



SAFETY DATA SHEET 21

HARD MIX FLOOR

1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name HARD MIX FLOOR

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

Descrption/Application RESIN FOR FLOORING

1. 3 Details of the supplier of the safety data sheet

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E-mail address of the competent person

responsible for the Safety Data Sheet info@bericalce.it

1.4 Emergency telephone number

For urgent inquiries refer to SANITARY EMERGENCY

2 HAZARD IDENTIFICATION

2.1. Classification of the substance or mixture.

The product is not classified as hazardous according to the provisions of Regulation (EC) 1272/2008 (CLP). The product, however, containing dangerous substances in concentrations such as to be declared to the section no. 3, requires a safety data sheet with adequate information, in accordance with Regulation (EC) 1907/2006 and subsequent amendments.

Hazard classification and indications: Not classified as dangerous.

2.2. Label elements.

Hazard pictograms: -

Warnings: -Hazard:

EUH210 Safety data sheet available on request.

Safety advice:

P262 Avoid contact with eyes, skin or clothing.
P273 Do not disperse in the environment.

P280 Wear protective gloves / clothing and eye / face protection.

P305 + P351 + P338 IN CASE OF CONTACT WITH EYES: Rinse thoroughly for several minutes.

Remove any contact lenses if it is easy to do. Continue to rinse.

P501 Dispose of contents / container in accordance with local / regional / national /

international regulations.

2.3 Other hazards

Based on the available data, the product does not contain PBT or vPvB substances in percentages greater than 0.1%

3 COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Information not relevant

3.2 Mixtures

It contains:

dentification Conc. %. Classification 67/548/CEE. Classification 1272/2008 (CLP).

Butyldialycol

CAS 112-34-5 $0.5 \le x < 1.5$ Eye Irrit. 2 H319

EC 203-961-6

INDEX 603-096-00-8

Reg. No. 01-2119475104-44

Polypropyleneglycol

CAS 25322-69-4 $0.1 \le x < 0.5$ Acute Tox. 4 H302

CE 500-039-8 INDEX -

(Methyl-2-methoxyethoxy) propanol

CAS 34590-94-8 $0.01 \le x < 0.5$ Substance with a community workplace exposure limit

EC 252-104-2

INDEX -

Reg. No. 01-2119450011-60

2-methyl-2H-isothiazol-3-one

CAS 2682-20-4 0.001 \leq x <0.1 Acute Tox. 2 H330, Acute Tox. 3 H301, Skin Corr. 1B H314, STOT SE 3

CE 220-239-6 H335, Skin Sens. 1 H317, Aquatic Acute 1 H400 M = 10, Aquatic

INDEX - Chronic 2 H411

4 FIRST AID MEASURES

4.1 Description of first aid measures

Not specifically necessary. In any case, compliance with the rules of good industrial hygiene is recommended.

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

No specific information is known about the symptoms and effects caused by the product.

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

Information not available

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5 FIREFIGHTING MEASURES

5.1 Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

5.2 Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.

5.3 Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing.

These indications apply for both processing staff and those involved in emergency procedures.

6.2 Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3 Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Check incompatibility for container material in section 7.

Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4 Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

7 HANDLING AND STORAGE

7.1 Precautions for safe handling

Handle the product after consultation with all other sections of this SDS. Avoid dispersion of the product in the environment. Do not eat, drink or smoke during use.

7.2 Conditions for safe storage, including any incompatibilities

Keep the product in clearly labeled containers. Keep containers away from incompatible materials, checking section 10.

7.3 Specific end use(s)

Information not available.

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8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Normative requirements

ITA I TALIA Legislative Decree 9 April 2008, n. 81

TLV-ACGIH ACGIH 2014

AUS Österreich Grenzwerteverordnung 2011 - GKV 2011

CHE Suisse / Schweiz Valeurs limites of exposure for traffickers 2014. / Grenzwerte

am Arbeitsplatz

DEU Deutschland MAK-und BAT-Werte-Liste 2012

EU OEL EU Directive (EU) 2017/164; Directive 2009/161 / EU; Directive

2006/15 / EC; Directive 2004/37 / EC; Directive 2000/39 / EC;

Directive 91/322 / EEC

Butyldiglycol

OFL

Threshold limit value

FU

Type State TWA/8h STEL / 15min status

mg/m3 ppm mg/m3 ppm 67.5 10 101.2 15

Estimated concentration of no effect on the environment - PNEC

Reference value in fresh water

Reference value in sea water

Reference value for sediment in fresh water

Reference value for sediments in sea water

Reference value for STP microorganisms

Reference value for the food chain (secondary poisoning)

Reference value for the Earth compartment

1.1 mg / l

4.4 mg / kg

0.44 mg / kg

200 mg / l

56 mg / kg

Reference value for the Earth compartment

0.32 mg / kg

Health - Derived no-effect level - DNEL / DMEL

Effects on the Effects on

worker consumer

Exposure Local Systems Local Systemic Local Systems Local Systemic Systemic Systemic Systemic Systemic Systemic

Oral 5 mg/kg bw/d

Inhalation 60.7 mg/m3 40.5 mg/m3 40.5 mg/m3 101.2 mg/m3 67.5 mg/m3 67.5 mg/m3

Dermal 50 mg/kg bw/d 83 mg/kg bw/d

Polypropyleneglycol

Threshold limit value
Estimated concentration of no effect on the environment - PNEC

Reference value in fresh water 0,2 mg / l
Reference value in sea water 0,02 mg / l
Reference value for sediment in fresh water 0,419 mg / kg
Reference value for sediments in sea water 0.042 mg / kg
Reference value for STP microorganisms 100 mg / l
Reference value for the Earth compartment 0.031 mg / kg

Health - Derived no-effect level - DNEL / DMEL

Effects on the Effects on

worker consumer

Exposure Local Systems Local Systemic Local Systems Local Systemic Systemic acute acute chronic chronic

Oral 8,3 mg/kg bw/d

Inhalation 29 mg/m3 98 mg/m3

Dermal 8,3 mg/kg bw/d 13,9 mg/kg bw/d

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(METHYL-2-methoxyethoxy) PROPANOL

Threshold lin	nit value					
Туре	State	te TWA/8h STEL / 15min status				
		mg/m3	ppm	mg/m3	ppm	
OEL	EU	308	50 1			SKIN
Estimated cor	ncentration of no effe	ct on the en	vironment - PN	IEC		
Reference value in fresh water 19 mg / I						
Reference value in sea water			1,9 1 mg / l			
Reference valu	ue for sediment in fre	sh water	70,2 mg / kg			
Reference value for sediments in sea water			7,02 mg / kg			
Reference value for STP microorganisms						
Reference value for the Earth compartment			2,74 mg / kg			
Health - Deri	ved no-effect level -	DNEL / DM	EL			
	Effects on the			Effects on		
	worker			consumer		
Exposure	Local Systems	Local	Systemic	Local Systems	Local	Systemic
	acute acute	chronic	chronic	acute acute	chronic	chronic
Oral	Oral 36 mg/kg bw/d					
Inhalation 37,2 mg/m3			n3		308 mg/m3	
Dermal	al 121 mg/kg bw/d					283 mg/kg bw/d

2-METHYL-2H-isothiazol-3-ONE

Туре	State	TWA/8h	STEL / 15min status		
		mg/m3	ppm	mg/m3	ppm
MAK	AUS	0,05			
MAK	CHE	0,2		0,4	
MAK AGW	DEU	0,2		0,4	INALAB

Legend:

(C) = CEILING; INALAB = inhalable fraction; RESPIR = Respirable fraction; TORAC = Thoracic fraction.

VND = identified hazard but no DNEL/PNEC available; NEA = no expected exposure;

NPI = no hazard identified.

8.2 Exposure controls

As the use if adequate technical equipment must always take priority over personal protection equipment must always take priority over personal protection equipment, ensure good ventilation in the workplace through effective local aspiration. For the selection of personal protective equipment, if necessary, request advice from your chemical substance suppliers.

The personal protective equipment must bear the CE marking attesting to their compliance with applicable regulations. Provide emergency shower with a pan for face and eyes.

HAND PROTECTION

Protect your hands with work gloves, category III (ref. standard EN 374). Final selection of the material of the gloves must be considered: compatibility, degradation, breakage times and permeation. In the case of preparartions the resistance of protective gloves to chemicals should be checked before use, as it expected. The gloves' limit depends on the duration and method of use.

SKIN PROTECTION

Wear work clothes with long sleeves and safety footware for professional use category II (ref. Directive 89/686/ EEC and law EN ISO 20344). Wash with soap and water after removing protective clothing.

EYE PROTECTION

We reccomend wearing hood visor or protective visor together with airtight goggles (ref. law EN 166).

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RESPIRATORY PROTECTION

If the threshold value (eg TLV-TWA) of the substance or one or more of the substances present in the product is exceeded, it is advisable to wear a mask with type A filter whose class (1, 2 or 3) must be chosen in relation to the limit concentration of use. (see standard EN 14387). In the event there were gases or vapors of a different nature and / or gases or vapors with particles (aerosols, fumes, mists, etc.) it is necessary to provide type filters combined. The use of respiratory protection means is necessary in case the technical measures taken are not sufficient to limit the exposure of the worker to the threshold values taken into consideration. However, the protection offered by the masks is limited. In the event that the substance considered is odorless or its olfactory threshold is higher than the relative TLV-TWA and in the event of an emergency, wear an open circuit compressed air breathing apparatus (see standard EN 137) or a breathing apparatus outdoor air (see standard EN 138). For the correct choice of the respiratory protection device, refer to the EN 529 standard. ENVIRONMENTAL EXPOSURE CONTROLS.

Emissions from production processes, including those from ventilation equipment, should be checked for compliance with environmental protection regulations.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Liquid Appearance Colour Milky Odour Slight Odour threshold Not available 7,5 - 8,5 Hq Melting point / freezing point Not available Initial boiling point Not available Boiling range Not available Flash point > 60 °C Evaporation rate Not available Flammability (solid, gas) Not available Lower inflammability limit Not available Upper inflammability limit Not available Lower explosive limit Not available Upper explosive limit Not available Vapour pressure Not available Vapour density Not available Relative density 1,00 g/l

Solubility Miscible on water
Partition coefficient: n-octanol/water Not available
Auto-ignition temperature Not available
Decomposition temperature Not available

Viscosity 10 - 30 cP (Brookfield, 25°C)

Explosive properties Not available Oxidising properties Not available

9.2 Other information

VOC (Directive 2010/75 / EC): 0.10% - 0.98 g / liter VOC (volatile carbon): 0.06% - 0.56 g / liter

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10 STABILITY AND REACTIVITY

10.1 Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

<u>butyldiglycol</u>

No specific data available.

polypropyleneglycol

Stable in normal conditions of use and storage.

(Methyl-2-methoxyethoxy) propanol

Stable in normal conditions of use and storage.

2-methyl-2H-isothiazol-3-one

No specific data available.

10.2 Chemical stability

The product is stable under normal conditions of use and storage.

<u>butyldiglycol</u>

Stable in normal conditions of use and storage.

polypropyleneglycol

Stable in normal conditions of use and storage.

(Methyl-2-methoxyethoxy) propanol

Stable in normal conditions of use and storage.

2-methyl-2H-isothiazol-3-one

No specific data available.

10.3 Possibility of hazardous reactions

Unusual reactions are not expected under normal use and storage conditions.

<u>butyldiglycol</u>

It can react with: oxidizing substances. It can form peroxides with: oxygen. Hydrogen developing in contact with: aluminum. It can form explosive mixtures with: air.

polypropyleneglycol

Stable in normal conditions of use and storage.

(Methyl-2-methoxyethoxy) propanol

Avoid contact with: oxidizing agents.

2-methyl-2H-isothiazol-3-one

No specific data available.

10.4 Conditions to avoid

None in particular. However, follow the usual precautions with regard to chemicals

butyldiglycol

Avoid exposure to: high temperatures, air, sources of ignition.

polypropyleneglycol

Avoid exposure to: humidity.

(Methyl-2-methoxyethoxy) propanol

Avoid contact with: oxidizing agents.

2-methyl-2H-isothiazol-3-one

No specific data available.

10.5 Incompatible materials

butyldialycol

Incompatible with: oxidizing substances, strong acids, alkali metals.

polypropyleneglycol

Avoid contact with: strong oxidizing agents.

(Methyl-2-methoxyethoxy) propanol

Avoid contact with: strong acids, strong oxidizing agents, strong bases.

2-methyl-2H-isothiazol-3-one

No specific data available.

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10.6. Hazardous decomposition products

<u>butyldiglycol</u>

For decomposition develops: carbon oxides.

polypropyleneglycol

No specific data available.

(Methyl-2-methoxyethoxy) propanol

For decomposition develops: carboxylic acids, aldehydes, ketones.

2-methyl-2H-isothiazol-3-one

No specific data available.

11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Metabolism, kinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

butyldiglycol

WORKERS: inhalation; contact with the skin.

Immediate, delayed, and chronic effects from short and long-term exposure

butyldiglycol

It can be absorbed by inhalation, ingestion and skin contact; it is irritating to the skin and especially to the eyes. You can have damage to the spleen. At room temperature the danger of inhalation is unlikely due to the low vapor pressure of the substance.

Interactive effects

ACUTE TOXICITY

LC50 (Inhalation) of the mixture: Not classified (no relevant component)

LD50 (Oral) of the mixture: Not classified (no relevant component)

LD50 (Cutaneous) of the mixture: Not classified (no relevant component)

(Methyl-2-methoxyethoxy) propanol

LD50 (Oral) > 5000 mg / kg male / female rat

LD50 (Cutaneous) 9510 mg/kg male rabbit

polypropyleneglycol

LD50 (Oral)> 2000 mg / kg Rat - Fischer 344

LD50 (Cutaneous)> 3000 mg / kg Rabbit - New Zeland white

butyldiglycol

LD50 (Oral) 2410 mg / kg male rat

LD50 (Cutaneous) 2764 mg / kg male rabbit

12 ECOLOGICAL INFORMATION

12.1. Toxicity

(Methyl-2-methoxyethoxy) propanol

LC50 - Fishes > 1000 mg / l / 96h Poecilia reticulata EC50 - Crustaceans 1919 mg / l / 48h Daphnia magna

EC50 - Algae / Aquatic Plants > 969 mg / I / 72h Pseudokirchneriella subcapitata

polypropyleneglycol

LC50 - Fishes > 100 mg / I / 96h Danio rerio EC50 - Crustaceans 105,8 mg / I / 48h Daphnia magna

EC50 - Algae / Aquatic Plants > 100 mg / l / 72h Desmodesmus subspicatus

butyldiglycol

LC50 - Fish 1300 mg / I / 96h Lepomis macrochiru EC50 - Crustaceans > 100 mg / I / 48h Daphnia magna

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12.2 Persistence and degradability

(Methyl-2-methoxyethoxy) propanol

Solubility in very soluble 100% water

Rapidly degradable 96% 28 d

polypropyleneglycol

Solubility in miscible water 1000 - 10000 mg / l

Rapidly degradable 84.7% 14 d

butyldiglycol

Solubility in miscible water 955000 mg / l

Rapidly degradable 85% 28 d

12.3 Bioaccumulative potential

(Methyl-2-methoxyethoxy) propanol

Partition coefficient: n-octanol / water 0.0043

polypropyleneglycol

Partition coefficient: n-octanol / water 0.01

butyldiglycol

Partition coefficient: n-octanol / water 1

12.4 Mobility in the soil

polypropyleneglycol

Partition coefficient: soil / water < 1.25

12.5 Results of the PBT and vPvB assessment

Based on the available data, the product doesn't contain PBT or vPvB substances in percentages > of 0.1%.

12.6 Other adverse effects

Information not available.

13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Reuse, when possible. Neat product residues should be considered special non-hazardous waste.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Avoid littering. Do not contaminate soil, sewers and waterways.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

14 TRANSPORT INFORMATION

14.1 ONU number

Not dangerous materials.

14.2 ONU shipping name

Not applicable.

14.3 Hazard classes connected to shipping

Not applicable.

14.4 Packaging group

Not applicable.

14.5 Environmental hazards

Not applicable.

14.6 Special precautions for users

Not applicable.

14.7 Shipping of bulk according to MARPOL 73/78 annex and the IBC code

No relevant information.

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15 REGULATORY INFORMATION

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

Seveso Category None

Restrictions relating to the product or contained substances pursuant to AnnexXVII to EC Regulation 1907/2006 None

Substances in Candidate List (Art. 59 REACH) None

Substances subject to authorisarion (Annex XIV REACH) None

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012: None

Substances subject to the Rotterdam Convention None

Substances subject to the Stockholm Convention None

Healthcare controls

Information not available.

15.2 Chemical safety assessment

No chemical safety assessment has been processed for the mixture and the substances it contains.

16 OTHER INFORMATIONS

Acute Tox. 2 Acute toxicity, category 2

Acute Tox. 3 Acute toxicity, category 3

Acute Tox. 4 Acute toxicity, category 4

Skin Corr. 1B Skin corrosion, category 1B

Eye Irrit. 2 Eye irritation, category 2

STOT SE 3 Specific target organ toxicity - single exposure, category 3

Skin Sens. 1 Skin sensitization, category 1

Aquatic Acute 1 Hazardous to the aquatic environment, acute toxicity, category 1

Aguatic Chronic 2 Hazardous to the aquatic environment, chronic toxicity, category 2

H330 Lethal if inhaled.

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H317 May cause an allergic skin reaction.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

EUH210 Safety data sheet available on request.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%

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HARD MIX FLOOR

- OEL: Occupational exposure level
- PBT: Persistent, bioaccumulative and toxic according to REACH
- PEC: Predictable environmental concentration
- PEL: Predictable level of exposure
- PNEC: Predictable concentration without effects
- REACH: EC Regulation 1907/2006
- RID: Regulations for the international transport of dangerous goods by train
- TLV: Threshold limit value
- TLV CEILING: Concentration that must not be exceeded during any moment of work exposure.
- TWA STEL: Short-term exposure limit
- TWA: Weighted average exposure limit
- VOC: Volatile organic compound
- vPvB: Very persistent and very bioaccumulant according to REACH
- WGK: Aquatic hazard class (Germany).

GENERAL BIBLIOGRAPHY

- 1. Directive 1999/45/EC and following amendments
- 2. Directive 67/548/EEC and following amendments and adjustments
- 3. Regulation (EC) 1907/2006 (REACH) of the European Parliament
- 4. Regulation (EC) 1272/2008 (CLP) of the European Parliament
- 5. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
- 6. Regulation (EC) 453/2010 of the European Parliament
- 7. Regulation (EC) 286/2011 (II Atp. CLP) of the European Parliament
- 8. Regulation (EC) 618/2012 (III Atp. CLP) of the European Parliament
- 9. The Merck Index. 10th Edition
- 10. Handling Chemical Safety
- 11. Niosh Registry of Toxic Effects of Chemical Substances
- 12. INRS Fiche Toxicologique (toxicological sheet)
- 13. Patty Industrial Hygiene and Toxicology
- 14. N.I. Sax Dangerous properties of Industrial Materials-7, 1989 Edition
- 15. ECHA website

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the

suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current

health and safety laws and regulations. The producer is relieved from any liability arising from improper uses. Provide appointed staff with adequate training on how to use chemical products.

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