

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 15.03.2018



Version number 5

Revision: 15.03.2018

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

- 1.1 Product identifier
- Trade name: **KEMCO POX 2K (B)**
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
- Application of the substance / the mixture: Coating
- 1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier: KEMPER SYSTEM GmbH & Co. KG
Holländische Strasse 32-36
34246 Vellmar
Deutschland / Germany
Telefon: +49 (0)561 / 8295-0
Telefax: +49 (0)561 / 8295-5110
E-Mail: MSDS@KEMPER-SYSTEM.COM
- Further information obtainable from: research & development
- 1.4 Emergency telephone number: Giftinformationszentrum der Länder Rheinland-Pfalz und Hessen
Langenbeckstraße 1; Gebäude 601; 55131 Mainz
Tel. Nr.: +49 (0)6131 / 19 24 0
Universitätsmedizin der Johannes Gutenberg-Universität Mainz

SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008
- 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.
- Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.
- 2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008
- Hazard pictograms
- The product is classified and labelled according to the CLP regulation.
-  
- GHS07 GHS09
- Signal word
- Warning
- Hazard-determining components of labelling:
- Hazard statements
- reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700)
- 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.
- Precautionary statements
- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P273 Avoid release to the environment.
- P280 Wear protective gloves / eye protection / face protection.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- Additional information:
- EUH205 Contains epoxy constituents. 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

- 3.2 Chemical characterisation: Mixtures
- Description: Mixture: consisting of the following components.

- Dangerous components:

CAS: 25068-38-6	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700)	50-100%
NLP: 500-033-5	Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1B, H317	
Index number: 603-074-00-8		
Reg.nr.: 01-2119456619-26		

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

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SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
Do not leave affected persons unattended.
Personal protection for the First Aider.
Take affected persons out of danger area and lay down.
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
Seek medical treatment in case of complaints.
- **After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
Protect unharmed eye.
If symptoms persist consult doctor.
- **After swallowing:** No further relevant information available.
- **4.2 Most important symptoms and effects, both acute and delayed**
- **4.3 Indication of any immediate medical attention and special treatment needed**

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture** Formation of toxic gases is possible during heating or in case of fire.
- **5.3 Advice for firefighters**
- **Protective equipment:** Do not inhale explosion gases or combustion gases.
- **Additional information** Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Avoid contact with skin and eyes
- **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.
Prevent from spreading (e.g. by damming-in or oil barriers).
- **6.3 Methods and material for containment and cleaning up:** Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
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** Store in cool, dry place in tightly closed receptacles.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:** Protect from frost.
Store in dry conditions.

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- | | |
|---|--|
| <ul style="list-style-type: none"> - Storage class: - 7.3 Specific end use(s) | <p>Keep container tightly sealed.
Recommended storage temperature: 5 - 30 °C
10
No further relevant information available.</p> |
|---|--|

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:**
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:** The usual precautionary measures are to be adhered to when handling chemicals. 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:** When used properly and under normal conditions, breathing protection is not required. Use suitable respiratory protective device in case of insufficient ventilation. Filter A/P2
Respiratory protection - Gas filters and combination filters according to EN 141
- **Protection of hands:**



Protective gloves

Check protective gloves prior to each use for their proper condition. Only use chemical-protective gloves with CE-labelling of category III. 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 After use of gloves apply skin-cleaning agents and skin cosmetics.
- **Material of gloves** Recommended materials:
Butyl rubber, BR
Recommended thickness of the material: ≥ 0.5 mm
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.
- **Penetration time of glove material** The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.
- **As protection from splashes gloves made of the following materials are suitable:** Nitrile rubber, NBR
Recommended thickness of the material: ≥ 0.1 mm
Penetration time (min.): <10
- **Eye protection:**



Tightly sealed goggles

Protective goggles and facial protection - Classification according to EN 166
- **Body protection:** Protective work clothing
Impervious protective clothing

SECTION 9: Physical and chemical properties

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

Form:	Fluid
Colour:	Light yellow
- **Odour:** Characteristic
- **Odour threshold:** Not determined.

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- pH-value at 20 °C:	7
- Change in condition	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	Undetermined.
- Flash point:	> 100 °C
- Flammability (solid, gas):	Not applicable.
- Decomposition temperature:	Not determined.
- Auto-ignition temperature:	Product is not selfigniting.
- Explosive properties:	Product does not present an explosion hazard.
- Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
- Density at 20 °C:	1.15 g/cm ³
- Relative density	Not determined.
- Vapour density	Not determined.
- Evaporation rate	Not determined.
- Solubility in / Miscibility with water:	Fully miscible.
- Partition coefficient: n-octanol/water:	Not determined.
- Viscosity:	
Dynamic at 23 °C:	700 mPas
Kinematic:	Not determined.
- Solvent content:	
VOC (EC)	0.47 %
- 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: No further relevant information available.
- 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.

- LD/LC50 values relevant for classification:

25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700)

Oral	LD50	11,400 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LCLo	1 mg/l (rat)

- Primary irritant effect: Causes skin irritation.
- Skin corrosion/irritation: Causes serious eye irritation.
- Serious eye damage/irritation: May cause an allergic skin reaction.
- Respiratory or skin sensitisation: Causes serious eye irritation.
- CMR effects (carcinogenicity, 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.

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Trade name: **KEMCO POX 2K (B)**

- **Aspiration hazard**

Based on available data, the classification criteria are not met.

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SECTION 12: Ecological information

- **12.1 Toxicity**

- **Aquatic toxicity:**

25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700)

IC50	>42.6 mg/l (Bakterien) (18h)
LC50/96 h	1.5 mg/l (fish) (OECD 203 (96 hr)) 1.5 mg/l (Oncorhynchus mykiss (Regenbogenforelle))
EC50 (24)	3.6 mg/l (dpa)
EC50	1.8 mg/l (Daphnia magna) (48h)
EC50	9.4 mg/l (ALGAE) (EPA CFR (72 hr)) 1.7 mg/l (daphnia) (OECD 202 (48 hr)) 11 mg/l (Selenastrum capricornutum) (72h)
NOEC	0.3 mg/l (Daphnia magna) (21d)
MATC	0.55 mg/l (Daphnia magna) (21d)

- **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.

- **Ecotoxicological 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.
Disposal according to official regulations

- **European waste catalogue**

08 04 09*	waste adhesives and sealants containing organic solvents or other hazardous substances
08 04 10	waste adhesives and sealants other than those mentioned in 08 04 09

- **Uncleaned packaging:**

- **Recommendation:**

Disposal must be made according to official regulations.

SECTION 14: Transport information

- **14.1 UN-Number**

- **ADR, IMDG, IATA**

UN3082

- **14.2 UN proper shipping name**

- **ADR**

3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700))

- **IMDG**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700)), MARINE POLLUTANT

- **IATA**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700))

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- 14.3 Transport hazard class(es)

- ADR



- Class 9 (M6) Miscellaneous dangerous substances and articles.
- Label 9

- IMDG, IATA



- Class 9 Miscellaneous dangerous substances and articles.
- Label 9

- 14.4 Packing group
- ADR, IMDG, IATA

III

- 14.5 Environmental hazards:

Product contains environmentally hazardous substances: reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700)
- Marine pollutant: Yes
- Special marking (ADR): Symbol (fish and tree)
- Special marking (IATA): Symbol (fish and tree)

- 14.6 Special precautions for user
- Danger code (Kemler):
- EMS Number:
- Stowage Category

Warning: Miscellaneous dangerous substances and articles.
 90
 F-A,S-F
 A

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

Not applicable.

- Transport/Additional information:

- ADR
- 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
- Tunnel restriction code -
- Remarks: Container sizes below 5L = EXEMPT FROM LABELING according special provision 375 ADR

- IMDG
- 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
- Remarks: Container sizes below 5L = EXEMPT FROM LABELING according special provision 2.10.2.7 IMDG

- UN "Model Regulation":

UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (REACTION PRODUCT: BISPHENOL-A-(EPICHLORHYDRIN) EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT \leq 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
- Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t

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- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **National regulations:**
- **Information about limitation of use:** Employment restrictions concerning juveniles must be observed.
Employment restrictions concerning women of child-bearing age must be observed.
Employment restrictions concerning pregnant and lactating women must be observed.
- **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:** research & development
- **Contact:** research & development
- **Abbreviations and acronyms:** 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)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
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
Skin Sens. 1B: Skin sensitisation – Category 1B
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
- **Sources** Internet:
- www.echa.com
- www.baua.de
- www.gestis.itrust.de (IFA: Institute für Occupational Safety and Health of the German Social Accident Insurance)
- *** Data compared to the previous version altered.**