

SAFETY DATA SHEET LAPKON HSG BASE (PART-A)

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

Product identifier

Product name LAPKON HSG BASE (PART-A)

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

Identified uses Base component of the epoxy system. For professional use.

1.3. Details of the supplier of the safety data sheet

Supplier SILKON ADDITIVES INDIA PVT LTD.
622-P, SECTOR-38 GURUGRAM
HARYANA-122001
18001236299 / 9717887038

1.4. Emergency telephone number

Emergency telephone 18001236299 / 9717887038

SECTION 2: Hazards identification

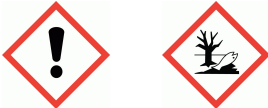
Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified
Health hazards Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317
Environmental hazards Aquatic Chronic 2 - H411

Label elements

Hazard pictograms



Signal word Warning

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 P261 Avoid breathing vapour/ spray.
P264 Wash contaminated skin thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P391 Collect spillage.
P501 Dispose of contents/ container in accordance with national regulations.

LAPKON HSG BASE (PART-A)

Contains	4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane 87%, OXIRANE, MONO [(C12-14- ALKYLOXY)METHYL] DERIVS 11%
Supplementary precautionary statements	P272 Contaminated work clothing should not be allowed out of the workplace. P302+P352 IF ON SKIN: Wash with plenty of water. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P321 Specific treatment (see medical advice on this label). P332+P313 If skin irritation occurs: Get medical advice/ attention. P333+P313 If skin irritation or rash occurs: Get medical advice/ attention. P337+P313 If eye irritation persists: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse.

Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700) 87% CAS number: 25068-38-6 EC number: 500-033-5 REACH registration number: 01-2119456619-26-XXXX	60-100%
Classification Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411	
OXIRANE, MONO[(C12-14- ALKYLOXY)METHYL] DERIVS 11% CAS number: 68609-97-2 EC number: 271-846-8	10-30%
Classification Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317	
HYDROCARBONS, C9, aromatics CAS number: 64742-95-6 EC number: 918-668-5 REACH registration number: 01-2119455851-35-0000	<1%
Classification Flam. Liq. 3 - H226 STOT SE 3 - H335, H336 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411	

LAPKON HSG BASE (PART-A)

1,2,4-TRIMETHYLBENZENE	<1%	
CAS number: 95-63-6	EC number: 202-436-9	
Classification Flam. Liq. 3 - H226 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H335 Aquatic Chronic 2 - H411		
MESITYLENE	<1%	
CAS number: 108-67-8	EC number: 203-604-4	
Classification Flam. Liq. 3 - H226 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H335 Aquatic Chronic 2 - H411		
CUMENE	<1%	
CAS number: 98-82-8	EC number: 202-704-5	
Classification Flam. Liq. 3 - H226 STOT SE 3 - H335 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411		
XYLENE	<1%	
CAS number: 1330-20-7	EC number: 215-535-7	REACH registration number: 01-2119488216-32-0000
Classification Flam. Liq. 3 - H226 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315		

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

Description of first aid measures

General information	When symptoms persist or in all cases of doubt seek medical advice.
Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
Ingestion	Do not induce vomiting. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Get medical attention if any discomfort continues.

LAPKON HSG BASE (PART-A)

Skin contact	Wash skin thoroughly with soap and water. Remove contaminated clothing. Wash contaminated clothing before reuse. Get medical attention if irritation persists after washing.
Eye contact	Do not rub eye. Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing.

Most important symptoms and effects, both acute and delayed

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	May cause coughing and difficulties in breathing.
Ingestion	Nausea, vomiting. May cause discomfort.
Skin contact	May cause an allergic skin reaction.
Eye contact	Severe irritation, burning and tearing.

Indication of any immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically.
-----------------------------	------------------------

SECTION 5: Firefighting measures

Suitable extinguishing media Extinguish with foam, carbon dioxide or dry powder. **5.2.**

Special hazards arising from the substance or mixture

Specific hazards	Dust may form explosive mixture with air.
Hazardous combustion products	Heating may generate the following products: Carbon dioxide (CO ₂). Carbon monoxide (CO).

5.3. Advice for firefighters In case of fire: Evacuate area. No action shall be taken without appropriate training or involving any personal risk. Move containers from fire area if it can be done without risk. Fire residues and contaminated fire-fighting water must be disposed of in accordance within the local regulations.

Protective actions during firefighting Wear self-contained breathing apparatus and protective fire fighting clothing.

Special protective equipment for firefighters

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin and eyes. Wear protective clothing, gloves, eye and face protection. **6.2.**

Environmental precautions

Environmental precautions Avoid the spillage or runoff entering drains, sewers or watercourses. Harmful to aquatic life with long lasting effects.

Methods and material for containment and cleaning up

Methods for cleaning up Pick up with absorbent material (e.g. sand, universal absorbent, diatomaceous earth). Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents.

Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13.

LAPKON HSG BASE (PART-A)

SECTION 7: Handling and storage

Precautions for safe handling

Usage precautions	Wear protective clothing, gloves, eye and face protection. Wash skin thoroughly after handling.
Advice on general occupational hygiene	Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

Storage precautions	Store in tightly-closed, original container in a dry, cool and well-ventilated place.
Storage class	Chemical storage.

Specific end use(s)

Specific end use(s)	The identified uses for this product are detailed in Section 1.2.
----------------------------	---

SECTION 8: Exposure controls/Personal protection

Control parameters

Occupational exposure limits

HYDROCARBONS, C9, aromatics

Long-term exposure limit (8-hour TWA): WEL 100 mg/m³

1,2,4-TRIMETHYLBENZENE

Long-term exposure limit (8-hour TWA): WEL 25 ppm 125 mg/m³
Short-term exposure limit (15-minute): WEL

MESITYLENE

Long-term exposure limit (8-hour TWA): WEL 25 ppm 125 mg/m³
Short-term exposure limit (15-minute): WEL

CUMENE

Long-term exposure limit (8-hour TWA): WEL 25 ppm 125 mg/m³
Short-term exposure limit (15-minute): WEL 50 ppm 250 mg/m³ Sk

XYLENE

Long-term exposure limit (8-hour TWA): WEL 50 ppm 220 mg/m³
Short-term exposure limit (15-minute): WEL 100 ppm 441 mg/m³ Sk

WEL = Workplace Exposure Limit
Sk = Can be absorbed through skin.

Sk = Can be absorbed through the skin.

Ingredient comments WEL = Workplace Exposure Limits

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700) 87% (CAS: 25068-38-6)

DNEL Workers - Inhalation; Short term systemic effects: 12.25 mg/m³
Workers - Inhalation; Long term systemic effects: 12.25 mg/m³

PNEC - Fresh water; 0.006 mg/l

OXIRANE, MONO [(C12-14- ALKYLOXY)METHYL] DERIVS 11% (CAS: 68609-97-2)

LAPKON HSG BASE (PART-A)

DNEL	Workers - Inhalation; Long term systemic effects: 3.6 mg/m ³ Workers - Dermal; Long term systemic effects: 1 mg/kg bw/day
PNEC	- Fresh water; 0.0072 mg/l - marine water; 0.00072 mg/l

HYDROCARBONS, C9, aromatics (CAS: 64742-95-6)

DNEL	Professional - Dermal; systemic effects: 25 mg/kg/day Professional - Inhalation; systemic effects: 150 mg/m ³ Consumer - Oral; systemic effects: 11 mg/kg/day Consumer - Inhalation; systemic effects: 32 mg/m ³ Consumer - Dermal; systemic effects: 11 mg/kg/day
-------------	--

XYLENE (CAS: 1330-20-7)

DNEL	Workers - Inhalation; Long term systemic effects: 77 mg/m ³ Workers - Inhalation; Short term systemic effects: 289 mg/m ³ Workers - Dermal; Long term systemic effects: 180 mg/kg/day
PNEC	- Fresh water; 0.327 mg/l - marine water; 0.327 mg/l - STP; 6.58 mg/l

Exposure controls**Protective equipment**

Appropriate engineering controls

Provide adequate ventilation.

Eye/face protection

Wear tight-fitting, chemical splash goggles or face shield.

Hand protection

Nitrile gloves are recommended.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

Exercise good industrial hygiene practice. Wash after handling, especially before eating, drinking or smoking. Remove contaminated clothing immediately.

Respiratory protection

Gas filter, type A2.

Environmental exposure controls

Avoid release to the environment. Keep container tightly sealed when not in use.

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

Appearance	Clear liquid.
Colour	White
Odour	Mild
Odour threshold	Not determined.
pH	Not applicable.

LAPKON HSG BASE (PART-A)

Relative density	1.12-1.15
Solubility(ies)	Insoluble in water
Viscosity	14 - 23 Poise @ 27°C
Explosive properties	Not considered to be explosive.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	The mixture itself has not been tested but none of the ingredient substances meet the criteria for classification as oxidising.

Other information

Other information	None.
--------------------------	-------

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	The following materials may react with the product: Amines. Alcohols. 10.2.
-------------------	--

Chemical stability

Stability	Stable at normal ambient temperatures.
------------------	--

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Under normal conditions of storage and use, no hazardous reactions will occur.
---	--

10.4. Conditions to avoid

Conditions to avoid	Avoid heat.
----------------------------	-------------

10.5. Incompatible materials

Materials to avoid	Acids. Alkalis.
---------------------------	-----------------

10.6. Hazardous decomposition products

Hazardous decomposition products	Does not decompose when used and stored as recommended.
---	---

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Inhalation	May cause respiratory system irritation.
Skin contact	Prolonged skin contact may cause redness and irritation.
Eye contact	Irritating to eyes.
Target organs	Skin Eyes Respiratory system, lungs

Toxicological information on ingredients.

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700) 87%

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg)	5,000.0
Species	Rat

LAPKON HSG BASE (PART-A)

Notes (oral LD₅₀)	NOAEL 750 mg/kg, Oral, Rat
ATE oral (mg/kg)	5,000.0
<u>Acute toxicity - dermal</u>	
Acute toxicity dermal (LD₅₀ mg/kg)	20,000.0
Species	Rabbit
Notes (dermal LD₅₀)	LD ₅₀ >1600 mg/kg, Dermal, Rat
ATE dermal (mg/kg)	20,000.0
<u>Skin corrosion/irritation</u>	
Animal data	Rabbit Moderately irritating.
<u>Skin sensitisation</u>	
Skin sensitisation	May cause sensitisation by skin contact.

OXIRANE, MONO [(C12-14- ALKYLOXY)METHYL] DERIVS 11%

<u>Acute toxicity - oral</u>	
Acute toxicity oral (LD₅₀ mg/kg)	19,200.0
Species	Rat
ATE oral (mg/kg)	19,200.0
<u>Acute toxicity - dermal</u>	
Acute toxicity dermal (LD₅₀ mg/kg)	4,500.0
Species	Rat
Notes (dermal LD₅₀)	LD ₅₀ >2000 mg/kg, Dermal, Rabbit
ATE dermal (mg/kg)	4,500.0

HYDROCARBONS, C9, aromatics

<u>Acute toxicity - oral</u>	
Acute toxicity oral (LD₅₀ mg/kg)	3,592.0
Species	Rat
<u>Acute toxicity - dermal</u>	
Acute toxicity dermal (LD₅₀ mg/kg)	3,160.0
Species	Rabbit
<u>Acute toxicity - inhalation</u>	
Acute toxicity inhalation (LC₅₀ vapours mg/l)	6.2
Species	Rat

LAPKON HSG BASE (PART-A)

ATE inhalation (vapours
mg/l) 6.2

XYLENE**Acute toxicity - dermal**

ATE dermal (mg/kg) 1,100.0

Carcinogenicity

IARC carcinogenicity IARC Group 3 Not classifiable as to its carcinogenicity to humans.

SECTION 12: Ecological information

Ecotoxicity The product contains substances which are toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

Toxicity**Ecological information on ingredients.****reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700) 87%**

Toxicity Ecotoxic to fish/daphnia/algae

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 3.6 mg/l, Leuciscus idus (Golden orfe)
LC₅₀, 96 hours: 2 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 1.8 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: 11 mg/l, Scenedesmus capricornutum (fresh water algae)

OXIRANE, MONO [(C12-14- ALKYLOXY)METHYL] DERIVS 11%**Acute aquatic toxicity**

Acute toxicity - fish LC₅₀, 96 hours: 1 - 10 mg/l, Fish
LC₅₀, 96 hours: 1800 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 1 - 10 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: 844 mg/l, Algae

HYDROCARBONS, C9, aromatics**Acute aquatic toxicity**

Acute toxicity - fish LC₅₀, : 9.2 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates EC₅₀, : 3.2 mg/l, Daphnia magna

EC₅₀, : 2.6 mg/l, Pseudokirchneriella subcapitata

Acute toxicity - aquatic plants

XYLENE

LAPKON HSG BASE (PART-A)

Toxicity Not considered toxic to fish.

Persistence and degradability

Persistence and degradability The product contains substances which are not expected to be biodegradable.

Ecological information on ingredients.

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700) 87%

Persistence and degradability The product is not readily biodegradable.

HYDROCARBONS, C9, aromatics

Biodegradation Water - Degradation (%) 78: 28 days
The substance is readily biodegradable.

XYLENE

Persistence and degradability Expected to be not readily biodegradable.

Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Ecological information on ingredients.

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700) 87%

Partition coefficient log Pow: 3.242

12.4. Mobility in soil

Mobility The product is insoluble in water.

Ecological information on ingredients.

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700) 87%

Mobility The product has poor water-solubility.

Adsorption/desorption coefficient Water - Koc: 445 @ °C

XYLENE

Mobility The product is insoluble in water.

Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients.

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700) 87%

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Other adverse effects

LAPKON HSG BASE (PART-A)

Other adverse effects None known.

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

General information Do not empty into drains, sewers or water courses. The generation of waste should be minimised or avoided wherever possible.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information**UN number**

UN No. (ADR/RID) 3082

UN No. (IMDG) 3082

UN No. (ICAO) 3082

UN No. (ADN) 3082

UN proper shipping name

Proper shipping name (ADR/RID) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS EPOXY RESIN (Type A) (Number average MW <= 700), SOLVENT NAPHTHA)

Proper shipping name (IMDG) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS EPOXY RESIN (Type A) (Number average MW <= 700), SOLVENT NAPHTHA)

Proper shipping name (ICAO) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS EPOXY RESIN (Type A) (Number average MW <= 700), SOLVENT NAPHTHA)

Proper shipping name (ADN) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS EPOXY RESIN (Type A) (Number average MW <= 700), SOLVENT NAPHTHA)

Transport hazard class(es)

ADR/RID class 9

ADR/RID classification code M6

ADR/RID label 9

IMDG class 9

ICAO class/division 9

ADN class 9

Transport labels**Packing group**

ADR/RID packing group III

IMDG packing group III

ICAO packing group III

ADN packing group III

LAPKON HSG BASE (PART-A)

Environmental hazards

Environmentally hazardous substance/marine pollutant



Special precautions for user

EmS F-A, S-F
 ADR transport category 3
 Emergency Action Code •3Z
 Hazard Identification Number 90
 (ADR/RID)
 Tunnel restriction code (-)

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

National regulations The Manufacture, storage and import of hazardous chemicals rules 1989.
EU legislation Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
 Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
Guidance Safety Data Sheets for Substances and Preparations.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

General information For professional use only. Only trained personnel should use this material.
Revision comments NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date 25/02/2019
Revision 5
Supersedes date 07/05/2015
SDS number 21882

LAPKON HSG BASE (PART-A)

Hazard statements in full

H226 Flammable liquid and vapour.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

SAFETY DATA SHEET LAPLON HSG FILLER

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

Product identifier

Product name LAPKON HSG FILLER
Product number A1165017

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

Identified uses Filler component of three-part epoxy grout.

Details of the supplier of the safety data sheet

Supplier SILKON ADDITIVES INDIA PVT LTD.
622-P, SECTOR-38 GURUGRAM
HARYANA-122001
18001236299 / 9717887038

Emergency telephone number

Emergency telephone 18001236299 / 9717887038

SECTION 2: Hazards identification

Classification of the substance or mixture Classification (EC 1272/2008)

Physical hazards Not Classified
Health hazards Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Skin Sens. 1 - H317 STOT SE 3 - H335
Environmental hazards Not Classified

Classification (67/548/EEC or - 1999/45/EC)

Label elements

Hazard



Signal word Danger

Hazard statements H315 Causes skin irritation.
H318 Causes serious eye damage.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.

LAPLON HSG FILLER

Precautionary statements	<p>P261 Avoid breathing dust.</p> <p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P271 Use only outdoors or in a well-ventilated area.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P362+P364 Take off contaminated clothing and wash it before reuse.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>
Contains	CEMENT POWDER
Supplementary precautionary statements	<p>P272 Contaminated work clothing should not be allowed out of the workplace. P302+P352 IF ON SKIN: Wash with plenty of water.</p> <p>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P310 Immediately call a POISON CENTER/ doctor.</p> <p>P312 Call a POISON CENTRE/doctor if you feel unwell.</p> <p>P321 Specific treatment (see medical advice on this label).</p> <p>P332+P313 If skin irritation occurs: Get medical advice/ attention.</p> <p>P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.</p> <p>P403+P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up.</p>

Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

ORDINARY PORTLAND CEMENT	10-30%
CAS number: 65997-15-1	EC number: 266-043-4
Classification Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Skin Sens. 1 - H317 STOT SE 3 - H335	
QUARTZ (SiO₂)	5-10%
CAS number: 14808-60-7	EC number: 238-878-4
Classification Not Classified	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

Description of first aid measures

General information	Remove affected person from source of contamination.
Inhalation	Remove affected person from source of contamination.
Ingestion	Rinse mouth thoroughly with water. Get medical attention if any discomfort continues. Never give anything by mouth to an unconscious person.
Skin contact	Wash skin thoroughly with soap and water. Remove affected person from source of contamination. Remove contaminated clothing. Get medical attention if irritation persists after washing.

LAPLON HSG FILLER

Eye contact Do not rub eye. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.

Most important symptoms and effects, both acute and delayed

General information The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases.

Ingestion Ingestion of large doses may result in irritation to the gastrointestinal tract.

Skin contact May have an irritating effect on moist skin after prolonged contact, or may cause dermatitis after repeated contact. Prolonged skin contact with wet preparation may cause serious burns without pain being felt, including through clothing.

Eye contact Eye contact may cause serious and potentially irreversible injuries. **4.3.**

Indication of any immediate medical attention and special treatment needed

Notes for the doctor Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire. **5.2.**

Special hazards arising from the substance or mixture

Specific hazards Water used for fire extinguishing, which has been in contact with the product, may be corrosive. No unusual fire or explosion hazards noted.

Hazardous combustion products No known hazardous decomposition products.

5.3. Advice for firefighters No specific firefighting precautions known.

Protective actions during firefighting Use protective equipment appropriate for surrounding materials.

Special protective equipment for firefighters

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with eyes and prolonged skin contact. Wear protective clothing and gloves. Avoid inhalation of dust.

Environmental precautions

Environmental precautions Avoid the spillage or runoff entering drains, sewers or watercourses. **6.3.**

Methods and material for containment and cleaning up

Methods for cleaning up Collect powder using special dust vacuum cleaner with particle filter or carefully sweep into suitable waste disposal containers and seal securely. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13.

LAPLON HSG FILLER

SECTION 7: Handling and storage

Precautions for safe handling

Usage precautions	Wear protective clothing, gloves, eye and face protection. Wash skin thoroughly after handling.
Advice on general occupational hygiene	Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

Storage precautions	Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep only in the original container.
----------------------------	--

Specific end use(s)

Specific end use(s)	The identified uses for this product are detailed in Section 1.2.
----------------------------	---

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

ORDINARY PORTLAND CEMENT

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust
 Long-term exposure limit (8-hour TWA): WEL 4 mg/m³ respirable dust

QUARTZ (SiO₂)

Long-term exposure limit (8-hour TWA): WEL 0,1 mg/m³ Respirable crystalline silica WEL = Workplace Exposure Limit

Ingredient comments	WEL = Workplace Exposure Limits
----------------------------	---------------------------------

ORDINARY PORTLAND CEMENT (CAS: 65997-15-1)

DNEL

Workers - Inhalation; Short term : 3 mg/m³

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation.

Personal protection

Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment. This product may present a chromate (VI) allergy risk. Users should wear appropriate personal protective equipment.

Eye/face protection

Wear tight-fitting, dust-resistant, chemical splash goggles if airborne dust is generated.

Hand protection

Use impervious, abrasion and alkali resistant gloves. Barrier cream applied before work may make it easier to clean the skin after exposure, but does not prevent absorption through the skin.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

Exercise good industrial hygiene practice. Wash after handling, especially before eating, drinking or smoking. Remove contaminated clothing immediately.

LAPLON HSG FILLER

Respiratory protection Wear a suitable dust mask. Wear a respirator fitted with the following cartridge: Particulate filter, type P2.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Dusty powder.
Colour	Grey.
Odour	Odourless.
pH	pH (concentrated solution): >12
Melting point	Not applicable.
Initial boiling point and range	> 1000 °C
Flash point	Not applicable.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	The product is not flammable.
Bulk density	1.60 g/cm ³
Solubility(ies)	Slightly soluble in water.
Viscosity	Not applicable.
Explosive properties	Not considered to be explosive.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	The mixture itself has not been tested but none of the ingredient substances meet the criteria for classification as oxidising.

Other information

Other information Not determined.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product. **10.2.**

Chemical stability

Stability Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions No potentially hazardous reactions known.

10.4. Conditions to avoid

Conditions to avoid There are no known conditions that are likely to result in a hazardous situation. **10.5.**

Incompatible materials

Materials to avoid No specific material or group of materials is likely to react with the product to produce a hazardous situation.

10.6. Hazardous decomposition products

LAPLON HSG FILLER

Hazardous decomposition products No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Inhalation May cause coughing and difficulties in breathing.
Ingestion May cause discomfort if swallowed.
Skin contact Causes skin irritation.
Eye contact Causes eye irritation.

SECTION 12: Ecological information

Ecotoxicity Not regarded as dangerous for the environment.

12.1. Toxicity

Toxicity Not considered toxic to fish.

12.2. Persistence and degradability

Persistence and degradability The product is not expected to be biodegradable. **12.3.**

Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

12.4. Mobility in soil

Mobility The product is not volatile but may be spread by dust-raising handling. **12.5.**

Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information The material is inert and suitable for disposal at an approved solid waste disposal or landfill site.
Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

UN number

Not applicable.

UN proper shipping name

Not applicable.

LAPLON HSG FILLER

Transport hazard class(es)

No transport warning sign

required. **14.4. Packing group**

Not applicable.

Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

Special precautions for user

Not applicable.

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

National regulations	The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended). The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).
EU legislation	Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
Guidance	Workplace Exposure Limits EH40. CHIP for everyone HSG228. Approved Classification and Labelling Guide (Sixth edition) L131. Safety Data Sheets for Substances and Preparations.

Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	01/03/2019
Revision	5
SDS number	21887
Hazard statements in full	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H335 May cause respiratory irritation.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

SAFETY DATA SHEET

LAPKON HSG HARDENER (PART-B)

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

Product identifier

Product name LAPKON HSG HARDENER (PART-B)

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

Identified uses Hardener component of three-part epoxy grout.

Details of the supplier of the safety data sheet

Supplier **SILKON ADDITIVES INDIA PVT LTD.**
622-P, SECTOR-38 GURUGRAM
HARYANA-122001
 18001236299 / 9717887038

Emergency telephone number

Emergency telephone 18001236299 / 9717887038

Emergency telephone number

SECTION 2: Hazards identification

Classification of the substance or mixture Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Acute Tox. 4 - H302 Acute Tox. 4 - H332 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Muta. 2 - H341 Carc. 1B - H350 STOT SE 1 - H370 STOT RE 2 - H373

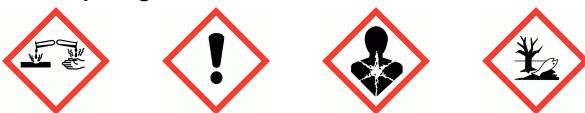
Environmental hazards Aquatic Chronic 1 - H410

Human health May cause serious eye damage. May cause skin sensitisation or allergic reactions in sensitive individuals. Contains a substance/a group of substances which may damage fertility and the unborn child.

Environmental The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

Label elements

Hazard pictograms



Signal word

Danger

LAPKON HSG HARDENER (PART-B)

Hazard statements	<p>H302+H332 Harmful if swallowed or if inhaled. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H341 Suspected of causing genetic defects. H350 May cause cancer. H370 Causes damage to organs . H373 May cause damage to organs through prolonged or repeated exposure. H410 Very toxic to aquatic life with long lasting effects.</p>
Precautionary statements	<p>P260 Do not breathe vapour/ spray. P264 Wash contaminated skin thoroughly after handling. P273 Avoid release to the environment. 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. P501 Dispose of contents/ container in accordance with national regulations.</p>
Contains	<p>ISOPHORONEDIAMINE, TRIETHYLENETETRAMINE, 4,4'-diaminodiphenylmethane, TRIMETHYLENE HEXAMETHYLENE DIAMINE</p>
Supplementary precautionary statements	<p>P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P261 Avoid breathing vapour/ spray. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P301+P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P302+P352 IF ON SKIN: Wash with plenty of water. P308+P311 IF exposed or concerned: Call a POISON CENTER or doctor. P308+P313 IF exposed or concerned: Get medical advice/ attention. P310 Immediately call a POISON CENTER/ doctor. P314 Get medical advice/ attention if you feel unwell. P321 Specific treatment (see medical advice on this label). P333+P313 If skin irritation or rash occurs: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse. P363 Wash contaminated clothing before reuse. P391 Collect spillage. P405 Store locked up.</p>

Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

LAPKON HSG HARDENER (PART-B)

ISOPHORONEDIAMINE		30-60%
CAS number: 2855-13-2	EC number: 220-666-8	REACH registration number: 01-2119514687-32-xxxx
Classification Acute Tox. 4 - H302 Acute Tox. 4 - H312 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Chronic 3 - H412		
TRIETHYLENETETRAMINE		10-30%
CAS number: 112-24-3	EC number: 203-950-6	
Classification Acute Tox. 4 - H312 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Chronic 3 - H412		
reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)		10-30%
CAS number: 25068-38-6	EC number: 500-033-5	REACH registration number: 01-2119456619-26-XXXX
Classification Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411		
4,4'-METHYLENEDIANILINE		10-30%
CAS number: 101-77-9	EC number: 202-974-4	
Mfactor (Acute) = 1	M factor (Chronic) = 10	
Substance of very high concern (SVHC).		
Classification Acute Tox. 3 - H301 Acute Tox. 2 - H330 Skin Sens. 1 - H317 Muta. 2 - H341 Carc. 1B - H350 STOT SE 1 - H370 STOT RE 2 - H373 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410		

LAPKON HSG HARDENER (PART-B)

TRIMETHYLENE HEXAMETHYLENE DIAMINE			10-30%
CAS number: 25620-58-0	EC number: 247-134-8		
Classification Acute Tox. 4 - H302 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Chronic 3 - H412			
PHENYL GLYCIDYL ETHER			5-10%
CAS number: 122-60-1	EC number: 204-557-2		
Classification Acute Tox. 4 - H302 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Skin Sens. 1 - H317 Muta. 2 - H341 Carc. 1B - H350 STOT SE 3 - H335 Aquatic Chronic 3 - H412			
SALICYLIC ACID			1-5%
CAS number: 69-72-7	EC number: 200-712-3	REACH registration number: 01-2119486984-17-XXXX	
Classification Acute Tox. 4 - H302 Eye Dam. 1 - H318			
2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL			1-5%
CAS number: 90-72-2	EC number: 202-013-9	REACH registration number: 01-2119560597-27	
Classification Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319			

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures**Description of first aid measures**

General information	When symptoms persist or in all cases of doubt seek medical advice.
Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues.
Ingestion	Do not induce vomiting. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Get medical attention if any discomfort continues.

LAPKON HSG HARDENER (PART-B)

Skin contact	Rinse immediately with plenty of water. Remove contaminated clothing. Wash contaminated clothing before reuse. Get medical attention promptly if symptoms occur after washing.
Eye contact	Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing.

Most important symptoms and effects, both acute and delayed

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	May cause coughing and difficulties in breathing.
Ingestion	May cause stomach pain or vomiting. May cause discomfort.
Skin contact	Causes severe burns. May cause an allergic skin reaction.
Eye contact	Severe irritation, burning and tearing.

Indication of any immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically.
-----------------------------	------------------------

SECTION 5: Firefighting measures

Suitable extinguishing media	Extinguish with foam, carbon dioxide or dry powder. Larger fires: Water spray.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

Special hazards arising from the substance or mixture

Specific hazards	Containers can burst violently or explode when heated, due to excessive pressure build-up.
Hazardous combustion products	Carbon monoxide (CO). Carbon dioxide (CO ₂). Oxides of nitrogen.

Advice for firefighters

Protective actions during firefighting	Move containers from fire area if it can be done without risk. No action shall be taken without appropriate training or involving any personal risk. Fire residues and contaminated fire-fighting water must be disposed of in accordance within the local regulations. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
---	--

Special protective equipment for firefighters

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid inhalation of vapours and contact with skin and eyes. Wear protective clothing, gloves, eye and face protection.
-----------------------------	--

Environmental precautions

Environmental precautions	Do not discharge into drains or watercourses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.
----------------------------------	--

Methods and material for containment and cleaning up

Methods for cleaning up	Pick up with absorbent material (e.g. sand, universal absorbent, diatomaceous earth). Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents.
--------------------------------	---

LAPKON HSG HARDENER (PART-B)

Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13.

SECTION 7: Handling and storage

Precautions for safe handling

Usage precautions Avoid inhalation of vapours and contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet. Avoid spilling.

Advice on general occupational hygiene Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Take off contaminated clothing and wash it before reuse.

Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry and cool place. **7.3.**

Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

Control parameters

Occupational exposure limits

4,4'-METHYLENEDIANILINE

Long-term exposure limit (8-hour TWA): WEL 0.01 ppm 0.08 mg/m³ Carc, Sk

PHENYL GLYCIDYL ETHER

Long-term exposure limit (8-hour TWA): WEL 1 ppm 6.2 mg/m³
Short-term exposure limit (15-minute): WEL

WEL = Workplace Exposure Limit

Carc = Capable of causing cancer and/or heritable genetic damage. Sk = Can be absorbed through the skin.

ISOPHORONEDIAMINE (CAS: 2855-13-2)

PNEC

- marine water; 0.006 mg/l
- Fresh water; 0.06 mg/l
- Soil; 1.121 mg/kg

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700) (CAS: 25068-38-6)

DNEL Workers - Inhalation; Short term systemic effects: 12.25 mg/m³
Workers - Inhalation; Long term systemic effects: 12.25 mg/m³

PNEC - Fresh water; 0.006 mg/l

SALICYLIC ACID (CAS: 69-72-7)

DNEL Workers - Inhalation; Long term systemic effects: 5 mg/m³
Workers - Dermal; Long term systemic effects: 2.3 mg/kg bw/day
Workers - Inhalation; Long term local effects: 5 mg/m³
General population - Inhalation; Long term systemic effects: 4 mg/m³

LAPKON HSG HARDENER (PART-B)

PNEC

- Fresh water; 0.20 mg/l
- marine water; 0.020 mg/l
- Sediment (Freshwater); 1.42 mg/kg dw
- Soil; 0.17 mg/kg dw
- STP; 16.2 mg/l

Bis(dimethylaminomethyl)phenol (CAS: 71074-89-0)

PNEC

- Fresh water; 0.084 mg/l
- marine water; 0.0084 mg/l

Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

Eye/face protection

Wear tight-fitting, chemical splash goggles or face shield.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Wear protective gloves made of the following material: Butyl rubber. Nitrile rubber. Viton rubber (fluoro rubber).

Hygiene measures

Provide eyewash station and safety shower. Discard contaminated shoes and clothing. Do not smoke in work area. Do not eat, drink or smoke when using this product. Wash promptly with soap and water if skin becomes contaminated. Wash at the end of each work shift and before eating, smoking and using the toilet. Use appropriate skin cream to prevent drying of skin.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. Gas filter, type K.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Liquid
Colour	Pale yellow
Odour	Amine Like
Odour threshold	Not determined.
Relative density	0.95 @ 27°C
Solubility(ies)	Completely soluble. with water
Explosive properties	Not considered to be explosive.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	The mixture itself has not been tested but none of the ingredient substances meet the criteria for classification as oxidising.

Other information

Volatile organic compound This product contains a maximum VOC content of 5g/l.

SECTION 10: Stability and reactivity

LAPKON HSG HARDENER (PART-B)

Reactivity

Reactivity The reactivity data for this product will be typical of those for the following class of materials: Amines.

Chemical stability

Stability Will decompose at temperatures exceeding 200°C.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Under normal conditions of storage and use, no hazardous reactions will occur.

10.4. Conditions to avoid

Conditions to avoid Avoid heat.

10.5. Incompatible materials

Materials to avoid Acids. Alkalis.

10.6. Hazardous decomposition products

Hazardous decomposition products Does not decompose when used and stored as recommended.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 659.77

Acute toxicity - dermal

ATE dermal (mg/kg) 2,244.9

Acute toxicity - inhalation

ATE inhalation (gases ppm) 92,592.59

ATE inhalation (dusts/mists mg/l) 3.36

Reproductive toxicity

Reproductive toxicity - fertility May damage fertility.

Inhalation May cause respiratory system irritation.

Ingestion Harmful if swallowed. Liquid irritates mucous membranes and may cause abdominal pain if swallowed.

Skin contact May be harmful in contact with skin.

Eye contact May cause eye irritation.

Acute and chronic health hazards May cause cancer by inhalation. May cause cancer if swallowed.

Toxicological information on ingredients.

ISOPHORONEDIAMINE

Acute toxicity - oral

LAPKON HSG HARDENER (PART-B)

Acute toxicity oral 1,030.0
(LD₅₀ mg/kg)

Species Rat

ATE oral (mg/kg) 500.0

Acute toxicity - dermal

Acute toxicity dermal 1,840.0
(LD₅₀ mg/kg)

Species Rabbit

ATE dermal (mg/kg) 1,100.0

Acute toxicity - oral**TRIETHYLENETETRAMINE**

Acute toxicity oral 2,500.0
(LD₅₀ mg/kg)

Species Rat

ATE oral (mg/kg) 2,500.0

Acute toxicity - dermal

Acute toxicity dermal 550.0
(LD₅₀ mg/kg)

Species Rabbit

ATE dermal (mg/kg) 1,100.0

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)**Acute toxicity - oral**

Acute toxicity oral 5,000.0
(LD₅₀ mg/kg)

Species Rat

Notes (oral LD₅₀) NOAEL 750 mg/kg, Oral, Rat

ATE oral (mg/kg) 5,000.0

Acute toxicity - dermal

Acute toxicity dermal 20,000.0
(LD₅₀ mg/kg)

Species Rabbit

Notes (dermal LD₅₀) LD₅₀ >1600 mg/kg, Dermal, Rat

ATE dermal (mg/kg) 20,000.0

Skin corrosion/irritation

Animal data Rabbit Moderately irritating.

Skin sensitisation

Skin sensitisation May cause sensitisation by skin contact.

LAPKON HSG HARDENER (PART-B)**4,4'-METHYLENEDIANILINE****Acute toxicity - oral**

Acute toxicity oral 260.0
(LD₅₀ mg/kg)

Species Guinea pig

ATE oral (mg/kg) 260.0

Acute toxicity - dermal

Acute toxicity dermal 2,080.0
(LD₅₀ mg/kg)

Species Rat

ATE dermal (mg/kg) 2,080.0

Acute toxicity -inhalation

Acute toxicity inhalation 0.46
(LC₅₀ dust/mist
mg/l)

Species Rat

ATE inhalation 0.46
(dusts/mists mg/l)

Carcinogenicity

IARC carcinogenicity IARC Group 2B Possibly carcinogenic to humans.

PHENYL GLYCIDYL ETHER**Acute toxicity - oral**

Acute toxicity oral 1,400.0
(LD₅₀ mg/kg)

Species Mouse

ATE oral (mg/kg) 1,400.0

Acute toxicity -dermal

Acute toxicity dermal 2,990.0
(LD₅₀ mg/kg)

Species Rabbit

ATE dermal (mg/kg) 2,990.0

Acute toxicity -inhalation

Acute toxicity inhalation 5,000.0
(LC₅₀ gases ppmV)

Species Rat

ATE inhalation(gases 5,000.0
ppm)

SALICYLIC ACID**Acute toxicity - oral**

LAPKON HSG HARDENER (PART-B)

Acute toxicity oral 891.0
(LD₅₀ mg/kg)

Species Rat

ATE oral (mg/kg) 891.0

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ >2000 mg/kg, Dermal, Rat

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LC₅₀ >0.9 mg/l, Inhalation, Rat

2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL**Acute toxicity - oral**

ATE oral (mg/kg) 500.0

SECTION 12: Ecological information

Ecotoxicity The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

12.1. Toxicity**Ecological information on ingredients.****ISOPHORONEDIAMINE****Acute aquatic toxicity**

Acute toxicity - fish LC₅₀, 96 hours: 110 mg/l, Fish

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 23 mg/l, Daphnia magna

IC₅₀, 72 hours: 50 mg/l, Algae

Acute toxicity - aquatic plants

TRIETHYLENETETRAMINE**Acute aquatic toxicity**

Acute toxicity - fish LC₅₀, 96 hours: 330 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 31.1 mg/L, Daphnia magna

EC₅₀, 72 hours: 20 mg/l, Pseudokirchneriella subcapitata

Acute toxicity - aquatic plants

EC₅₀, 16 hour: 680 mg/l, Bacteria

Acute toxicity - microorganisms

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

Toxicity Ecotoxic to fish/daphnia/algae

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 3.6 mg/l, Leuciscus idus (Golden orfe)

LC₅₀, 96 hours: 2 mg/l, Oncorhynchus mykiss (Rainbow trout)

LAPKON HSG HARDENER (PART-B)

Acute toxicity -aquatic invertebrates EC₁₀, 48 hours: 1.8 mg/l, Daphnia magna
 EC₅₀, 72 hours: 11 mg/l, Scenedesmus capricornutum (fresh water algae)

Acute toxicity -aquatic plants

4,4'-METHYLENEDIANILINE**Acute aquatic toxicity**

LE(C) 0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) 1

Acute toxicity -fish LC₁₀, 96 hours: 20.6 mg/l, Oryzias latipes (Red killifish)

Chronic aquatic toxicity

M factor (Chronic) 10

SALICYLIC ACID**Acute aquatic toxicity**

Acute toxicity -fish LC₁₀, : 90 mg/l, Leuciscus idus (Golden orfe)
 LC₁₀, 96 hours: 1.3 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity -aquatic invertebrates EC₁₀, 24 hours: 105 mg/l, Daphnia magna

2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL**Acute aquatic toxicity**

Acute toxicity -fish LC₁₀, 96 hours: 175 mg/l, Cyprinus carpio (Common carp)

12.2. Persistence and degradability

Persistence and degradability The product is not expected to be biodegradable.

Ecological information on ingredients.**ISOPHORONEDIAMINE**

Persistence and degradability The product is not readily biodegradable.

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

Persistence and degradability The product is not readily biodegradable.

Bioaccumulative potential

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

Ecological information on ingredients.**ISOPHORONEDIAMINE**

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.
Partition coefficient log Kow: 0.99

LAPKON HSG HARDENER (PART-B)**reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)**

Partition coefficient log Pow: 3.242

Mobility in soil

Mobility The product is soluble in water.

Ecological information on ingredients.**reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)**

Mobility The product has poor water-solubility.

**Adsorption/desorption
coefficient** Water - Koc: 445 @ °C

Results of PBT and vPvB assessment

**Results of PBT and vPvB
assessment** This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients.**TRIETHYLENETETRAMINE**

**Results of PBT and vPvB
assessment** This product does not contain any substances classified as PBT or vPvB.

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

**Results of PBT and vPvB
assessment** This product does not contain any substances classified as PBT or vPvB.

Other adverse effects

Other adverse effects None known.

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

General information Do not empty into drains, sewers or water courses. The generation of waste should be minimised or avoided wherever possible.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information**UN number**

UN No. (ADR/RID) 2735

UN No. (IMDG) 2735

UN No. (ICAO) 2735

UN No. (ADN) 2735

UN proper shipping name

**Proper shipping name
(ADR/RID)** POLYAMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS ISOPHORONEDIAMINE, 4,4'-METHYLENEDIANILINE)

LAPKON HSG HARDENER (PART-B)

Proper shipping name (IMDG) POLYAMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS ISOPHORONEDIAMINE, 4,4'-METHYLENEDIANILINE, EPOXY RESIN (Type A) (Number average MW <= 700))

Proper shipping name (ICAO) POLYAMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS ISOPHORONEDIAMINE, 4,4'-METHYLENEDIANILINE)

Proper shipping name (ADN) POLYAMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS ISOPHORONEDIAMINE, 4,4'-METHYLENEDIANILINE)

Transport hazard class(es)

ADR/RID class	8
ADR/RID classification code	C7
ADR/RID label	8
IMDG class	8
ICAO class/division	8
ADN class	8

Transport labels



Packing group

ADR/RID packing group	II
IMDG packing group	II
ICAO packing group	II
ADN packing group	II

Environmental hazards

Environmentally hazardous substance/marine pollutant



Special precautions for user

IMDG Code segregation group	18. Alkalis
EmS	F-A, S-B
ADR transport category	2
Emergency Action Code	2X
Hazard Identification Number (ADR/RID)	80
Tunnel restriction code	(E)

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

LAPKON HSG HARDENER (PART-B)**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

National regulations	The Manufacture, storage and import of hazardous chemicals rules 1989.
EU legislation	Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
Guidance	Workplace Exposure Limits EH40.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	ATE: Acute Toxicity Estimate. CAS: Chemical Abstracts Service. PBT: Persistent, Bioaccumulative and Toxic substance. vPvB: Very persistent and Very Bioaccumulative DNEL: Derived No Effect Level. PNEC: Predicted No Effect Concentration. IARC: International Agency for Research on Cancer. ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail. RRN = REACH Registration Number EC ₅₀ : 50% of maximal Effective Concentration. LD ₅₀ : Lethal Dose to 50% of a test population (Median Lethal Dose).
General information	Only trained personnel should use this material.
Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	20/02/2019
Revision	4A
Supersedes date	07/05/2015
SDS number	21885

LAPKON HSG HARDENER (PART-B)

Hazard statements in full

H301 Toxic if swallowed.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
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.
H330 Fatal if inhaled.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H341 Suspected of causing genetic defects.
H350 May cause cancer.
H370 Causes damage to organs .
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects. H411
Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

The information on this data sheet represents our current data and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.