

NOVOFLOOR P22 S-UV POLYURETHANE BINDER

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Keep away from heat and fire. Do not smoke cigarettes. Do not inhale vapours. Avoid exposure of skin and eyes. Use protection against electrostatic discharge. Caution: reaction with water produces carbon dioxide and positive pressure inside of containers. Use only in well-ventilated rooms. Use personal protection, see SDS section 8.

7.2. Conditions for safe storage, including any incompatibilities

Store in hermetically sealed original containers. Do not store near large amounts of organic peroxides or other strong oxidants, amines and/or alcohols. Use protection against electrostatic discharge. Store in cool, well-ventilated rooms. Sensitive to low temperatures i.e. below 0°C. Store at +10 to +35°C.

7.3. Specific end uses

Polyurethane binder for rubber granulate. Intended for professional use in the building industry, with the proviso of subsection 7.1 and 7.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

No data.

8.2. Exposure controls

Respiratory protection:

Gas masks with A2-P2 absorbers (EN 141).

Hand protection:

Safety gloves acc. to PN-EN 374-3 (Viton, 0.7 mm thick, penetration time > 480 mins; nitrile rubber, >=0.35 mm thick, break time >= 480 mins; PVC, >=0.5mm, break time >=480mins)

Eye protection:

Sealed protective eyewear.

Skin protection:

Suitable protective garment (coated/impregnated fabrics).

Work site:

Local exhaust, general ventilation.

Environmental exposure controls:

Prevent release into sewerage, surface waters, underground waters and soil.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state	liquid
Colour	According to the specification
Odour	specific
Odour threshold	N/A
pH	N/A
Melting point / freezing point	N/A
Boiling point	No data
Ignition point	>100°C (DIN 53213)
Auto-ignition temperature	No data
Decomposition temperature	N/A
Evaporation rate	N/A
Flammability (solid, gas)	N/A
Explosion limits	No data
Vapour pressure	No data
Vapour density (relative to air)	No data
Density	ca. 1.08 g/cm ³ (20°C)
Solubility (in water)	insoluble
Partition coefficient: n-octanol/water	No data
Viscosity (rotating rheometer)	3500 ÷ 4500 mPa s (23°C)
Explosive properties	N/A
Oxidising properties	N/A

9.2. Other information

No data



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SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Not reactive under normal conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reacts exothermically with amines and alcohols; slowly releases CO₂ when in contact with water; increases pressure in sealed containers; danger of bursting of sealed containers.

10.4. Conditions to avoid

Avoid exposure to strong oxidants, peroxides, strong acids and strong alkalis. Avoid generation and accumulation of electrostatic charges. Protect from exposure to sunlight and heat.

10.5. Incompatible materials

Avoid exposure to large amounts of organic peroxides, strong acids, strong alkalis and other strong oxidants. Reacts exothermically with amines and alcohols, see subsection 10.3.

10.6. Hazardous decomposition products

Thermal decomposition may produce carbon oxide, nitrogen oxides, isocyanate vapours and trace amounts of hydrogen cyanide.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

No experimental data on the preparation. The evaluation is based on the data of the hazardous components of this preparation.

a) Acute toxicity

ATE mix inhalation	>10-20 mg/l	
Methylenediphenyl diisocyanate	LD ₅₀ (rat, oral) LC ₅₀ (rabbit, skin)	>2000 mg/kg >9400 mg/kg/24h
Toluene diisocyanate	LD ₅₀ (rat, oral) LC ₅₀ (rat, inhalation)	>2000 mg/kg 0.48 mg/l1h

b) Skin corrosion/irritation

Causes skin irritation.

c) serious eye damage/irritation

Causes serious eye irritation.

d) respiratory or skin sensitisation

May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

e) germ cell mutagenicity

The mixture has not been classified as mutagenic. No available data confirming the hazard class.

f) carcinogenicity

Suspected of causing cancer.

g) reproductive toxicity

The mixture has not been classified as having any harmful effect on reproduction. No available data confirming the hazard class.

h) STOT-single exposure

May cause respiratory irritation.

i) STOT- repeated exposure

No available data confirming the hazard class.

j) aspiration hazard

No available data confirming the hazard class.

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SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Exposure routes:

Respiratory tract: May cause allergy or asthma symptoms or breathing difficulties if inhaled. Harmful if inhaled.

Skin: May cause an allergic skin reaction.

Eyes: Causes serious eye irritation.

Swallowing may irritate the digestive tract and cause nausea, vomiting and diarrhoea.

Toxicity symptoms:

Headache and vertigo, tiredness, muscular fatigue, drowsiness, with loss of consciousness in extreme cases.

SECTION 12: ECOLOGICAL INFORMATION

No experimental data on the preparation. The evaluation is based on the data of the hazardous components of this preparation.

12.1. Toxicity

Methylenediphenyl diisocyanate	toxicity to invertebrates toxicity to fish (Danio rerio)	EC ₅₀ LC ₅₀ >1000 mg/l/24h LC ₅₀ >1000 mg/l/96h
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Toluene diisocyanate	toxicity to invertebrates toxicity to fish (Danio rerio) toxicity to algae	EC ₅₀ LC ₅₀ 12.5 mg/l/48h LC ₅₀ >133 mg/l/96h EC ₅₀ LC ₅₀ 3230 mg/l/96h
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12.2. Persistence and degradability

Not biodegradable

12.3. Bioaccumulative potential

No data.

12.4. Mobility in soil

The product is insoluble in water. Reaction with water transforms the product at the interface into a solid, highly meltable and insoluble substance (polyurea). Carbod dioxide is also produced.

12.5. Results of PBT and vPvB assessment

No data

12.6. Other adverse effects

No data

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste neutralisation methods

The product must be disposed of in compliance with proper local and statutory regulations with regard to waste - see point 15. The product should be disposed with entities which are authorised to conduct activity in the area of collecting, recycling or utilization of waste.

Product remains:

Do not dispose the product into the sewage system. Do not store with communal waste. Remove the remains of the mixture carefully and leave to dry only in good ventilated rooms. The dried product is not harmful waste.

CAUTION: The remains should be dried in small portions. Keep them away from flammable products. High amounts of heat are released during chemical reaction!

Contaminated container:

A container containing unhardened remains of the product is harmful waste. Do not store with communal waste. The contaminated container should be disposed with entities which are authorized to collection, recover or disposal.

SECTION 14: INFORMATION ON TRANSPORT

ADR/RID	IMO/IMGD	IATA-DGR
Not hazardous in transport. Protect against moisture. Sensitive to temperatures below +10°C and above +35°C.		

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SECTION 15: REGULATORY INFORMATION

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

REACH - Regulation 2006/1907/WE
CLP - Regulation 1272/2008/WE

15.2. Chemical safety assessment

None performed

SECTION 16: OTHER INFORMATION

The full meaning of hazard phrases listed in section 2 to 15:

Acute Tox. 4 Acute toxicity, Category 4
H332 Harmful if inhaled.
STOT RE 2 Specific target organ toxicity — Repeated exposure, Category 2
H373 May cause damage to organs through prolonged or repeated exposure.
Skin Irrit. 2 Skin irritation, Category 2
H315 Causes skin irritation.
Skin Sens. 1 Skin sensitization, Category 1
H317 May cause an allergic skin reaction.
Eye Irrit. 2 Eye irritation, Category 2
H319 Causes serious eye irritation.
Resp. Sens. 1 Respiratory sensitization, Category 1
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
STOT SE 3 Specific target organ toxicity— single exposure, Category 3
H335 May cause respiratory irritation.
Carc. 2 Carcinogenicity, Hazard Category 2
H351 Suspected of causing cancer.
Aquatic Chronic 3 Hazardous to the aquatic environment — Chronic Hazard, Category 3
H412 Harmful to aquatic life with long lasting effects.

Explanation of the abbreviations and acronyms used in the Safety Data Sheet

CAS no – numerical symbol ascribed to a chemical substance by the American organization, Chemical Abstracts Service (CAS).

EC no. – a number ascribed to a chemical substance in the European List of Notified Chemical Substances (ELINCS) or a number in the European Inventory of Existing Chemical Substances mention in "No-longer polymers" publication (EINECS)

MPC – maximum permissible concentration of health hazardous substances in the work place

MPIC – maximum permissible instantaneous concentration

MPCC - maximum permissible ceiling concentration

PCB - permissible concentration in biological material

UN number - four-digit identification number of a substance, preparation or product pursuant to UN model regulations

ADR – European agreement on international road transport of hazardous materials

IMO – International Marine Organization

RID – Regulations for international rail transport of hazardous materials

IMDG-Code – International marine code for hazardous materials

ICAO /IATA – Technical Instructions for Safe Air Transport of Hazardous Materials

The information is based on our current knowledge. This document shall not constitute warranty for product characteristics. Classification was made by calculation method according to the classification rules contained in Regulation 1272/2008/WE.

Other sources of information

ECHA European Chemicals Agency

TOXNET Toxicology Data Network

IUCLID International Uniform Chemical Information Database

Changes: General update

Trainings:

With regard to handling, health and safety while working with hazardous substances and mixtures.

With regard to transport of hazardous goods pursuant to the requirements of ADR regulations.

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