

Safety Data Sheet

according to UK REACH Regulation

HP-E111L HARDENER

Revision date: 08.12.2022

Product code: 168

Page 1 of 15

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

HP-E111L HARDENER

UFI: CQVN-D75V-MN8D-AF2E

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

Adhesives, sealants

Uses advised against

Any use not mentioned in the product data sheet.

1.3. Details of the supplier of the safety data sheet

Company name:	HP-Textiles GmbH	
Street:	Otto-Hahn-Str. 22	
Place:	D-48480 Schapen	
Telephone:	+49 (0) 5905 94598-70	Telefax: +49 (0) 5905 94598-74
e-mail:	produktsicherheit@hp-textiles.com	
Internet:	www.hp-textiles.com	
Responsible Department:	Safety department	

1.4. Emergency telephone number: +49 (0) 151 5473 5568 (08:00 a.m.- 03:00 p.m.)**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****GB CLP Regulation**

Acute Tox. 4; H302
Skin Corr. 1B; H314
Eye Dam. 1; H318
Skin Sens. 1; H317
Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

2.2. Label elements**GB CLP Regulation****Hazard components for labelling**

3-aminomethyl-3,5,5-trimethylcyclohexylamine
benzyl alcohol
Polyoxypropylendiamine
Phenol, styrenated

Signal word: Danger**Pictograms:****Hazard statements**

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.

Safety Data Sheet

according to UK REACH Regulation

HP-E111L HARDENER

Revision date: 08.12.2022

Product code: 168

Page 2 of 15

Precautionary statements

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
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.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor. Store
P405	locked up.
P501	Dispose of contents/container to hazardous waste.

2.3. Other hazards

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

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 Regulation)			
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine			50 - 75 %
	220-666-8	612-067-00-9	01-2119514687-32	
	Acute Tox. 4, Skin Corr. 1B, Eye Dam. 1, Skin Sens. 1A; H302 H314 H318 H317			
100-51-6	benzyl alcohol			10 - 25 %
	202-859-9	603-057-00-5	01-2119492630-38	
	Acute Tox. 4, Acute Tox. 4, Eye Irrit. 2; H332 H302 H319			
9046-10-0	Polyoxypropylendiamine			10 - 25 %
	618-561-0		01-2119557899-12	
	Skin Corr. 1C, Eye Dam. 1, Aquatic Chronic 3; H314 H318 H412			
61788-44-1	Phenol, styrenated			1 - 5 %
	262-975-0		01-2119980970-27	
	Skin Irrit. 2, Skin Sens. 1, Aquatic Chronic 2; H315 H317 H411			

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

Safety Data Sheet

according to UK REACH Regulation

HP-E111L HARDENER

Revision date: 08.12.2022

Product code: 168

Page 3 of 15

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
2855-13-2	220-666-8	3-aminomethyl-3,5,5-trimethylcyclohexylamine	50 - 75 %
		inhalation: LC50 = >5,01 mg/l (dusts or mists); oral: ATE 1030 mg/kg Skin Sens. 1A; H317: >= 0,001 - 100	
100-51-6	202-859-9	benzyl alcohol	10 - 25 %
		inhalation: ATE = 11 mg/l (vapours); inhalation: LC50 = (>4178) mg/l (dusts or mists); dermal: LD50 = (>2000) mg/kg; oral: LD50 = 1580 mg/kg	
9046-10-0	618-561-0	Polyoxypropylendiamine	10 - 25 %
		inhalation: LC50 = [0,74] mg/l (vapours); dermal: LD50 = 2980 mg/kg; oral: LD50 = 2885 mg/kg	
61788-44-1	262-975-0	Phenol, styrenated	1 - 5 %
		dermal: LD50 = >2000 mg/kg; oral: LD50 = >2500 mg/kg	

Further Information

Product does not contain listed SVHC substances > 0,1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH)

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest. In case of respiratory tract irritation, consult a physician. In the case of lung irritation: Primary treatment using corticoide spray, eg. Auxiloson spray, Pulmicort-dosage-spray. (Auxiloson and Pulmicort are registered trademarks.)

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing. In case of skin irritation, seek medical treatment.

After contact with eyes

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

After ingestion

Do NOT induce vomiting. Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Observe risk of aspiration if vomiting occurs. Never give anything by mouth to an unconscious person or a person with cramps. When in doubt or if symptoms are observed, get medical advice.

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

If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects).

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**

Sand. Foam. Carbon dioxide (CO₂). Extinguishing powder. In case of major fire and large quantities: Water spray jet. Water mist.

Unsuitable extinguishing media

Full water jet

Safety Data Sheet

according to UK REACH Regulation

HP-E111L HARDENER

Revision date: 08.12.2022

Product code: 168

Page 4 of 15

5.2. Special hazards arising from the substance or mixtureIn case of fire may be liberated: Carbon monoxide Carbon dioxide (CO₂)**5.3. Advice for firefighters**

In case of fire and/or explosion do not breathe fumes. In case of fire: Wear self-contained breathing apparatus.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures****General advice**

Wear personal protection equipment (refer to section 8).

Do not breathe vapour/aerosol. Avoid contact with skin, eyes and clothes.

For non-emergency personnel

Wear personal protection equipment (refer to section 8).

For emergency responders

Wear personal protection equipment (refer to section 8).

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up**For containment**

Make sure spills can be contained (e.g. sump pallets or kerbed areas).

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

For cleaning up

Clean contaminated objects and areas thoroughly observing environmental regulations.

Other information

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

6.4. Reference to other sections

Safe handling: see section 7

Disposal: see section 13

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Wear suitable protective clothing. (See section 8.)

Conditions to avoid: aerosol or mist formation

Avoid contact with skin, eyes and clothes.

Advice on protection against fire and explosion

Usual measures for fire prevention.

Advice on general occupational hygiene

When using do not eat, drink or smoke.

Further information on handling

Advices on general occupational hygiene: See section 8.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed in a cool, well-ventilated place. Only use containers specifically approved for the substance/product.

Make sure spills can be contained (e.g. sump pallets or kerbed areas).

Safety Data Sheet

according to UK REACH Regulation

HP-E111L HARDENER

Revision date: 08.12.2022

Product code: 168

Page 5 of 15

Hints on joint storage

Do not store together with: Explosives. Oxidizing solids. Oxidizing liquids. Organic peroxides. Self-reactive substances and mixtures. Radioactive substances. Infectious substances.

Further information on storage conditions

Recommended storage temperature: 20°C

Protect against: frost. UV-radiation/sunlight. heat. Humidity

7.3. Specific end use(s)

See section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
100-51-6	benzyl alcohol			
Consumer DNEL, long-term		oral	systemic	4 mg/kg bw/day
Worker DNEL, acute		inhalation	systemic	110 mg/m³
Worker DNEL, long-term		inhalation	systemic	22 mg/m³
Consumer DNEL, acute		oral	systemic	20 mg/kg bw/day
Consumer DNEL, acute		inhalation	systemic	27 mg/m³
Consumer DNEL, long-term		inhalation	systemic	5,4 mg/m³
Worker DNEL, long-term		dermal	systemic	8 mg/kg bw/day
Consumer DNEL, acute		dermal	systemic	20 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	4 mg/kg bw/day
Worker DNEL, acute		dermal	systemic	40 mg/kg bw/day
9046-10-0	Polyoxypropylendiamine			
Worker DNEL, long-term		inhalation	systemic	1.36 mg/m³
Worker DNEL, long-term		dermal	systemic	2.5 mg/kg bw/day
61788-44-1	Phenol, styrenated			
Worker DNEL, long-term		inhalation	systemic	11,02 mg/m³
Worker DNEL, long-term		dermal	systemic	6,25 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	2,717 mg/m³
Consumer DNEL, long-term		dermal	systemic	3,125 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	1,562 mg/kg bw/day

Safety Data Sheet

according to UK REACH Regulation

HP-E111L HARDENER

Revision date: 08.12.2022

Product code: 168

Page 6 of 15

PNEC values

CAS No	Substance	
Environmental compartment		Value
100-51-6	benzyl alcohol	
Freshwater		1 mg/l
Freshwater (intermittent releases)		2,3 mg/l
Marine water		0,1 mg/l
Freshwater sediment		5,27 mg/kg
Marine sediment		0,527 mg/kg
Micro-organisms in sewage treatment plants (STP)		39 mg/l
Soil		0,456 mg/kg
9046-10-0	Polyoxypropylendiamine	
Freshwater		0.015 mg/l
Marine water		0.014 mg/l
Freshwater sediment		0.132 mg/kg
Marine sediment		0.125 mg/kg
Secondary poisoning		6.93 mg/kg
Micro-organisms in sewage treatment plants (STP)		7.5 mg/l
Soil		0.018 mg/kg

Additional advice on limit values

To date, no national critical limit values exist.

8.2. Exposure controls**Appropriate engineering controls**

Technical measures and the application of suitable work processes have priority over personal protection equipment.

Provide adequate ventilation.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Wear eye/face protection. BS/EN 166

Hand protection

Wear suitable gloves.

Suitable material:

FKM (fluororubber). - Thickness of glove material: 0,4 mm

Breakthrough time \geq 8 h

NBR (Nitrile rubber). - Thickness of glove material: 0,35 mm

Breakthrough time \geq 8 h

PVC (Polyvinyl chloride).

Breakthrough time \geq 8 h

The selected protective gloves have to satisfy the specifications of EU Directive EC/2016/425 and the standard EN 374 derived from it.

Before using check leak tightness / impermeability. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Safety Data Sheet

according to UK REACH Regulation

HP-E111L HARDENER

Revision date: 08.12.2022

Product code: 168

Page 7 of 15

Skin protection

Suitable protective clothing: Lab apron.

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500 (D).

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

Respiratory protection necessary at:

-Exceeding exposure limit values

-Insufficient ventilation and aerosol or mist formation

Suitable respiratory protective equipment: Combination filtering device (EN 14387) Type A-P2

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

Environmental exposure controls

No information available.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state:	Liquid
Colour:	different
Odour:	characteristic

Test method**Changes in the physical state**

Melting point/freezing point: No information available.

Boiling point or initial boiling point and >200 °C
boiling range:

Sublimation point: No information available.

Softening point: No information available.

Pour point: No information available.

Flash point: >100 °C

Flammability

Solid/liquid: No information available.

Gas: No information available.

Explosive properties

none

Lower explosion limits: 1,2 g/m³Upper explosion limits: 13 g/m³

Auto-ignition temperature: 365 °C DIN 51794

Self-ignition temperature

Solid: No information available.

Gas: No information available.

Decomposition temperature: No information available.

pH-Value: No information available.

Viscosity / dynamic: 100 mPa·s
(at 25 °C)

Viscosity / kinematic: No information available.

Flow time: No information available.

Safety Data Sheet

according to UK REACH Regulation

HP-E111L HARDENER

Revision date: 08.12.2022

Product code: 168

Page 8 of 15

Water solubility:	almost immiscible	OECD 105
Solubility in other solvents		
No information available.		
Partition coefficient n-octanol/water:	No information available.	
Vapour pressure: (at 20 °C)	<1 hPa	DIN 51640
Vapour pressure: (at 50 °C)	No information available.	DIN 51754
Density (at 23 °C):	1,0 g/cm ³	ASTM D 1296
Bulk density:	No information available.	ISO 1183 (A)
Relative vapour density:	No information available.	

9.2. Other information**Information with regard to physical hazard classes**

Sustaining combustion:	No data available
Oxidizing properties	
none	

Other safety characteristics

Solvent separation test:	No information available.
Solvent content:	No information available.
Solid content:	100 %
Evaporation rate:	No information available.

Further Information**SECTION 10: Stability and reactivity****10.1. Reactivity**

No information available.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

Refer to chapter 10.5.

10.4. Conditions to avoid

Protect against: UV-radiation/sunlight. heat.

10.5. Incompatible materials

Materials to avoid: Oxidizing agents, strong. Reducing agents, strong.

10.6. Hazardous decomposition productsIn case of fire may be liberated: Carbon monoxide Carbon dioxide (CO₂)**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in GB CLP Regulation****Toxicokinetics, metabolism and distribution**

No information available.

Acute toxicity

Harmful if swallowed.

ATEmix calculated

ATE (oral) 1672,7 mg/kg

Safety Data Sheet

according to UK REACH Regulation

HP-E111L HARDENER

Revision date: 08.12.2022

Product code: 168

Page 9 of 15

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine				
	oral	ATE 1030 mg/kg			
	inhalation (4 h) dust/mist	LC50 >5,01 mg/l	Rat.	ECHA Dossier	
100-51-6	benzyl alcohol				
	oral	LD50 1580 mg/kg	Mouse	ECHA Dossier	OECD 401
	dermal	LD50 (>2000) mg/kg	Rabbit	ECHA-Dossier	
	inhalation vapour	ATE 11 mg/l			
	inhalation (4 h) dust/mist	LC50 (>4178) mg/l	Rat	ECHA-Dossier	OECD 403
9046-10-0	Polyoxypropylendiamine				
	oral	LD50 2885 mg/kg	Rat	ECHA Dossier	
	dermal	LD50 2980 mg/kg	Rabbit.	ECHA Dossier	
	inhalation vapour	LC50 [0,74] mg/l	8 h Rat	ECHA Dossier	
61788-44-1	Phenol, styrenated				
	oral	LD50 >2500 mg/kg	Rat	ECHA Dossier	
	dermal	LD50 >2000 mg/kg	Rat	ECHA Dossier	

Irritation and corrosivity

Causes severe skin burns and eye damage.

Causes serious eye damage.

Sensitising effects

May cause an allergic skin reaction. (3-aminomethyl-3,5,5-trimethylcyclohexylamine; Phenol, styrenated)

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**Endocrine disrupting properties**

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

SECTION 12: Ecological information**12.1. Toxicity**

The product has not been tested.

Safety Data Sheet

according to UK REACH Regulation

HP-E111L HARDENER

Revision date: 08.12.2022

Product code: 168

Page 10 of 15

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine					
	Acute fish toxicity	LC50 110 mg/l	96 h	Leuciscus idus	ECHA Dossier	
	Acute algae toxicity	ErC50 >50 mg/l	72 h	Desmodesmus subspicatus	ECHA Dossier	
	Acute crustacea toxicity	EC50 23 mg/l	48 h	Daphnia Magna	ECHA Dossier	
100-51-6	benzyl alcohol					
	Acute fish toxicity	LC50 460 mg/l	96 h	Pimephales promelas	ECHA Dossier	
	Acute algae toxicity	ErC50 500 mg/l	72 h	Pseudokirchnerella subcapitata	ECHA Dossier	OECD 201
	Acute crustacea toxicity	EC50 230 mg/l	48 h	Daphnia magna	ECHA Dossier	OECD 202
9046-10-0	Polyoxypropylendiamine					
	Acute fish toxicity	LC50 >15 mg/l	96 h	Oncorhynchus mykiss	ECHA Dossier	
	Acute algae toxicity	ErC50 141,72 mg/l	72 h	Skeletonema costatum	ECHA Dossier	
	Acute crustacea toxicity	EC50 418,34 mg/l	48 h	Acartia tonsa	ECHA Dossier	
	Algae toxicity	NOEC 100 mg/l	3 d	Skeletonema costatum	ECHA Dossier	
	Crustacea toxicity	NOEC 200 mg/l	2 d	Acartia tonsa	ECHA Dossier	
61788-44-1	Phenol, styrenated					
	Acute fish toxicity	LC50 1,77 mg/l	96 h	Danio rerio	ECHA Dossier	
	Acute algae toxicity	ErC50 1,35 mg/l	72 h	Desmodesmus subspicatus.	ECHA Dossier	

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine			
	OECD 301F / ISO 9408 / EEC 92/69 annex V, C.4-D	8%	28	ECHA Dossier
	Not readily biodegradable (according to OECD criteria)			
100-51-6	benzyl alcohol			
	OECD 301C / ISO 9408 / EEC 92/69 annex V, C.4-F	96%	14	ECHA-Dossier
	readily biodegradable			
9046-10-0	Polyoxypropylendiamine			
	OECD Guideline 301 B	0%	28	ECHA Dossier
	Not easily bio-degradable (according to OECD-criteria).			
61788-44-1	Phenol, styrenated			
	OECD Guideline 310	4%	28	ECHA Dossier
	Not easily bio-degradable (according to OECD-criteria).			

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

Safety Data Sheet

according to UK REACH Regulation

HP-E111L HARDENER

Revision date: 08.12.2022

Product code: 168

Page 11 of 15

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	0,99
100-51-6	benzyl alcohol	1,05
9046-10-0	Polyoxypropylendiamine	1,344
61788-44-1	Phenol, styrenated	3,67

BCF

CAS No	Chemical name	BCF	Species	Source
100-51-6	benzyl alcohol	1,37		ECHA-Dossier

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

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

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

Wassergefährdungsklasse 2 - wassergefährdend

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Disposal recommendations**

Dispose of waste according to applicable legislation. Consult the local waste disposal expert about waste disposal. Non-contaminated packages may be recycled. The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Control report for waste code/ waste marking according to (EWC) European Waste Catalogue:

List of Wastes Code - residues/unused products

080111 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; waste paint and varnish containing organic solvents or other hazardous substances; hazardous waste

List of Wastes Code - used product

200127 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); paint, inks, adhesives and resins containing 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

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information**Land transport (ADR/RID)**

Safety Data Sheet

according to UK REACH Regulation

HP-E111L HARDENER

Revision date: 08.12.2022

Product code: 168

Page 12 of 15

14.1. UN number or ID number:
14.2. UN proper shipping name:
14.3. Transport hazard class(es):
14.4. Packing group:
Hazard label:

UN 2735
POLYAMINES, LIQUID, CORROSIVE, N.O.S. (ISOPHORONDIAMINE)
8
III
8



Classification code:
Special Provisions:
Limited quantity:
Excepted quantity:
Transport category:
Hazard No:
Tunnel restriction code:

C7
274
5 L
E1
3
80
E

Inland waterways transport (ADN)

14.1. UN number or ID number:
14.2. UN proper shipping name:
14.3. Transport hazard class(es):
14.4. Packing group:
Hazard label:

UN 2735
POLYAMINES, LIQUID, CORROSIVE, N.O.S. (ISOPHORONDIAMINE)
8
III
8



Classification code:
Special Provisions:
Limited quantity:
Excepted quantity:

C7
274
5 L
E1

Marine transport (IMDG)

14.1. UN number or ID number:
14.2. UN proper shipping name:
14.3. Transport hazard class(es):
14.4. Packing group:
Hazard label:

UN 2735
POLYAMINES, LIQUID, CORROSIVE, N.O.S. (ISOPHORONDIAMINE)
8
III
8



Marine pollutant:
Special Provisions:
Limited quantity:
Excepted quantity:
EmS:

NO
223, 274
5 L
E1
F-A, S-B

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:
14.2. UN proper shipping name:
14.3. Transport hazard class(es):
14.4. Packing group:
Hazard label:

UN 2735
POLYAMINES, LIQUID, CORROSIVE, N.O.S. (ISOPHORONDIAMINE)
8
III
8



Safety Data Sheet

according to UK REACH Regulation

HP-E111L HARDENER

Revision date: 08.12.2022

Product code: 168

Page 13 of 15

Special Provisions:	A3 A803	
Limited quantity Passenger:	1 L	
Passenger LQ:	Y841	
Excepted quantity:	E1	
IATA-packing instructions - Passenger:		852
IATA-max. quantity - Passenger:		5 L
IATA-packing instructions - Cargo:		856
IATA-max. quantity - Cargo:		60 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

Safe handling: see section 7

Personal protection equipment: see section 8

14.7. Maritime transport in bulk according to IMO instruments

not relevant

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 3, Entry 75

2010/75/EU (VOC): 0 % in the intended hardened condition

2004/42/EC (VOC): 0 % in the intended hardened condition

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

Additional information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (amended by Regulation (EU) No 2020/878)

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

REACH 1907/2006 Appendix XVII, No (mixture): 3

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

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

3-aminomethyl-3,5,5-trimethylcyclohexylamine

benzyl alcohol

Polyoxypropylendiamine

SECTION 16: Other information**Changes**

Rev. : 5,0 - Initial release 18.11.2022

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

CAS Chemical Abstracts Service

CLP: Classification, Labelling and Packaging of substances and mixtures

DNEL: Derived No Effect Level

d: day(s)

Safety Data Sheet

according to UK REACH Regulation

HP-E111L HARDENER

Revision date: 08.12.2022

Product code: 168

Page 14 of 15

EINECS: European INventory of Existing Commercial chemical Substances
 ELINCS: European List of Notified Chemical Substances
 ECHA: European Chemicals Agency
 EWC: European Waste Catalogue
 IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
 ICAO: International Civil Aviation Organization
 ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals
 GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)
 h: hour
 LOAEL: Lowest observed adverse effect level
 LOAEC: Lowest observed adverse effect concentration
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 NOAEL: No observed adverse effect level
 NOAEC: No observed adverse effect concentration
 NLP: No-Longer Polymers
 N/A: not applicable
 OECD: Organisation for Economic Co-operation and Development
 PNEC: predicted no effect concentration
 PBT: Persistent bioaccumulative toxic
 RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 REACH: Registration, Evaluation, Authorisation of Chemicals
 SVHC: substance of very high concern
 TRGS: Technische Regeln für Gefahrstoffe
 UN: United Nations
 VOC: Volatile Organic Compounds

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

Classification	Classification procedure
Acute Tox. 4; H302	Calculation method
Skin Corr. 1B; H314	Calculation method
Eye Dam. 1; H318	Calculation method
Skin Sens. 1; H317	Calculation method
Aquatic Chronic 3; H412	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.
 H411 Toxic to aquatic life with long lasting effects.
 H412 Harmful to aquatic life with long lasting effects.

Further Information

Classification according to Regulation (EC) No 1272/2008 [CLP] - Classification procedure:
 Health hazards: Calculation method.
 Environmental hazards: Calculation method.
 Physical hazards: On basis of test data and / or calculated and / or estimated.

Safety Data Sheet

according to UK REACH Regulation

HP-E111L HARDENER

Revision date: 08.12.2022

Product code: 168

Page 15 of 15

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.)