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SECTION 1: Identification of the substance/mixture and of the company/undertaking
· 1.1 Product identifier
Trade name: <u>KEMAPOX GRUND 2040 A</u>
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 Construction chemicals

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

GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

GHS07

Skin Irrit. 2	H315	Causes skin irritation.
Eye Irrit. 2	H319	Causes serious eye irritation.
Skin Sens. 1	H317	May cause an allergic skin reaction.

· 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



· Signal word Warning

 Hazard-determining components of labelling: reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700) formaldehyde, oligomeric reaction products with 1-chloro-2, 3-epoxypropane and phenol oxirane, mono[(C12-14-alkyloxy)methyl] derivs
 Hazard statements H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

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· Precautional	ry statements
P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P273	Avoid release to the environment.
P305+P351+	-P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if
	present and easy to do. Continue rinsing.
P321	Specific treatment (see on this label).
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

. 2.3 Other hazards

· Results of PBT and vPvB assessment

· **PBT:** Not applicable.

. vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

. 3.2 Chemical characterisation: Mixtures

. Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:		
CAS: 25068-38-6 NLP: 500-033-5 Index number: 603-074-00-8	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700) Aquatic Chronic 2, H411 Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	50-100%
CAS: 9003-36-5	formaldehyde, oligomeric reaction products with 1-chloro-2,3- epoxypropane and phenol Aquatic Chronic 2, H411 Skin Irrit. 2, H315; Skin Sens. 1, H317	10-25%
CAS: 68609-97-2 EINECS: 271-846-8 Index number: 603-103-00-4	oxirane, mono[(C12-14-alkyloxy)methyl] derivs ③ Skin Irrit. 2, H315; Skin Sens. 1, H317	10-25%

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

SECTION 4: First aid measures

• 4.1 Description of first aid measures

. General information: Immediately remove any clothing soiled by the product.

After inhalation:

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: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- · After swallowing: If symptoms persist consult doctor.
- 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: Use fire extinguishing methods suitable to surrounding conditions.
- . 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- · 5.3 Advice for firefighters
- · Protective equipment: No special measures required.

SECTION 6: Accidental release measures

- . 6.1 Personal precautions, protective equipment and emergency procedures Not required.
- 6.2 Environmental precautions: Do not allow product to reach sewage system or any water course. 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.
- 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.
- . Information about fire and explosion protection: No special measures required.
- . 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.

- . 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

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Additional information: The lists valid during the making were used as basis.
8.2 Exposure controls
Personal protective equipment:
General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.
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:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

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

Eye protection:



Tightly sealed goggles

9.1 Information on basic physical a General Information Appearance:	and chemical properties	
Form:	Liquid	
Colour:	According to product specification	
Odour:	Characteristic	
Odour threshold:	Not determined.	
pH-value at 20 °C:	7	
Change in condition		
Melting point/Melting range:	Undetermined.	

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· Flash point:	118 °C	
· Flammability (solid, gaseous):	Not applicable.	
· Ignition temperature:		
Decomposition temperature:	Not determined.	
· Self-igniting:	Product is not selfigniting.	
· Danger of explosion:	Product does not present an explosion hazard.	
· Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
· Vapour pressure:	Not determined.	
· Density at 25 •C:	1,12 g/cm ³	
· Relative density	Not determined.	
· Vapour density	Not determined.	
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
water:	Not miscible or difficult to mix.	
· Partition coefficient (n-octanol/wat	er): 3,6	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic at 25 °C:	63 s	
· Solvent content:		
Organic solvents:	0,0 %	
VOC (EC)	0,00 %	
• 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 No dangerous reactions known.
- . 10.4 Conditions to avoid No further relevant information available.
- . 10.5 Incompatible materials: No further relevant information available.
- . 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

- . 11.1 Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.
- · Primary irritant effect:
- · Skin corrosion/irritation
- Causes skin irritation.

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- · Serious eye damage/irritation
- Causes serious eye irritation.
- **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: No further relevant information available.
- . 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: Toxic for fish
- · Additional ecological information:
- · General notes:
- 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. Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

- . 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.

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

· 14.1 UN-Number	
· ADR, RID, ADN, IMDG, IATA	UN3082
· 14.2 UN proper shipping name · IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE
	LIQUID, N.O.S. (reaction product: bisphenol-A-

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LIQUID, N.O.S. (reaction product: bisphenol-A (epichlorhydrin) epoxy resin (number average molecula weight ≤ 700)) • 14.3 Transport hazard class(es) • ADR/RID/ADN • • • • • • • • • • • • • • • • • • •		(Contd. of page
Label 9 IMDG, IATA Image: Construct of the second sec	. IATA	weight ≤ 700)), MARINE POLLUTANT ENVIRONMENTALLY HAZARDOUS SUBSTANCE LIQUID, N.O.S. (reaction product: bisphenol-A (epichlorhydrin) epoxy resin (number average molecula
Image: Class 9 (M6) Miscellaneous dangerous substances and articles. 1 abel 9 I abel 9 I abel 9 I abel 9 MDG, IATA Image: Class I abel 9 I class 9 Miscellaneous dangerous substances and articles. I abel 9 I class 9 ADR, RID, ADN, IMDG, IATA III I 4.4 Packing group Narine pollutant: Product contains environmentally hazardous substances reaction product: bisphenol-A - (epichlorhydrin) epoxy resi (number average molecular weight ≤ 700) Special marking (ADR/RID/ADN): Symbol (fish and tree) Special marking (ADR/RID/ADN): Symbol (fish and tree) Special marking (ADR/RID/ADN): Symbol (fish and tree) Special precautions for user Warning: Miscellaneous dangerous substances and articles. Danger code (Kenler): 90 EMS Number: F-A,S-F Stowage Category A I 4.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable. Transport/Additional information: Code: EI Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 30 ml Maximum	· 14.3 Transport hazard class(es)	
Label 9 IMDG, IATA Image: Constraint of the second se	· ADR/RID/ADN	
IMDG, IATA Image: Second Se		
Image: Class 9 Miscellaneous dangerous substances and articles. 1 Label 9 1 L4 Packing group 9 1 L4 Packing group 11 1 L5 Environmental hazards: Product contains environmentally hazardous substances reaction product: bisphenol-A-(epichlorhydrin) epoxy resi (number average molecular weight ≤ 700) 9 Marine pollutant: Symbol (fish and tree) Special marking (ADR/RID/ADN): Symbol (fish and tree) Special marking (IATA): Symbol (fish and tree) 1 L6 Special precautions for user Warning: Miscellaneous dangerous substances and articles. 90 EMS Number: 1 L4.5 Special precautions for user Yeaning: Miscellaneous dangerous substances and articles. 90 EMS Number: 5 Stowage Category A 1 Later in bulk according to Annex II of Marpol and the IBC Code Not applicable. 1 Transport/Additional information: SL ADR/RID/ADN SL Limited quantities (LQ) SL Excepted quantities (EQ) SL Code: EI Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml Transport category 3		, ,
• ADR,RID,ADN, IMDG, IATA III • 14.5 Environmental hazards: Product contains environmentally hazardous substance. reaction product: bisphenol-A-(epichlorhydrin) epoxy rest (number average molecular weight ≤ 700) • Marine pollutant: Symbol (fish and tree) • Special marking (ADR/RID/ADN): Symbol (fish and tree) • Special marking (IATA): Symbol (fish and tree) • 14.6 Special precautions for user Warning: Miscellaneous dangerous substances and articles. • Danger code (Kemler): 90 • EMS Number: F-A,S-F • Stowage Category A • 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable. • Transport/Additional information: SL • ADR/RID/ADN SL • Limited quantities (LQ) SL • Excepted quantities (EQ) Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml • Transport category 3		
reaction product: bisphenol-A-(epichlorhydrin) epoxy resise (number average molecular weight ≤ 700)• Marine pollutant:Symbol (fish and tree)• Special marking (ADR/RID/ADN):Symbol (fish and tree)• Special marking (IATA):Symbol (fish and tree)• I4.6 Special precautions for userWarning: Miscellaneous dangerous substances and articles.• Danger code (Kemler):90• EMS Number:F-A, S-F• Stowage CategoryA• 14.7 Transport in bulk according to Annex II of Marpol and the IBC CodeNot applicable.• Transport/Additional information:SL• Limited quantities (LQ)SL• Excepted quantities (EQ)Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml• Transport category3		111
 Danger code (Kemler): 90 EMS Number: F-A,S-F Stowage Category A 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable. Transport/Additional information: ADR/RID/ADN Limited quantities (LQ) 5L Excepted quantities (EQ) Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml Transport category 3 	· Marine pollutant: · Special marking (ADR/RID/ADN):	reaction product: bisphenol-A-(epichlorhydrin) epoxy rest (number average molecular weight \leq 700) Symbol (fish and tree) Symbol (fish and tree)
 Danger code (Kemler): 90 EMS Number: F-A,S-F Stowage Category A 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable. Transport/Additional information: ADR/RID/ADN Limited quantities (LQ) 5L Excepted quantities (EQ) Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml Transport category 3 	14.6 Special precautions for user	Warning: Miscellaneous dangerous substances and articles.
 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable. Transport/Additional information: ADR/RID/ADN Limited quantities (LQ) Excepted quantities (EQ) Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml Transport category 	 Danger code (Kemler): EMS Number: 	90 F-A, S-F
Marpol and the IBC Code Not applicable. • Transport/Additional information: . • ADR/RID/ADN . • Limited quantities (LQ) . • Excepted quantities (EQ) . • Transport category .		
 ADR/RID/ADN Limited quantities (LQ) Excepted quantities (EQ) Transport category 5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml 3 		
 Limited quantities (LQ) Excepted quantities (EQ) Transport category 5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml 3 	· Transport/Additional information:	
	· Limited quantities (LQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml
		-

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· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
• UN "Model Regulation":	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (REACTION PRODUCT: BISPHENOL-A-(EPICHLORHYDRIN) EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT ≤ 700)), 9, III

SECTION 15: Regulatory information

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

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- . Seveso category E2 Hazardous to the Aquatic Environment
- \cdot Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t
- . REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- . 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

H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H411 Toxic to aquatic life with long lasting effects.

· Department issuing SDS: R&D DEPARTMENT

· Abbreviations and acronyms: ADR: Acc ord e uropéen sur le transport des marchandises dan gereuses par Route (Europe an 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) VOC: Volatile Organic Compounds (USA, EU) PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Skin Irrit. 2: Skin corrosion/irritation - Category 2 Eye Irrit. 2: Serious eye damage/eye irritation - Category 2 Skin Sens. 1: Skin sensitisation – Category 1 Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2

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