test species	Measuring method	Exposure duration [h]	Source

191 mg/l	LC50	Oncorhynchus mykiss (rainbow trout)	OECD Test Guideline 203	96 h	Company data

2-ethylhexyl acrylate					
Value	Test criterion	Test species	Measuring method	Exposure duration [h]	Source
1,81 mg/l	LC50	Oncorhynchus mykiss (rainbow trout)	OECD Test Guideline 203	96 h	Company data

1,1`-(p-Tolylimino)dipropan-2-ol				
Value	Test criterion	Test species	Exposure duration [h]	Source
17 mg/l	LC50	Brachydanio rerio (zebra fish)	96 h	Company data

Toxicity to daphnia [mg/l]

Hazardous ingredients

methyl methacrylate					
Value	Test criterion	Test species	Exposure duration [h]	Measuring method	Source
69 mg/l	EC50	Daphnia magna (Water flea)	48 h	OECD Test Guideline 202	Company data

2-ethylhexyl acrylate					
Value	Test criterion	Test species	Exposure duration [h]	Measuring method	Source
1,3 mg/l	EC50	Daphnia magna (Water flea)	48 h	OECD Test Guideline 202	Company data

aliphatic urethanacrylate			
Value	Test criterion	Test species	Source
>100 mg/l	LC50	Daphnia magna (Water flea)	Company data

1,1`-(p-Tolylimino)dipropan-2-ol				
Value	Test criterion	Test species	Exposure duration [h]	Source
28,8 mg/l	EC50	Daphnia magna (Water flea)	18 h	Company data

Toxicity to algae [mg/l]

Hazardous ingredients

methyl methacrylate					
Value	Test criterion	Test species	Exposure duration [h]	Measuring method	Source

>110 mg/l	EC50	Selenastrum capricornutum (green algae)	72 h	OECD Test Guideline 201	Company data

2-ethylhexyl acrylate					
Value	Test criterion	Test species	Exposure duration [h]	Measuring method	Source
1,71 mg/l	ErC50	Desmodesmus subspicatus	72 h	OECD Test Guideline 201	Company data

1,1`-(p-Tolylimino)dipropan-2-ol				
Value	Test criterion	Test species	Exposure duration [h]	Source
245 mg/l	EC50	Desmodesmus subspicatus	27 h	Company data

NOEC (fish) [mg/l]

Hazardous ingredients

methyl methacrylate			
Value	Test species	Measuring method	Source
9,4 mg/l	Brachydanio rerio (zebra fish)	OECD Test Guideline 210	Company data

NOEC (daphnia) [mg/l]

Hazardous ingredients

methyl methacrylate			
Value	Test species	Measuring method	Source
37 mg/l	Daphnia magna (Water flea)	OECD Test Guideline 202	Company data

NOEC (algae) [mg/l]

Hazardous ingredients

2-ethylhexyl acrylate			
Value	Test species	Measuring method	Source
0,45 mg/l	Desmodesmus subspicatus	OECD Test Guideline 201	Company data

12.2 Persistence and degradability

Biodegradability

Hazardous ingredients

methyl methacrylate		
Value	Method of analysis	Source
Readily biodegradable.	OECD 301C/ ISO 9408/ EEC 92/69/V, C.4-F	Company data

2-ethylhexyl acrylate	
Value	Source

Readily biodegradable.	Company data

1,1`-(p-Tolylimino)dipropan-2-ol	
Value	Source
Poorly biodegradable.	Company data

12.3 Bioaccumulative potential

Bioaccumulation

Hazardous ingredients

methyl methacrylate	
Value	Source
Does not bioaccumulate.	Company data

2-ethylhexyl acrylate	
Value	Source
Bioaccumulation slight, log Pow 4,64	Company data

1,1`-(p-Tolylimino)dipropan-2-ol	
Value	Source
no data available	Company data

12.4 Mobility in soil

Mobility

Hazardous ingredients

methyl methacrylate	
Mobility	Source
Terrestrial Compartment Not relevant	Company data

12.5 Results of PBT and vPvB assessment

Results of PBT characteristics determination

Hazardous ingredients

methyl methacrylate	
Value	Source
This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).	Company data

2-ethylhexyl acrylate	
Value	Source
This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).	Company data

aliphatic urethanacrylate	
Value	Source
This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).	Company data

1,1`-(p-Tolylimino)dipropan-2-ol	
Value	Source
This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).	Company data

12.6 Endocrine disrupting properties

Harmful effects on the environment — No known effect.

12.7 Other harmful effects

Further information on ecology — We have no quantitative data concerning the ecological effects of this product.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Disposal considerations — According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. The following Waste Codes are only suggestions:

Waste Code — 08 01 11* waste paint and varnish containing organic solvents or other dangerous substances

Uncleaned empty packaging — Empty containers should be taken for local recycling or waste disposal. Dispose of in accordance with local regulations.

SECTION 14: Transport information

	Land transport ADR/RID	Marine transport IMDG	Air transport ICAO/IATA
14.1 UN-No	1263	1263	1263
14.2 Description of the goods	PAINT	PAINT	PAINT
14.3 Transport hazard class(es)	3	3	3
14.4 Packaging group	III	III	III
Labels	3 	3 	3 
Risk No.	33		
Category	3		
Factor	1		
Classification Code	F1		
Tunnel restriction code	E		
EmS		F-E;_S-E	
Stowage category		A	
UN proper shipping name	UN 1263 PAINT	UN 1263 PAINT	UN 1263 Paint

14.7 Bulk transport by sea according to IMO instruments

Transport in bulk according to Annex II of MARPOL and the IBC Code — Not relevant

SECTION 15: Regulatory information

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

Additional regulations — Additionally, observe any national regulations!

Classification in compliance with the Industrial Safety Regulation	highly flammable

SECTION 16: Other information

Modifications since last version	Modifications of the previous version are denoted with an asterisk (*).
Relevant H-phrases	H225: Highly flammable liquid and vapour. H300: Fatal if swallowed. H315: Causes skin irritation. H317: May cause an allergic skin reaction. H319: Causes serious eye irritation. H335: May cause respiratory irritation. H412: Harmful to aquatic life with long lasting effects.
Wording of the hazard classes	Flam. Liq.: Flammable liquid STOT SE: Specific target organ toxicity - single exposure Skin Irrit.: Skin irritation Skin Sens.: Skin sensitization Aquatic Chronic: Hazardous to the aquatic environment Eye Irrit.: Serious eye irritation Acute Tox.: Acute toxicity

Classification for mixtures and used evaluation method according to r

Classification	Evaluation
Flam. Liq. 2; H225	Calculated
Skin Irrit. 2; H315	Calculated
Skin Sens. 1; H317	Calculated
STOT SE 3; H335	Calculated

Department issuing safety data sheet	Environmental Department
Recommended restrictions	Reserved for industrial and professional use.

This information is provided in accordance with the current status of our knowledge and experience. The Safety Data Sheet describes products with a view to relevant safety requirements. This information does not constitute a warranty of properties, features or qualities.