



SP Handipack Hardener

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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

1.1. Product identifier

Product form	: Mixture
Name	: SP Handipack Hardener
Type of product	: Hardener (Crosslinker)
Product group	: Hardener

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

1.2.1. Relevant identified uses

Main use category	: Industrial use
Industrial/Professional use spec	: For professional use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Gurit (UK) Ltd
 St Cross Business Park
 PO30 5WU Isle of Wight - United Kingdom
 T +44 (0) 1983 828 000
contact@gurit.com - www.gurit.com

1.4. Emergency telephone number

Emergency number : +44 (0) 2392 242148

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Acute toxicity (oral), Category 4	H302
Acute toxicity (inhalation:vapour) Category 3	H331
Skin corrosion/irritation, Category 1B	H314
Sensitisation — Skin, Category 1	H317
Germ cell mutagenicity, Category 2	H341

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Suspected of causing genetic defects. Toxic if inhaled. Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction.

2.2. Label elements

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

Hazard pictograms (CLP)



Signal word (CLP)

: Danger

Hazardous ingredients

: Phenol; Trimethylhexamethylenediamine; 2-piperazin-1-ylethylamine; benzyl alcohol; 1,3-Benzenedimethanamine

Hazard statements (CLP)

: H302 - Harmful if swallowed
 H314 - Causes severe skin burns and eye damage
 H317 - May cause an allergic skin reaction
 H331 - Toxic if inhaled
 H341 - Suspected of causing genetic defects

Precautionary statements (CLP)

: P201 - Obtain special instructions before use
 P202 - Do not handle until all safety precautions have been read and understood

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P260 - Do not breathe vapours
 P264 - Wash hands, forearms and face thoroughly after handling
 P270 - Do not eat, drink or smoke when using this product
 P271 - Use only outdoors or in a well-ventilated area

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
benzyl alcohol	(CAS No) 100-51-6 (EC no) 202-859-9 (EC index no) 603-057-00-5 (REACH-no) 01-2119493630-38	>= 10	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:dust,mist), H332 Eye Irrit. 2, H319
Trimethylhexamethylenediamine	(CAS No) 25620-58-0 (EC no) 247-134-8	5 - 25	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Skin Sens. 1, H317
1,3-Benzenedimethanamine	(CAS No) 1477-55-0 (EC no) 216-032-5 (REACH-no) 01-2119480150-50	< 25	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 2 (Inhalation:vapour), H330 Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Chronic 3, H412
Phenol	(CAS No) 108-95-2 (EC no) 203-632-7 (EC index no) 604-001-00-2 (REACH-no) 01-2119471329-32	3 - 10	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:dust,mist), H331 Skin Corr. 1B, H314 Muta. 2, H341 STOT RE 2, H373
2-piperazin-1-ylethylamine	(CAS No) 140-31-8 (EC no) 205-411-0 (EC index no) 612-105-00-4 (REACH-no) 01-2119471486-30	< 10	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Chronic 3, H412

Specific concentration limits:

Name	Product identifier	Specific concentration limits
Phenol	(CAS No) 108-95-2 (EC no) 203-632-7 (EC index no) 604-001-00-2 (REACH-no) 01-2119471329-32	(1 =<C < 3) Skin Irrit. 2, H315 (1 =<C < 3) Eye Irrit. 2, H319 (C >= 3) Skin Corr. 1B, H314

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Call a physician immediately.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a doctor.
First-aid measures after skin contact	: Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Call a physician immediately.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: Rinse mouth. Do not induce vomiting. Call a physician immediately.

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

Symptoms/injuries after skin contact	: Burns. May cause an allergic skin reaction.
Symptoms/injuries after eye contact	: Serious damage to eyes.
Symptoms/injuries after ingestion	: Burns.

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

Treat symptomatically.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
 Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Precautionary measures fire : Evacuate area.
 Firefighting instructions : Exercise caution when fighting any chemical fire.
 Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
 Other information : Collect contaminated fire fighting water separately. It must not enter drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Protective clothing.
 Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
 Emergency procedures : Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.
 Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
 Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13. For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray. Wear personal protective equipment. Ensure good ventilation of the work station.
 Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Separate working clothes from town clothes. Launder separately. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.
 Storage temperature : ≤ 30 °C
 Storage area : Store away from heat. Store in a well-ventilated place.
 Special rules on packaging : Keep only in original container.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Phenol (108-95-2)		
EU	IOELV TWA (mg/m ³)	8 mg/m ³
EU	IOELV TWA (ppm)	2 ppm

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Phenol (108-95-2)		
EU	IOELV STEL (mg/m ³)	16 mg/m ³
EU	IOELV STEL (ppm)	4 ppm
United Kingdom	Local name	Phenol
United Kingdom	WEL TWA (mg/m ³)	7.8 mg/m ³
United Kingdom	WEL TWA (ppm)	2 ppm
United Kingdom	WEL STEL (mg/m ³)	16 mg/m ³
United Kingdom	WEL STEL (ppm)	4 ppm
United Kingdom	Remark (WEL)	Sk

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Personal protective equipment : Gloves. Protective clothing. Safety glasses.

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Wear respiratory protection. Where exposure through inhalation may occur from use, respiratory protection equipment is recommended



Environmental exposure controls : Avoid release to the environment.

Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Yellow.
Odour	: Amine-like.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

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Explosive limits : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport. Product is not explosive.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed. Inhalation:vapour: Toxic if inhaled.

ATE CLP (oral)	637.908 mg/kg bodyweight
ATE CLP (vapours)	9.783 mg/l/4h

Phenol (108-95-2)	
LD50 oral rat	340 mg/kg
LD50 dermal rabbit	630 mg/kg

Trimethylhexamethylenediamine (25620-58-0)	
LD50 oral rat	910 mg/kg

benzyl alcohol (100-51-6)	
LD50 oral rat	1230 mg/kg
LD50 dermal rabbit	2 g/kg
LC50 inhalation rat (mg/l)	8.8 mg/l/4h

1,3-Benzenedimethanamine (1477-55-0)	
LD50 oral rat	660 mg/kg
LD50 oral	980 mg/kg
LD50 dermal rabbit	2 g/kg
LC50 inhalation rat (mg/l)	1.34 mg/l/4h
LC50 inhalation rat (ppm)	700 ppm/1h

2-piperazin-1-ylethylamine (140-31-8)	
LD50 oral rat	2140 µl/kg
LD50 dermal rabbit	880 µl/kg

Skin corrosion/irritation : Causes severe skin burns and eye damage.
 Serious eye damage/irritation : Serious eye damage, category 1, implicit
 Respiratory or skin sensitisation : May cause an allergic skin reaction.
 Germ cell mutagenicity : Suspected of causing genetic defects.
 Carcinogenicity : Not classified
 Reproductive toxicity : Not classified
 Specific target organ toxicity (single exposure) : Not classified
 Specific target organ toxicity (repeated exposure) : Not classified
 Aspiration hazard : Not classified

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.

Phenol (108-95-2)	
LC50 fish 1	11.9 - 50.5 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 fish 2	20.5 - 25.6 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 1	4.24 - 10.7 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
EC50 Daphnia 2	10.2 - 15.5 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 72h algae (1)	187 - 279 mg/l (Species: Desmodesmus subspicatus [static])
EC50 96h algae (1)	46.42 mg/l (Species: Pseudokirchneriella subcapitata)
EC50 96h algae (2)	0.0188 - 0.1044 mg/l (Species: Pseudokirchneriella subcapitata [static])
Trimethylhexamethylenediamine (25620-58-0)	
EC50 72h algae (1)	29.5 mg/l (Species: Desmodesmus subspicatus)
benzyl alcohol (100-51-6)	
LC50 fish 1	460 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
LC50 fish 2	10 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 1	23 mg/l (Exposure time: 48 h - Species: water flea)
2-piperazin-1-ylethylamine (140-31-8)	
LC50 fish 1	1950 - 2460 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 fish 2	> 1000 mg/l (Exposure time: 96 h - Species: Poecilia reticulata [semi-static])
EC50 Daphnia 1	32 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 72h algae (1)	495 mg/l (Species: Pseudokirchneriella subcapitata)

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Phenol (108-95-2)	
BCF fish 1	(no significant bioaccumulation)
Log Pow	1.47
Trimethylhexamethylenediamine (25620-58-0)	
Log Pow	0.77 (at 23 °C)
benzyl alcohol (100-51-6)	
Log Pow	1.1
2-piperazin-1-ylethylamine (140-31-8)	
BCF fish 1	(no bioaccumulation expected)
Log Pow	-1.48

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Waste disposal recommendations	: Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials	: Avoid release to the environment.
European List of Waste (LoW) code	: 08 04 09* - waste adhesives and sealants containing organic solvents or other dangerous substances

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SECTION 14: Transport information

In accordance with ADR / IATA / IMDG

ADR	IMDG	IATA
14.1. UN number		
2735	2735	2735
14.2. UN proper shipping name		
POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Trimethylhexamethylenediamine ; 1,3-Benzenedimethanamine)	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Trimethylhexamethylenediamine ; 1,3-Benzenedimethanamine)	Polyamines, liquid, corrosive, n.o.s. (Trimethylhexamethylenediamine ; 1,3-Benzenedimethanamine)
Transport document description		
UN 2735 POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Trimethylhexamethylenediamine ; 1,3-Benzenedimethanamine), 8, II, (E)	UN 2735 POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Trimethylhexamethylenediamine ; 1,3-Benzenedimethanamine), 8, II	UN 2735 Polyamines, liquid, corrosive, n.o.s. (Trimethylhexamethylenediamine ; 1,3-Benzenedimethanamine), 8, II
14.3. Transport hazard class(es)		
8	8	8
		
14.4. Packing group		
II	II	II
14.5. Environmental hazards		
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No
No supplementary information available		

14.6. Special precautions for user

- Overland transport

Classification code (ADR)	: C7
Special provisions (ADR)	: 274
Limited quantities (ADR)	: 1I
Excepted quantities (ADR)	: E2
Packing instructions (ADR)	: P001, IBC02
Mixed packing provisions (ADR)	: MP15
Portable tank and bulk container instructions (ADR)	: T11
Portable tank and bulk container special provisions (ADR)	: TP1, TP27
Tank code (ADR)	: L4BN
Vehicle for tank carriage	: AT
Transport category (ADR)	: 2
Hazard identification number (Kemler No.)	: 80
Orange plates	: 

Tunnel restriction code (ADR)	: E
EAC code	: 2X
APP code	: B

- Transport by sea

Special provisions (IMDG)	: 274
Limited quantities (IMDG)	: 1 L
Excepted quantities (IMDG)	: E2
Packing instructions (IMDG)	: P001
IBC packing instructions (IMDG)	: IBC02
Tank instructions (IMDG)	: T11
Tank special provisions (IMDG)	: TP1, TP27

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EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-B
Stowage category (IMDG)	: A
Properties and observations (IMDG)	: Colourless to yellowish liquids or solutions with a pungent odour. Miscible with or soluble in water. When involved in a fire, evolve toxic gases. Corrosive to most metals, especially to copper and its alloys. Reacts violently with acids. Cause burns to skin, eyes and mucous membranes.

- Air transport

PCA Excepted quantities (IATA)	: E2
PCA Limited quantities (IATA)	: Y840
PCA limited quantity max net quantity (IATA)	: 0.5L
PCA packing instructions (IATA)	: 851
PCA max net quantity (IATA)	: 1L
CAO packing instructions (IATA)	: 855
CAO max net quantity (IATA)	: 30L
Special provisions (IATA)	: A3
ERG code (IATA)	: 8L

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Full text of H- and EUH-statements:

Acute Tox. 2 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 2
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Muta. 2	Germ cell mutagenicity, Category 2
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
Skin Sens. 1	Sensitisation — Skin, Category 1
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
H301	Toxic if swallowed
H302	Harmful if swallowed
H311	Toxic in contact with skin
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H330	Fatal if inhaled
H331	Toxic if inhaled

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H332	Harmful if inhaled
H341	Suspected of causing genetic defects
H373	May cause damage to organs through prolonged or repeated exposure
H412	Harmful to aquatic life with long lasting effects

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Acute Tox. 4 (Oral)	H302	Calculation method
Acute Tox. 3 (Inhalation:vapour)	H331	Calculation method
Skin Corr. 1B	H314	Calculation method
Skin Sens. 1	H317	Calculation method
Muta. 2	H341	Calculation method

SDS EU (REACH Annex II)

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