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

- · 1.1 Product identifier
- · Trade name: KEMAPUR V 7200 FLEX 1K
- · Article number: /
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

· Application of the substance / the mixture

Coating

Sealing

Isocyanate resin

- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

KEMA d.o.o.

Puconci 393

9201 Puconci

Slovenija

- · Further information obtainable from: R&D DEPARTMENT
- · 1.4 Emergency telephone number: +386 (0)2 545 95 00

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

Flam. Liq. 3 H226 Flammable liquid and vapour.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Aguatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

· Hazard pictograms





GHS02 GHS07

- · Signal word Warning
- · Hazard-determining components of labelling:

Aliphatisches Polyisocyanat

1,6-hexanediyl-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl)carbamate isophorone di-isocyanate

· Hazard statements

H226 Flammable liquid and vapour.

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

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

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P302+P352 IF ON SKIN: Wash with plenty of water.

· Additional information:

Contains isocyanates. May produce an allergic reaction.

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- PBT: Not applicable.vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- · 3.1 Chemical characterisation: Substances
- · Identification number(s) 3 (VCI
- 3.2 Chemical characterisation: Mixtures
- · Description: Mixture of substances listed below with nonhazardous additions.

CAS: 426822-87-9	Aliphatisches Polyisocyanat	50-100%
	♦ Skin Sens. 1, H317	
CAS: 140921-24-0 ELINCS: 411-700-4	1,6-hexanediyl-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl)carbamate	10-<25%
	♦ Skin Sens. 1, H317	
CAS: 108-65-6	2-methoxy-1-methylethyl acetate	10-<25%
EINECS: 203-603-9 Reg.nr.: 01-2119475791-29	♦ Flam. Liq. 3, H226	
CAS: 1330-20-7	xylene	3-<10%
EINECS: 215-535-7 Reg.nr.: 01-2119488216-32	Flam. Liq. 3, H226; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	•
CAS: 64742-95-6	Solvent naphtha (petroleum), light arom.	3-<10%
EINECS: 265-199-0 Reg.nr.: 01-2119455851-35-xxxx	 Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Acute Tox. 4, H332; STOT SE 3, H335-H336 	
CAS: 4098-71-9	isophorone di-isocyanate	0.3-<0.5%
EINECS: 223-861-6 Reg.nr.: 01-2119490408-31-XXXX	Acute Tox. 3, H331; Resp. Sens. 1, H334; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	

Additional information: For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· After inhalation:

Seek medical treatment in case of complaints.

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

· After skin contact:

If skin irritation continues, consult a doctor.

Immediately wash with water and soap and rinse thoroughly.

- After eye contact: Seek immediate medical advice.
- · After swallowing: Seek immediate medical advice.
- · 4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

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• 4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · 5.2 Special hazards arising from the substance or mixture

No further relevant information available.

- · 5.3 Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

Mouth respiratory protective device.

· Additional information Cool endangered receptacles with water spray.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

· 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Store in cool, dry place in tightly closed receptacles.

Keep away from heat and direct sunlight.

· Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep container tightly sealed.
- 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

· Additional information about design of technical facilities: No further data; see item 7.

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· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

108-65-6 2-methoxy-1-methylethyl acetate

WEL Short-term value: 548 mg/m³, 100 ppm Long-term value: 274 mg/m³, 50 ppm

Sk

1330-20-7 xylene

WEL Short-term value: 441 mg/m³, 100 ppm Long-term value: 220 mg/m³, 50 ppm

Sk; BMGV

4098-71-9 isophorone di-isocyanate

WEL Short-term value: 0.07 mg/m³

Long-term value: 0.02 mg/m³

Sen: as -NCO

· Ingredients with biological limit values:

1330-20-7 xylene

BMGV 650 mmol/mol creatinine

Medium: urine

Sampling time: post shift

Parameter: methyl hippuric acid

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Do not eat or drink while working.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:

Use gloves of stable material (e.g. Nitrile) - if necessary tricoted to improve the wearability.



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

Nitrile rubber, NBR

Butyl rubber, BR

Recommended thickness of the material: ≥ 0.5 mm

Fluorocarbon rubber (Viton)

· Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· Eye protection:



Tightly sealed goggles

· Body protection: Protective work clothing

SECTION 9: Physical and chemical properties

- · 9.1 Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Fluid Colour! Colourless

· Odour: Like aromatic solvents

· Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 137 ℃

• Flash point: $> 37 \, ^{\circ}$

· Ignition temperature: 315 ℃

· **Self-igniting**: Product is not selfigniting.

· Danger of explosion: Product is not explosive. However, formation of explosive air/

vapour mixtures are possible.

· Explosion limits:

Lower: 1.2 Vol % **Upper:** 10.6 Vol %

· Vapour pressure at 20 ℃: 3.4 hPa

• Density at 20 ℃:
1.04 g/cm³ (DIN EN ISO 2811-2)

· Solubility in / Miscibility with

water: Not miscible or difficult to mix.

· Viscosity:

Dynamic at 20 ℃: 1100 mPas (DIN EN ISO 3219)

Kinematic: Not determined.

• **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- · Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

· 10.3 Possibility of hazardous reactions

Reacts with acids, alkalis and oxidising agents.

Reacts with amines.

Exothermic reaction.

Reacts with alcohols.

- · 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: No further relevant information available.

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· 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity

· Acute tox	icity				
· LD/LC50 v	/alues rele	evant for classification:			
140921-24	l-0 1,6-hex	xanediyl-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl)carbamate			
Oral	LD50	> 2000 mg/kg (rat)			
Dermal	LD50	> 2000 mg/kg (rat)			
108-65-6 2	?-methoxy	v-1-methylethyl acetate			
Oral	LD50	8532 mg/kg (rat)			
Dermal	LD50	> 5000 mg/kg (rat)			
Inhalative	LC50/4 h	35.7 mg/l (rat)			
1330-20-7	xylene				
Oral	LD50	4300 mg/kg (rat)			
Dermal	LD50	3200 mg/kg (rabbit)			
Inhalative	LC50/4 h	28 mg/l (rat)			
64742-95-	64742-95-6 Solvent naphtha (petroleum), light arom.				
Oral	LD50	>6800 mg/kg (rat)			
Dermal	LD50	>3400 mg/kg (rab)			
Inhalative	LC50/4 h	>10.2 mg/l (rat)			
4098-71-9	4098-71-9 isophorone di-isocyanate				
Inhalative	LC50/4 h	3 mg/l (ATE)			

- · Primary irritant effect:
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- · Respiratory or skin sensitisation

May cause an allergic skin reaction.

- CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity:

1 1000 1 0 1 0 1	0 1 11 1 /0 /0	// ·/ · · · · · · · · · · · · · · · · ·	
140921-24-0 1	.6-hexanedivl-bis(2-(2-	(1-ethylpentyl)-3-oxaz	zolidinyl)ethyl)carbamate

EC50/48 h 193 mg/l (Daphnia (Wasserfloh))

EC50/72h 43 mg/l (Grünalge (Desmodesmus subspicatus))

LC50/96 h 316 mg/l (Brachydanio rerio (Zebrabärbling))

108-65-6 2-methoxy-1-methylethyl acetate

ECO > 1000 mg/l (Selenastrum capricornutum) ((72h))

EC50/48 h > 500 mg/l (Daphnia (Wasserfloh))

LC0/96h 23.8 mg/l (rat) ((6h))

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LC50/96 h > 100-180 mg/l (Oncorhynchus mykiss (Regenbogenforelle))

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1330-20-7 xylene

EC50/24h | 165 mg/l (Daphnia (Wasserfloh))

LC50/96 h 26.7 mg/l (Pimephales promelas (Goldelritze))

- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- · Remark: Harmful to fish
- · Additional ecological information:
- · General notes:

Harmful to aquatic organisms

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· European waste catalogue

08 04 09 waste adhesives and sealants containing organic solvents or other dangerous substances

- Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

· 14.1 UN-Number

· ADR, ADN, IMDG · IATA Void UN1866

14.2 UN proper shipping name

· ADR, ADN, IMDG Void

· IATA RESIN SOLUTION

- · 14.3 Transport hazard class(es)
- · ADR, ADN, IMDG

· Class Void

·IATA



· Class 3 Flammable liquids.

· Label

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· 14.4 Packing group		
· ADR, IMDG	Void	
· IATA	III	
· 14.5 Environmental hazards:		
· Marine pollutant:	No	
· 14.6 Special precautions for user	Not applicable.	
14.7 Transport in bulk according to An	nex II	
of Marpol and the IBC Code	Not applicable.	
UN "Model Regulation":	Void	

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Qualifying quantity (tonnes) for the application of lower-tier requirements 5.000 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 50.000 t
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H331 Toxic if inhaled.

H332 Harmful if inhaled.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

· Department issuing MSDS: R&D DEPARTMENT

· Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 3: Flammable liquids, Hazard Category 3

Acute Tox. 4: Acute toxicity, Hazard Category 4

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Acute Tox. 3: Acute toxicity, Hazard Category 3
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
Asp. Tox. 1: Aspiration hazard, Hazard Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

* Pata compared to the provious version altered

* Data compared to the previous version altered.