Safety Data Sheet according to Regulation (EC) 'No. 2020/878

SECTION 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product Identifier

Product Name: EPICON F.S MORTAR (Hardener)

Revision Date: 18/01/2024

Supersedes Date: 24/05/2023

UFI Code: X8F1-M0DT-900J-0J64

Contain nanoform: No

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

Component of multi-component industrial grouts, mortars and screeds. Industrial and professional use. Advised against: others than recommended

1.3 Details of the supplier of the safety data sheet

Manufacturer:

USL
Kingston House
3 Walton Road
Pattinson North
Washington
Tyne & Wear
NE38 8QA
Regulatory / Technical Information:
+44(0)191 416 1530
www.usluk.com

Datasheet Produced by: Norton M365, Catherine - info@usluk.com

1.4 Emergency telephone number: CHEMTREC +1 703 5273887 (Outside US)

SECTION 2: Hazards Identification

2.1 Classification of the substance or mixture

Classification according to Classification, Labeling & Packaging Regulation (EC) 1272/2008

HAZARD STATEMENTS

Acute Toxicity, Dermal, category 4	H312
Skin Corrosion, category 1B	H314-1B
Skin Sensitizer, category 1	H317
Acute Toxicity, Inhalation, category 4	H332
Reproductive Toxicity, category 2	H361
STOT, repeated exposure, category 1	H372
Hazardous to the aquatic environment, Chronic, category 3	H412

2.2 Label elements

Symbol(s) of Product

Signal Word

Danger

Named Chemicals on Label

2,4,6-tris(dimethylaminomethyl)phenol, benzyl alcohol, 2-piperazin-1-ylethylamine, Amines, polyethylenepoly-, triethylenetetramine fraction, Reaction mass of (1-phenyletyl)phenols and bis-(1-phenylethyl)phenols

HAZARD STATEMENTS

Acute Toxicity, Dermal, category 4	H312	Harmful in contact with skin.
Skin Corrosion, category 1B	H314-1B	Causes severe skin burns and eye damage.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
Acute Toxicity, Inhalation, category 4	H332	Harmful if inhaled.
Reproductive Toxicity, category 2	H361	Suspected of damaging fertility or the unborn child.
STOT, repeated exposure, category 1	H372	Causes damage to organs through prolonged or repeated exposure.
Hazardous to the aquatic environment, Chronic, category 3	H412	Harmful to aquatic life with long lasting effects.

PRECAUTION PHRASES

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/ face protection.
P284	Wear respiratory protection.
P301+310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P301+330+331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+352	IF ON SKIN: Wash with plenty of soap and water.
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P308+313	IF exposed or concerned: Get medical advice/attention.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P314	Get medical advice/attention if you feel unwell.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P352	Wash with plenty of soap and water.
P363	Wash contaminated clothing before reuse.

2.3 Other hazards
No Information

Results of PBT and vPvB assessment:
The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

Endocrine disrupting properties - Toxicity

Name According to EEC	CAS-No.
No Information	

Endocrine disrupting properties - Ecotoxicity

Name According to EEC	CAS-No.
No Information	

SECTION 3: Composition/Information On Ingredients

3.1 Substances
Not applicable

3.2 Mixtures
Hazardous ingredients

Name According to EEC EINEC No. CAS-No. REACH Reg No.	%	Classifications	SCL Value: ATE Value: M-Factor:	
Amines, polyethylenepoly-, triethylenetetramine fraction 292-588-2 90640-67-8 01-2119487919-13	25 - <50	H302-312-314-317-412 Acute Tox. 4 Dermal, Acute Tox. 4 Oral, Aquatic Chronic 3, Skin Corr. 1B, Skin Sens. 1	**SCL Value:** **ATE Value:** **M-Factor: (acute)** **M-Factor: (chronic)**	- - - -

2-piperazin-1-ylethylamine 205-411-0 140-31-8 01-2119471486-30	25 - <50	H311-314-317-361-372-412 Acute Tox. 3 Dermal, Aquatic Chronic 3, Repr. 2, Skin Corr. 1B, Skin Sens. 1, STOT RE 1	**SCL Value:** **ATE Value:** **M-Factor: (acute)** **M-Factor: (chronic)**	- - - -
Reaction mass of (1-phenyletyl) phenols and bis-(1-phenylethyl) phenols 701-443-9 01-2119980970-27-xxxx	10 - <25	H315-317-411 Aquatic Chronic 2, Skin Irrit. 2, Skin Sens. 1A	**SCL Value:** **ATE Value:** **M-Factor: (acute)** **M-Factor: (chronic)**	- - - -
benzyl alcohol 202-859-9 100-51-6 01-2119492630-38	10 - <25	H302-312-317-319-332 Acute Tox. 4 Dermal, Acute Tox. 4 Inhalation, Acute Tox. 4 Oral, Eye Irrit. 2, Skin Sens. 1B	**SCL Value:** **ATE Value:** **M-Factor: (acute)** **M-Factor: (chronic)**	- - - -

2,4,6-tris(dimethylaminomethyl) phenol 202-013-9 90-72-2 01-2119560597-27	2.5 - <10	H302-312-315-319 Acute Tox. 4 Dermal, Acute Tox. 4 Oral, Eye Irrit. 2, Skin Irrit. 2	**SCL Value:** **ATE Value:** **M-Factor: (acute)** **M-Factor: (chronic)**	- - - -

Additional Information: The text for CLP Hazard Statements shown above (if any) is given in Section 16.

SECTION 4: First-aid Measures

4.1 Description of First Aid Measures

GENERAL NOTES: When symptoms persist or in all cases of doubt seek medical advice.
AFTER INHALATION: Move to fresh air. Consult a physician after significant exposure.
AFTER SKIN CONTACT: Use a mild soap if available. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
AFTER EYE CONTACT: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses.
AFTER INGESTION: Gently wipe or rinse the inside of the mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Obtain medical attention.

Self protection of the first aider:

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Corrosive to skin and eyes. Irritating to the respiratory tract.

4.3 Indication of any immediate medical attention and special treatment needed

Immediate medical attention is required. No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

SECTION 5: Firefighting Measures

5.1 Extinguishing Media:

Carbon Dioxide, Dry Chemical, Foam, Water Fog

FOR SAFETY REASONS NOT TO BE USED: Alcohol, Alcohol based solutions, any other media not listed above.

5.2 Special hazards arising from the substance or mixture

No Information

5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. Do not use a solid water stream as it may scatter and spread fire. Hazardous decomposition products formed under fire conditions. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

Ensure adequate ventilation. Use personal protective equipment.

6.1.2 For emergency responders

No Information

6.2 Environmental precautions

Do not allow material to contaminate ground water system. Prevent product from entering drains.

6.3 Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections

FURTHER INSTRUCTIONS: Please refer to EU disposal requirements or country specific disposal requirements for this material. See Section 8 and 13 for further information.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment. Do not breathe vapours or spray mist.
Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities

CONDITIONS TO AVOID: Direct sources of heat.
STORAGE CONDITIONS: Store in original container. Keep locked up or in an area accessible only to qualified or authorised persons. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.

7.3 Specific end use(s)

The mixing and application to be in accordance with the technical data sheets.

SECTION 8: Exposure Controls/Personal Protection

8.1 Control parameters

Ingredients with Occupational Exposure Limits
(UK WELS)

Name	CAS-No.	LTEL ppm	STEL ppm	STEL mg/m3	LTEL mg/m3
Amines, polyethylenepoly-, triethylenetetramine fraction	90640-67-8				
2-piperazin-1-ylethylamine	140-31-8				
Reaction mass of (1-phenyletyl)phenols and bis-(1-phenylethyl)phenols					
benzyl alcohol	100-51-6				
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2				

Name	CAS-No.	OEL Note
Amines, polyethylenepoly-, triethylenetetramine fraction	90640-67-8	

2-piperazin-1-ylethylamine	140-31-8
Reaction mass of (1-phenyletyl)phenols and bis-(1-phenylethyl)phenols	
benzyl alcohol	100-51-6
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2

FURTHER ADVICE: Refer to the regulatory exposure limits for the workforce enforced in each country. Some components may not have been classified under the EU CLP Regulation.

Chemical Name:

Amines, polyethylenepoly-, triethylenetetramine fraction

EC No.: 292-588-2

CAS-No.: 90640-67-8

DNELs - Derived no effect level

	Workers				Consumers			
Route of Exposure	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required							
Inhalation								
Dermal				0.57 mg/kg / bw/ d				

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	0.19 mg/l
Fresh water sediments	
Marine water	0.038 mg/l
Marine sediments	
Food chain	
Microorganisms in sewage treatment	
soil (agricultural)	
Air	

Chemical Name:

Reaction mass of (1-phenyletyl)phenols and bis-(1-phenylethyl)phenols

EC No.: 701-443-9

CAS-No.:

DNELs - Derived no effect level

	Workers				Consumers			
Route of Exposure	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required							
Inhalation				1.21 mg/m³				
Dermal				2.87 mg/kg bw/day				

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	0.03 mg/l
Fresh water sediments	
Marine water	0.003 mg/l
Marine sediments	
Food chain	
Microorganisms in sewage treatment	
soil (agricultural)	
Air	

Chemical Name:

benzyl alcohol

EC No.: 202-859-9

CAS-No.: 100-51-6

DNELs - Derived no effect level

	Workers				Consumers			
Route of Exposure	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required					20 mg/kg bw/day		4 mg/kg
Inhalation		110 mg/m³		22 mg/m³		27 mg/m³		5.4 mg/m³
Dermal		40 mg/kg		8 mg/kg bw/day		20 mg/kg bw/day		4 mg/kg bw/day

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	1.0 mg/l
Fresh water sediments	5.27 ,g/kg
Marine water	0.1mg/l
Marine sediments	0.527 mg/kg
Food chain	
Microorganisms in sewage treatment	39 mg/l
soil (agricultural)	0.456 mg/kg
Air	

8.2 Exposure controls

Personal Protection

RESPIRATORY PROTECTION: Respirator with combination filter for vapour/particulate (EN 14387:2004+A1:2008): A1-P3.

EYE PROTECTION: Face-shield. Safety glasses with side-shields conforming to EN 166.

HAND PROTECTION: Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374. Take note of the information given by the producer concerning permeability and break through times, and of special workplace

conditions (mechanical strain, duration of contact). Long sleeved clothing. Remove and wash contaminated clothing before re-use.

OTHER PROTECTIVE EQUIPMENT: No Information

ENGINEERING CONTROLS: Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confined areas.

SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Colour:	Amber liquid
Physical State	Liquid
Odor	Amine-type
Odor threshold	Not determined
pH	Not determined
Melting point / freezing point (°C)	Not determined
Boiling point or initial boiling point and boiling range (°C)	100 - N.D.
Flash Point, (°C)	95
Evaporation rate	Not determined
Flammability (solid, gas)	Not measured
Llower and upper explosive limit	Not determined
Vapour Pressure	Not determined
Relative vapour density	Not determined
Density and/or relative density	Not determined
Solubility in / Miscibility with water	Insoluble in water
Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature (°C)	Product is not selfigniting.
Decomposition temperature (°C)	Not determined
Kinematic viscosity	Not determined
Particle characteristics	Not applicable to liquids

9.2 Other information

VOC Content g/l:	158
Specific Gravity (g/cm3)	1.050

SECTION 10: Stability and Reactivity

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions
Hazardous polymerisation may occur.

10.4 Conditions to avoid
Direct sources of heat.

10.5 Incompatible materials
Strong oxidizing agents.

10.6 Hazardous decomposition products
Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke.

SECTION 11: Toxicological information

11.1 Information on hazard classes as definied in Regulation (EC) No 1272/2008

Acute Toxicity:

Oral LD50: No Information

Inhalation LC50: No Information

Dermal LD50: No Information

Irritation: No information available.

Corrosivity: Causes severe skin burns and eye damage.

Sensitization: May cause an allergic skin reaction.

Repeated dose toxicity: No information available.

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

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

Toxicity for reproduction: Suspected of damaging fertility or the unborn child.

STOT-single exposure: No information available.

STOT-repeated exposure: Causes damage to organs through prolonged or repeated exposure.

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

If no information is available above under Acute Toxicity then the acute effects of this product have not been tested. Data on individual components are tabulated below:

CAS-No.	Name According to EEC	Oral LD50	Dermal LD50	Vapor LC50	Gas LC50	Dust/Mist LC50
90640-67-8	Amines, polyethylenepoly-, triethylenetetramine fraction	1716 mg/kg	1465 mg/kg			
140-31-8	2-piperazin-1-ylethylamine	>2170 mg/kg (rat)	866 mg/kg (rab)		0.000	0.000
	Reaction mass of (1-phenyletyl)phenols and bis-(1-phenylethyl)phenols	>2000mg/kg	>2000mg/kg			
100-51-6	benzyl alcohol	1620 mg/kg, rat	2000 mg/kg, rabbit			
90-72-2	2,4,6-tris (dimethylaminomethyl)phenol	1200 mg/kg oral, rat	1280 mg/kg rabbit		0.000	0.000

Additional Information:
No Information

11.2 Information on other hazards

Endocrine disrupting properties - Toxicity

Name According to EEC	CAS-No.
No Information	

SECTION 12: Ecological Information

12.1 Toxicity:

EC50 48hr (Daphnia):	No information
IC50 72hr (Algae):	No information
LC50 96hr (fish):	No information

12.2 Persistence and degradability: No information

12.3 Bioaccumulative potential: No information

12.4 Mobility in soil: No information

12.5 Results of PBT and vPvB assessment: The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

12.6 Endocrine disrupting properties

Endocrine disrupting properties - Ecotoxicity

Name According to EEC	CAS-No.
No Information	

12.7 Other adverse effects: No information

CAS-No.	Name According to EEC	EC50 48hr	IC50 72hr	LC50 96hr
90640-67-8	Amines, polyethylenepoly-, triethylenetetramine fraction	No information	No information	330 mg/l
140-31-8	2-piperazin-1-ylethylamine	No information	No information	>100 mg/L
	Reaction mass of (1-phenyletyl)phenols and bis-(1-phenylethyl)phenols	No information	No information	1.77-5.6 mg/l
100-51-6	benzyl alcohol	230 mg/l	700 mg/L (algae)	10 mg/L (fish)
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	No information	No information	

SECTION 13: Disposal Considerations

13.1 **WASTE TREATMENT METHODS:** If recycling is not practicable, dispose of in compliance with local regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

European Waste Code: No Information
Packaging Waste Code: 150110

SECTION 14: Transport Information

		ADR/RID	ADN	IMDG	IATA
14.1	UN-number or ID number	UN2735	UN2735	UN2735	UN2735
14.2	UN proper shipping name	AMINES, LIQUID, CORROSIVE, N.O.S. ,N-aminopiperazine & Triethylenetetramine	AMINES, LIQUID, CORROSIVE, N.O.S. ,N-aminopiperazine & Triethylenetetramine	AMINES, LIQUID, CORROSIVE, N.O.S. ,N-aminopiperazine & Triethylenetetramine	AMINES, LIQUID, CORROSIVE, N.O.S. ,N-aminopiperazine & Triethylenetetramine
14.3	Transport Hazard Class(es)	8	8	8	8
14.4	Packing Group	II	II	II	II
14.5	Enviromental Hazards	Marine Pollutant/ Environmentally Hazardous	Marine Pollutant/ Environmentally Hazardous	Marine Pollutant/ Environmentally Hazardous	Marine Pollutant/ Environmentally Hazardous

14.6 **Special precautions for user** Not applicable
EmS-No.: F-A , S-B

14.7 **Maritime transport in bulk according to IMO intruments** Not applicable

SECTION 15: Regulatory Information

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

National Regulations:

Denmark Product Registration Number: Not available

Danish MAL Code: Not available

Danish MAL Code - Mixture: Not available

Sweden Product Registration Number:	Not available
Norway Product Registration Number:	Not available
Germany WGK Class:	Not available
Covered by Directive 2012/18/EC (Seveso III):	H3, E2
Restrictions to product or to substances according to Annex XVII, Regulation (CE) 1907/2006:	Not applicable

Annex XIV, Regulation (CE) 1907/2006 - Authorisation List:

CAS-No.	Name According to EEC
Not Applicable	

SVHC - Substances of very high concern (Candidate List - Art. 59 REACH):

CAS-No.	Name According to EEC
Not Applicable	

15.2 Chemical Safety Assessment:

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: Other Information

Text for CLP Hazard Statements shown in Section 3 describing each ingredient:

H302	Harmful if swallowed.
H311	Toxic in contact with skin.
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.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H361	Suspected of damaging fertility or the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.

H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Reasons for revision

Composition Information Changed
Substance and/or Product Properties Changed in Section(s):
01 - Identification
02 - Hazard Identification
03 - Composition/Information On Ingredients
08 - Exposure Controls/Personal Protection
09 - Physical and Chemical Properties
11 - Toxicological Information
15 - Regulatory Information
Revision Statement(s) Changed

Changes have been made to Section 8 of the Safety Data Sheet (SDS). Please refer to the Exposure Controls / Personal Protection information in Section 8 of the SDS.

List of References:

This Safety Data Sheet was compiled with data and information from the following sources:

- The Ariel Regulatory Database provided by the 3E Corporation in Copenhagen, Denmark.
- Joint Research Centre in Ispra, Italy.
- Regulation (EC) 1272/2008 with subsequent amendments.
- Regulation (EC) 1272/2006 with subsequent amendments.
- Commission Regulation (EU) 2020/878
- EU Council Decision 2000/532/EC and its Annex entitled "List of Wastes"
- Safety Data Sheet from raw material supplier
- The classification declared in sec. 2.2 is based on the calculation methods set out in Annex I and Annex II of the CLP Reg. 1272/2008 on the composition of the formula.

Acronym & Abbreviation Key:

CLP	Classification, Labeling & Packaging Regulation
EC	European Commission
EU	European Union
US	United States
CAS	Chemical Abstract Service
EINECS	European Inventory of Existing Chemical Substances
REACH	Registration, Evaluation, Authorization of Chemicals Regulation
GHS	Globally Harmonized System of Classification and Labeling of Chemicals
LTEL	Long term exposure limit
STEL	Short term exposure limit
OEL	Occupational exposure limit
ppm	Parts per million
mg/m3	Milligrams per cubic meter
TLV	Threshold Limit Value
ACGIH	American Conference of Governmental Industrial Hygienists
OSHA	Occupational Safety & Health Administration
PEL	Permissible Exposure Limits
VOC	Volatile organic compounds
g/l	Grams per liter
mg/kg	Milligrams per kilogram
N/A	Not applicable
LD50	Lethal dose at 50%
LC50	Lethal concentration at 50%
EC50	Half maximal effective concentration
IC50	Half maximal inhibitory concentration
PBT	Persistent bioaccumulative toxic chemical
vPvB	Very persistent and very bioaccumulative

EEC	European Economic Community
ADR	International Transport of Dangerous Goods by Road
RID	International Transport of Dangerous Goods by Rail
UN	United Nations
IMDG	International Maritime Dangerous Goods Code
IATA	International Air Transport Association
MARPOL	International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978
IBC	International Bulk Container
RTI	Respiratory Tract Irritation
NE	Narcotic Effects
IMO	International Maritime Organization
Note P:	The classification as a carcinogen or mutagen need not apply; the substance contains less than 0,1 % w/w benzene
Note 10:	The classification as a carcinogen by inhalation applies only to mixtures in powder form containing 1 % or more of titanium dioxide which is in the form of or incorporated in particles with aerodynamic diameter ≤ 10 µm.

For further information, please contact: Technical Services Department

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product or where instructions and recommendations are not followed.