

Safety Data Sheet

MAPEFLOOR I 320 SL CONCEPT comp. B

Safety Data Sheet dated: 21/12/2021 - version 3



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

1.1. Product identifier

Mixture identification:

Trade name: MAPEFLOOR I 320 SL CONCEPT comp. B

Trade code: 903F999

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

Recommended use: Hardener for epoxy products

Uses advised against: N.A.

1.3. Details of the supplier of the safety data sheet

Company: MAPEI S.p.A. - Via Cafiero, 22 - 20158 Milano

Tel. +(39)02376731 (office hours) - Fax: +39-02-37673.214 - www.mapei.it

Responsible: sicurezza@mapei.it

1.4. Emergency telephone number

Poison Centre - Ospedale di Niguarda - Milan - Tel. +39/02/66101029

SECTION 2: Hazards identification



2.1. Classification of the substance or mixture

Regulation (EC) n. 1272/2008 (CLP)

Skin Corr. 1A	Causes severe skin burns and eye damage.
Eye Dam. 1	Causes serious eye damage.
Skin Sens. 1	May cause an allergic skin reaction.
Aquatic Chronic 3	Harmful to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Regulation (EC) n. 1272/2008 (CLP)

Pictograms and Signal Words



Danger

Hazard statements:

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

Precautionary statements:

P261	Avoid breathing mist/vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER.

Contains:

Special provisions according to Annex XVII of REACH and subsequent amendments:

None.

2.3. Other hazards

No PBT/vPvB Ingredients are present

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Mixture identification: MAPEFLOOR I 320 SL CONCEPT comp. B

Hazardous components within the meaning of the CLP regulation and related classification:

Concentration (% w/w)	Name	Ident. Numb.	Classification	Registration Number
≥25 - <50 %	Reaction products of 3-aminomethyl-3,5,5-trimethylcyclohexylamine and 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	CAS:38294-64-3, 68609-08-5 EC:500-101-4	Skin Corr. 1B, H314; Skin Sens. 1, H317; Aquatic Chronic 3, H412	01-2119965165-33-000
≥25 - <50 %	benzyl alcohol	CAS:100-51-6 EC:202-859-9 Index:603-057-00-5	Acute Tox. 4, H332; Acute Tox. 4, H302; Eye Irrit. 2, H319	01-2119492630-38-XXXX
≥5 - <10 %	2-Methylpentane-1,5-diamine	CAS:15520-10-2 EC:239-556-6	Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Corr. 1A, H314; Eye Dam. 1, H318; STOT SE 3, H335	01-2119976310-41-XXXX

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.
OBTAIN IMMEDIATE MEDICAL ATTENTION.
Remove contaminated clothing immediately and dispose of safely.
After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.
Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

Eye irritation
Eye damages
Skin Irritation
Erythema

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

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

Treatment:

(see paragraph 4.1)

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.
Carbon dioxide (CO2).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

5.3. Advice for firefighters

Use suitable breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Limit leakages with earth or sand.

6.3. Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand

Retain contaminated washing water and dispose it.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

List of components with OEL value

Component	OEL Type	Country	Ceiling	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Behaviour	Note
benzyl alcohol	National	FINLAND		45	10				
	National	POLAND		240					
	DFG	GERMANY	C			44	10		
	National	GERMANY		22	5				
	NDS	POLAND		240					
	National	CZECH REPUBLIC		40					
	National	LATVIA		5					
	National	CZECH REPUBLIC	C			80			
	National	BULGARIA		5.0					
	National	LITHUANIA		5					
	National	SLOVENIA		22	5	44	10		

Predicted No Effect Concentration (PNEC) values

Component	CAS-No.	PNEC Limit	Exposure Route	Exposure Frequency	Remark
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benzyl alcohol	100-51-6	1 mg/l	Fresh Water
		0.1 mg/l	Marine water
		5.27 mg/kg	Freshwater sediments
		0.527 mg/kg	Marine water sediments
		39 mg/l	Microorganisms in sewage treatments
2-Methylpentane-1,5-diamine	15520-10-2	0.45 mg/kg	Soil
		2.3 mg/l	Intermittent release
		0.042 mg/l	Marine water
		0.42 mg/l	Fresh Water
		0.42 mg/l	Intermittent release

Derived No Effect Level. (DNEL)

Component	CAS-No.	Worker Industrial	Worker Professional	Consumer	Exposure Route	Exposure Frequency	Remark
benzyl alcohol	100-51-6			20 mg/kg	Human Oral		Short Term, systemic effects
				4 mg/kg	Human Oral		Long Term, systemic effects
		110 mg/m3		27 mg/m3	Human Inhalation		Short Term, systemic effects
		22 mg/m3		5.4 mg/m3	Human Inhalation		Long Term, systemic effects
		40 mg/kg		20 mg/kg	Human Dermal		Short Term, systemic effects
		8 mg/kg		4 mg/kg	Human Dermal		Long Term, systemic effects
2-Methylpentane-1,5-diamine	15520-10-2	1.5 mg/kg			Human Dermal		Long Term (repeated)
		0.25 mg/m3			Human Inhalation		Long Term (repeated)
		0.5 mg/m3			Human Inhalation		Short Term (acute)

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Suitable materials for safety gloves; EN ISO 374:

Polychloroprene - CR: thickness $\geq 0,5\text{mm}$; breakthrough time $\geq 480\text{min}$.

Nitrile rubber - NBR: thickness $\geq 0,35\text{mm}$; breakthrough time $\geq 480\text{min}$.

Butyl rubber - IIR: thickness $\geq 0,5\text{mm}$; breakthrough time $\geq 480\text{min}$.

Fluorinated rubber - FKM: thickness $\geq 0,4\text{mm}$; breakthrough time $\geq 480\text{min}$.

Neoprene gloves are suggested (0,5 mm) not recommended gloves: not waterproof gloves

Respiratory protection:

Personal Protective Equipment should comply with relevant CE standards (as EN ISO 374 for gloves and EN ISO 166 for goggles), correctly maintained and stored. Consult the supplier to check the suitability of equipment against specific chemicals and for user information.

Hygienic and Technical measures

N.A.

Appropriate engineering controls:

N.A.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid
Appearance and colour: liquid white, light yellow
Odour: Like: Amines
Odour threshold: N.A.
pH: 8.50
Melting point / freezing point: N.A.
Initial boiling point and boiling range: N.A.
Flash point: 100 °C (212 °F)
Evaporation rate: N.A.
Upper/lower flammability or explosive limits: N.A.
Vapour density: N.A.
Vapour pressure: N.A.
Relative density: 1.00 g/cm³
Solubility in water: partly soluble
Solubility in oil: N.A.
Partition coefficient (n-octanol/water): N.A.
Auto-ignition temperature: N.A.
Decomposition temperature: N.A.
Viscosity: 300.00 cPs
Explosive properties: ==
Oxidizing properties: N.A.
Solid/gas flammability: N.A.

9.2. Other information

No additional information

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

None.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the mixture:

a) acute toxicity	Not classified Based on available data, the classification criteria are not met
b) skin corrosion/irritation	The product is classified: Skin Corr. 1A(H314)
c) serious eye damage/irritation	The product is classified: Eye Dam. 1(H318)
d) respiratory or skin sensitisation	The product is classified: Skin Sens. 1(H317)
e) germ cell mutagenicity	Not classified Based on available data, the classification criteria are not met
f) carcinogenicity	Not classified Based on available data, the classification criteria are not met
g) reproductive toxicity	Not classified Based on available data, the classification criteria are not met
h) STOT-single exposure	Not classified Based on available data, the classification criteria are not met
i) STOT-repeated exposure	Not classified

j) aspiration hazard

Based on available data, the classification criteria are not met

Not classified

Based on available data, the classification criteria are not met

Toxicological information on main components of the mixture:

benzyl alcohol	a) acute toxicity	LC50 Inhalation Rat = 11.00000 mg/l 4h LD50 Oral Rat = 1230.00000 mg/kg
	g) reproductive toxicity	NOAEL Rat = 1072.00000 mg/m3
2-Methylpentane-1,5-diamine	a) acute toxicity	LC50 Inhalation Mist Rat = 4.9 mg/l 1h LD50 Oral Rat = 1170 mg/kg LD50 Skin Rat = 1870 mg/kg LC50 Inhalation Rat = 4.1 mg/l 1h LC50 Inhalation Rat = 2.9 mg/l 1h LD50 Oral Rat = 1690 mg/kg

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

List of Eco-Toxicological properties of the product

The product is classified: Aquatic Chronic 3(H412)

List of components with eco-toxicological properties

Component	Ident. Numb.	Ecotox Infos
benzyl alcohol	CAS: 100-51-6 - EINECS: 202-859-9 - INDEX: 603-057-00-5	a) Aquatic acute toxicity : EC50 Daphnia = 230 mg/L 48
		a) Aquatic acute toxicity : LC50 Fish = 770 mg/L 1
		a) Aquatic acute toxicity : EC50 Algae = 770 mg/L 72
		a) Aquatic acute toxicity : LC50 Fish = 460 mg/L 96
		a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 460.00000 mg/L 96h EPA
2-Methylpentane-1,5-diamine	CAS: 15520-10-2 - EINECS: 239-556-6	a) Aquatic acute toxicity : EC50 Algae > 100 mg/L 72
		a) Aquatic acute toxicity : EC50 Fish = 1825 mg/L 96
		a) Aquatic acute toxicity : EC50 Daphnia = 19.8 mg/L 48

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

No PBT/vPvB Ingredients are present

12.6. Other adverse effects

N.A.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Recover if possible.

A waste code (EWC) according to European List of Waste (LoW) cannot be specified, due to dependence on the usage. Contact and send to an authorized waste disposal service.

Methods of disposal:

Disposal of this product, solutions, packaging and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor.

Do not dispose of waste into sewers.

Hazardous waste: Yes

Disposal considerations:

Do not allow to enter drains or watercourses.

Dispose of product according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

Dispose of containers contaminated by the product in accordance with local or national legal provisions. For further information, contact your local waste authority.

Special precautions:

This material and its container must be disposed of in a safe way. Care should be taken when handling untreated empty containers.

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Empty containers or liners may retain some product residues. Do not re-use empty containers.

SECTION 14: Transport information

14.1. UN number

2735

14.2. UN proper shipping name

ADR-Shipping Name: POLYAMINES, LIQUID, CORROSIVE, N.O.S. (modified cycloaliphatic polyamines - 2-methylpentane-1,5-diamine)

IATA-Technical name: POLYAMINES, LIQUID, CORROSIVE, N.O.S. (modified cycloaliphatic polyamines - 2-methylpentane-1,5-diamine)

IMDG-Technical name: POLYAMINES, LIQUID, CORROSIVE, N.O.S. (modified cycloaliphatic polyamines - 2-methylpentane-1,5-diamine)

14.3. Transport hazard class(es)

ADR-Class: 8, II

IATA-Class: 8, II

IMDG-Class: 8, II

14.4. Packing group

ADR-Packing Group: II

IATA-Packing group: II

IMDG-Packing group: II

14.5. Environmental hazards

Marine pollutant: No

Environmental Pollutant: No

14.6. Special precautions for user

Road and Rail (ADR-RID) :

ADR-Label: 8

ADR-Hazard identification number: NA

ADR-Special Provisions: 274

ADR-Transport category (Tunnel restriction code): 2 (E)

Air (IATA) :

IATA-Passenger Aircraft: 851

IATA-Cargo Aircraft: 855

IATA-Label: 8

IATA-Subsidiary hazards: -

IATA-Erg: 8L

IATA-Special Provisioning: A3 A803

Sea (IMDG) :

IMDG-Stowage Code: Category A

IMDG-Stowage Note: SG35

IMDG-Subsidiary hazards: -

IMDG-Special Provisioning: 274

IMDG-Page: N/A

IMDG-Label: N/A

IMDG-EMS: F-A, S-B

IMDG-MFAG: N/A

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

N.A.

SECTION 15: Regulatory information

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

VOC (2004/42/EC) : (A+B) <200 g/l

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EU) 2015/830

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Provisions related to directive EU 2012/18 (Seveso III):

N.A.

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: 3

Restrictions related to the substances contained: 75

SVHC Substances:

No data available

German Water Hazard Class (WGK)

N.A.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Code	Description
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

Code	Hazard class and hazard category	Description
3.1/4/Dermal	Acute Tox. 4	Acute toxicity (dermal), Category 4
3.1/4/Inhal	Acute Tox. 4	Acute toxicity (inhalation), Category 4
3.1/4/Oral	Acute Tox. 4	Acute toxicity (oral), Category 4
3.2/1A	Skin Corr. 1A	Skin corrosion, Category 1A
3.2/1B	Skin Corr. 1B	Skin corrosion, Category 1B

3.3/1	Eye Dam. 1	Serious eye damage, Category 1
3.3/2	Eye Irrit. 2	Eye irritation, Category 2
3.4.2/1	Skin Sens. 1	Skin Sensitisation, Category 1
3.8/3	STOT SE 3	Specific target organ toxicity — single exposure, Category 3
4.1/C3	Aquatic Chronic 3	Chronic (long term) aquatic hazard, category 3

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

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
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3.2/1A	Calculation method
3.3/1	Calculation method
3.4.2/1	Calculation method
4.1/C3	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

DMEL: Derived Minimal Effect Level

DNEL: Derived No Effect Level.

DPD: Dangerous Preparations Directive

DSD: Dangerous Substances Directive

EC50: Half Maximal Effective Concentration

ECHA: European Chemicals Agency

EINECS: European Inventory of Existing Commercial Chemical Substances.

ES: Exposure Scenario

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

IC50: half maximal inhibitory concentration

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

IMDG: International Maritime Code for Dangerous Goods.

INCI: International Nomenclature of Cosmetic Ingredients.

IRCCS: Scientific Institute for Research, Hospitalization and Health Care

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.
LDLo: Leathal Dose Low
N.A.: Not Applicable
N/A: Not Applicable
N/D: Not defined/ Not available
NA: Not available
NIOSH: National Institute for Occupational Safety and Health
NOAEL: No Observed Adverse Effect Level
OSHA: Occupational Safety and Health Administration.
PBT: Persistent, Bioaccumulative and Toxic
PGK: Packaging Instruction
PNEC: Predicted No Effect Concentration.
PSG: Passengers
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
vPvB: Very Persistent, Very Bioaccumulative.
WGK: German Water Hazard Class.

Paragraphs modified from the previous revision:

- 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING
- 2. HAZARDS IDENTIFICATION
- 3. COMPOSITION/INFORMATION ON INGREDIENTS
- 7. HANDLING AND STORAGE
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 11. TOXICOLOGICAL INFORMATION
- 12. ECOLOGICAL INFORMATION
- 13. DISPOSAL CONSIDERATIONS
- 14. TRANSPORT INFORMATION
- 15. REGULATORY INFORMATION
- 16. OTHER INFORMATION