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# SAFETY DATA SHEET according to 1907/2006/EC, Article 31 Revision date: 12.04.2017

# <u>1-IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE</u> COMPANY/UNDERTAKING

**Product details** 

Trade name: 2K Epoxy Primer

**Article number: 14554** 

**Intended use:** Car refinishing Product/ Filler/ Extender

Manufacturer/Supplier: Chamäleon GmbH

Rudolf-Diesel-Straße, 8a, 69115 Heidelberg -- Germany

**Further information obtainable from:** Product Safety Department **Information in case of emergency:** + 49 70024112112 (CH)

## <u>2 – HAZARDS IDENTIFICATION</u>

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



GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



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.



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#### Label elements

# Labelling according to Regulation (EC) No 1272/2008:

GHS09

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

# Hazard pictograms



GHS02 GHS07 **Signal word:** Warning

# Hazard-determining components of labelling:

bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight 700-1100) reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight =< 700)

Fatty acids,C18-unsatd., dimers, reaction products with N,N-dimethyl-1,3-propanediamine and1,3-propanediamine

# **Hazard statements**

H226 Flammable liquid and vapour.

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**

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.

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

P241 Use explosion-proof electrical/ventilating/lighting equipment.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

#### **Additional information:**

EUH205 Contains epoxy constituents. May produce an allergic reaction.

## Other hazards

## Results of PBT and vPvB assessment

**PBT:** Not applicable. **vPvB:** Not applicable.



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# 3- COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical characterization:** Mixtures

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

bisphenol-A-(epichlorhydrin), epoxy resin (number average molecular weight 700-1100)	r 10-25%	
Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317		
xylene	2.5-<10%	
lam. Liq. 3, H226; STOT RE 2, H373; Asp. Tox. 1, H304; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335		
1-methoxy-2-propanol	2.5-<10%	
Flam. Liq. 3, H226; STOT SE 3, H336		
butanone	2.5-<10%	
Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336		
Kaliumaluminiumsilikat substance with a Community workplace exposure limit	2.5-<10%	
reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight =< 700)	2.5-<5%	
Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317		
trizinc bis(orthophosphate)	2.5-<10%	
Aquatic Acute 1, H400; Aquatic Chronic 1, H410		
isobutanol	2.5-<3%	
Flam. Liq. 3, H226; Eye Dam. 1, H318; Skin Irrit. 2, H315; STOT SE 3, H335-H336		
Fatty acids,C18-unsatd., dimers, reaction products with N,Ndimethyl-1,3-propanediamine and1,3-propanediamine Skin Sens. 1A, H317	0.1-<1%	
	average molecular weight 700-1100)  Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317  xylene  lam. Liq. 3, H226; STOT RE 2, H373; Asp. Tox. 1, H304; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335  1-methoxy-2-propanol  Flam. Liq. 3, H226; STOT SE 3, H336  butanone  Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336  Kaliumaluminiumsilikat substance with a Community workplace exposure limit 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  trizinc bis(orthophosphate)  Aquatic Acute 1, H400; Aquatic Chronic 1, H410 isobutanol  Flam. Liq. 3, H226; Eye Dam. 1, H318; Skin Irrit. 2, H315; STOT SE 3, H335-H336  Fatty acids, C18-unsatd., dimers, reaction products with N,Ndimethyl-1,3-propanediamine and 1,3-propanediamine	

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



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# 4- FIRST - AID MEASURE

# **Description of first aid measures**

#### 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.

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

**Information for doctor:** 

# <u>5– FIRE - FIGHTING MEASURE</u>

## **Extinguishing media**

Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.

For safety reasons unsuitable extinguishing agents: Water with full jet

Special hazards arising from the substance or mixture No further relevant information available.

Advice for firefighters

**Protective equipment:** No special measures required.

## 6- ACCIDENTAL RELEASE MEASURE

## Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

## **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.

# Methods and material for containment and cleaning up:

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

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents.

#### 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.



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# 7- HANDLING AND STORAGE

# Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

# Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

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: Store away from foodstuffs.

Further information about storage conditions: Keep container tightly sealed.

Storage class: 3

Specific end use(s) No further relevant information available.

## 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

**Control parameters** 

	ents with limit values that require monitoring at the workplace:
1330-20	0-7 xylene
WEL	Short-term value: 441 mg/m3, 100 ppm
	Long-term value: 220 mg/m3, 50ppm
	Sk; BMGV
107-98-	2 1-methoxy-2-propanol
WEL	Short-term value: 560 mg/m3, 150 ppm
	Long-term value: 375 mg/m3, 100ppm
	Sk
78-93-3	butanone
WEL	Short-term value: 899 mg/m3, 300ppm
	Long-term value: 600 mg/m3, 200ppm
	Sk, BMGV
12001-2	6-2 Kaliumaluminiumsilikat
WEL	Long-term value: 10* 0.8** mg/m <sup>3</sup>
	*total inhalable **respirable
78-83-1	isobutanol
WEL	Short-term value: 231 mg/m³, 75 ppm
	Long-term value: 154 mg/m³, 50 ppm

Ingredi	ents with biological limit values:
1330-20	- 7 xylene
BMGV	650 mmol/mol creatinine
	Medium: urine
	Sampling time: post shift
	Parameter: methyl hippuric acid



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78-93-3	3 butanone	
<b>BMGV</b>	70 μmol/L	
	Medium: urine	
	Sampling time: post shift	
	Parameter: butan-2-one	

**Additional information:** The lists valid during the making were used as basis.

**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:**

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/the chemical mixture.

Protective gloves (EN 374)

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

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

Eye protection: Tightly sealed goggles

#### 9 – PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties **General Information** Appearance: Form: Colour: According to product specification

Characteristic **Odour:** Not determined. **Odour threshold:** 

Not determined. pH-value:



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Melting point/freezing point: Initial boiling point and boiling range:  Flash point:  Flash point:  Flammability (solid, gas):  Ignition temperature:  Decomposition temperature:  Not determined.  Auto-ignition temperature:  Product is not selfigniting.  Product is not explosive. However, formation of explosive air/vapour mixtures are possible.  Explosion limits:  Lower:  1.1 Vol %  Upper:  7.0 Vol %  Vapour pressure at 20 °C:  Relative density  Vapour density  Not determined.  Not determined.  Not miscible or difficult to mix	[	
Initial boiling point and boiling range: 79-80.5 °C  Flash point: 24 °C (DIN EN ISO 1523:2002)  Flammability (solid, gas): Not applicable.  Ignition temperature: 270 °C(DIN 51794)  Decomposition temperature: Not determined.  Auto-ignition temperature: Product is not selfigniting.  Danger of explosion: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.  Explosion limits:  Lower: 1.1 Vol %  Upper: 7.0 Vol %  Vapour pressure at 20 °C: 105 hPa.  Density at 20 °C: 1.453 g/cm³ (DIN EN ISO 2811-1)  Relative density Not determined.  Vapour density Not determined.  Solubility in / Miscibility with water: Not miscible or difficult to mix	Change in condition	
Flash point:  Flash point:  24 °C (DIN EN ISO 1523:2002)  Flammability (solid, gas):  Not applicable.  Ignition temperature:  270 °C(DIN 51794)  Decomposition temperature:  Not determined.  Auto-ignition temperature:  Product is not selfigniting.  Product is not explosive. However, formation of explosive air/vapour mixtures are possible.  Explosion limits:  Lower:  1.1 Vol %  Upper:  7.0 Vol %  Vapour pressure at 20 °C:  1.453 g/cm³ (DIN EN ISO 2811-1)  Relative density  Not determined.  Vapour density  Not determined.  Not determined.  Solubility in / Miscibility with water:  Not miscible or difficult to mix		
Flammability (solid, gas):  Not applicable.  Ignition temperature:  270 °C(DIN 51794)  Decomposition temperature:  Not determined.  Auto-ignition temperature:  Product is not selfigniting.  Product is not explosive. However, formation of explosive air/vapour mixtures are possible.  Explosion limits:  Lower:  1.1 Vol %  Upper:  7.0 Vol %  Vapour pressure at 20 °C:  1.453 g/cm³ (DIN EN ISO 2811-1)  Relative density  Not determined.  Vapour density  Not determined.  Solubility in / Miscibility with water:  Not miscible or difficult to mix	<b>Initial boiling point and boiling range:</b>	
Ignition temperature:  Decomposition temperature:  Not determined.  Auto-ignition temperature:  Product is not selfigniting.  Product is not explosive. However, formation of explosive air/vapour mixtures are possible.  Explosion limits:  Lower:  1.1 Vol %  Upper:  7.0 Vol %  Vapour pressure at 20 °C:  105 hPa.  Density at 20 °C:  1.453 g/cm³ (DIN EN ISO 2811-1)  Relative density  Not determined.  Not determined.  Not determined.  Solubility in / Miscibility with water:  Not miscible or difficult to mix	Flash point:	24 °C (DIN EN ISO 1523:2002)
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Explosion limits:  Lower: Upper:  7.0 Vol %  Vapour pressure at 20 °C:  1.453 g/cm³ (DIN EN ISO 2811-1)  Relative density  Vapour density  Not determined.  Not determined.  Not determined.  Solubility in / Miscibility with water:  Not miscible or difficult to mix	Auto-ignition temperature:	Product is not selfigniting.
Lower: Upper: 7.0 Vol %  Vapour pressure at 20 °C: 105 hPa.  Density at 20 °C: 1.453 g/cm³ (DIN EN ISO 2811-1) Relative density Not determined. Vapour density Not determined. Evaporation rate Not determined. Not determined. Not determined. Not determined. Not determined.	Danger of explosion:	± , , , , , , , , , , , , , , , , , , ,
Upper: 7.0 Vol %  Vapour pressure at 20 °C: 105 hPa.  Density at 20 °C: 1.453 g/cm³ (DIN EN ISO 2811-1)  Relative density Not determined.  Vapour density Not determined.  Evaporation rate Not determined.  Solubility in / Miscibility with water: Not miscible or difficult to mix	<b>Explosion limits:</b>	
Vapour pressure at 20 °C:  105 hPa.  1.453 g/cm³ (DIN EN ISO 2811-1)  Relative density  Not determined.  Vapour density  Not determined.  Evaporation rate  Not determined.  Not determined.  Not determined.  Not determined.	Lower:	1.1 Vol %
Density at 20 °C:  Relative density  Vapour density  Not determined.  Not determined.  Evaporation rate  Not determined.  Not determined.  Not determined.  Not determined.  Not determined.	Upper:	7.0 Vol %
Relative density Vapour density Not determined.  Not determined.  Not determined.  Not determined.  Not determined.  Not determined.	Vapour pressure at 20 °C:	105 hPa.
Vapour density Not determined. Evaporation rate Not determined. Not determined. Not miscible or difficult to mix	Density at 20 °C:	
Evaporation rate  Not determined.  Solubility in / Miscibility with water:  Not miscible or difficult to mix	Relative density	Not determined.
Solubility in / Miscibility with water: Not miscible or difficult to mix	Vapour density	Not determined.
	Evaporation rate	Not determined.
Partition coefficients n octanol/water Not determined	Solubility in / Miscibility with water:	Not miscible or difficult to mix
i ai ution coefficient. n-octanoi/water i voi determined.	Partition coefficient: n-octanol/water	Not determined.
Viscosity:	Viscosity:	
<b>Dynamic:</b> Not determined.	Dynamic:	Not determined.
<b>Kinematicat 20 °C:</b> 210 s (DIN 53211/4)	Kinematicat 20 °C:	210 s (DIN 53211/4)
Solvent content:	Solvent content:	
VOC (EC) 28.01 %	VOC (EC)	28.01 %
Solids content (weight-%): 72.0 %	Solids content (weight-%):	72.0 %
Other information No further relevant information available.		No further relevant information available.

# 10-STABILITY AND REACTIVITY

Reactivity No further relevant information available.

**Chemical stability** 

**Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

**Possibility of hazardous reactions:** No dangerous reactions known. **Conditions to avoid:** No further relevant information available. **Incompatible materials:** No further relevant information available.

**Hazardous decomposition products:** 

Possible in traces. Nitrogen oxides

Hydrogen chloride (HCl)

Carbon monoxide

Nitrogen oxides (NOx)

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# 11- TOXILOGICAL INFORMATION

# **Information on toxicological effects**

**Acute toxicity:** Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification:				
1330-20-7 x	1330-20-7 xylene			
Oral Dermal Inhalative	LD50 LD50 LC50/4 h	(Dämpfe)	5251 mg/kg (rat) > 5000 mg/kg (rabbit) 29 mg/l (rat)	
25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight =< 700)				
Oral Dermal	LD50 LD50	> 5000 mg/kg (rat) > 2000 mg/kg (rabbit)		
7779-90-0 trizinc bis(orthophosphate)				
Oral	LD50		>5000 mg/kg (rat)	

# **Primary irritant effect:**

#### Skin corrosion/irritation

Causes skin irritation.

#### 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.

# <u>12 – ECOLOGICAL INFORMATION</u>

**Toxicity** 

Aquatic toxicity: No further relevant information available.

**Persistence and degradability** No further relevant information available.

**Bioaccumulative potential** No further relevant information available.

Mobility in soil No further relevant information available.

**Ecotoxical effects: Remark:** Toxic for fish

Additional ecological information:

**General notes:** 



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Water hazard class 2 (German Regulation): 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

Results of PBT and vPvB assessment

**PBT:** Not applicable. **vPvB:** Not applicable.

Other adverse effects No further relevant information available.

# 13- DISPOSAL CONSIDERATION

# Waste treatment methods

#### Recommendation

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

08 01 11\* waste paint and varnish containing organic solvents or other dangerous substances

## Uncleaned packaging:

**Recommendation:** Disposal must be made according to official regulations.

## 14- TRANSPORT INFORMATION

**UN-Number** 

ADR, IMDG, IATA UN1263

UN proper shipping name

ADR UN1263 PAINT, ENVIRONMENTALLY HAZARDOUS IMDG PAINT (bisphenolresins, trizinc bis(orthophosphate)),

MARINE POLLUTANT

MARINE PULLUTAN

PAINT PAINT

Transport hazard class(es)

**ADR** 



Class 3 (F1) Flammable liquids.

Label



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#### **IMDG**



Class 3 Flammable liquids.

Label 3

**IATA** 



Class 3 Flammable liquids.

Label 3

Packing group

ADR, IMDG, IATA III

**Environmental hazards:** Product contains environmentally hazardous substances:

trizinc bis(orthophosphate)

Marine pollutant: No

Symbol (fish and tree)

Special marking (ADR): Symbol (fish and tree)

**Special precautions for user** Warning: Flammable liquids.

Danger code (Kemler): 30

EMS Number: F-E,S-E

Stowage Category: A

Transport in bulk according to Annex II of

Marpol and the IBC Code Not applicable.

**Transport/Additional information:** 

**ADR** 

Transport category 3
Tunnel restriction code D/E

**Remarks:**  $\leq 5 1: 2.2.3.1.5 \text{ ADR}$ 

**IMDG** 

Limited quantities (LQ) 5L

**Remarks:**  $\leq 5 \text{ 1: } 2.2.3.1.5 \text{ IMDG}$ 

UN "Model Regulation": UN 1263 PAINT, 3, III, ENVIRONMENTA LLY

**HAZARDOUS** 



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# <u>15 – REGULATORY INFORMATION</u>

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

P5c FLAMMABLE LIQUIDS

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

## **National regulations:**

Class	Share in %
NK	25-50

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

# **16-OTHER INFORMATION**

#### **Relevant phrases**

- H225 Highly flammable liquid and vapour.
- 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.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H373 May cause damage to organs through prolonged orrepeated exposure.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H411 Toxic to aquatic life with long lasting effects.

The information contained in these sheets is based on the present state of knowledge and current national legislation. It provides guidance on health, safety and environmental aspects and should not be construed as any guarantee of technical performance or suitability for particular applications.



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