# **SAFETY DATA SHEET**



KORRO E - All variants

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

1.1	Product identifier	
Pr	oduct name	

: KORRO E - All variants

**1.2 Relevant identified uses of the substance or mixture and uses advised againstProduct use**: Paint.

#### 1.3 Details of the supplier of the safety data sheet

Teknos Group Oy, Takkatie 3, FI-00370 HELSINKI, FINLAND. Tel. +358 9 506 091.

e-mail address of person : Prod-safe@teknos.com

responsible for this SDS

#### **National contact**

Teknos Group Oy, Takkatie 3, FI-00370 HELSINKI, FINLAND. Tel. +358 9 506 091.

#### 1.4 Emergency telephone number

#### National advisory body/Poison Centre

 Telephone number
 : National Poisons Information Centre: 01 809 2566

### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Flam. Liq. 2, H225 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 2, H361d STOT SE 3, H336 STOT RE 2, H373 Aquatic Chronic 2, H411

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended. See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

#### 2.2 Label elements

Hazard pictograms



Signal word Hazard statements

#### : Danger

- : H225 Highly flammable liquid and vapour.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.
- H361d Suspected of damaging the unborn child.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H411 Toxic to aquatic life with long lasting effects.

#### **Precautionary statements**

## **SECTION 2: Hazards identification**

Prevention	•	P280 - Wear protective gloves, protective clothing, eye protection, face protection,
	1	or hearing protection.
		P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition
		sources. No smoking.
		P273 - Avoid release to the environment.
Response	1	P391 - Collect spillage.
Storage	:	P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
Disposal	:	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazardous ingredients	:	Contains: Toluene
Supplemental label elements	:	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	:	
2.3 Other hazards		
Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	:	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
Other hazards which do		None known.

not result in classification

## **SECTION 3: Composition/information on ingredients**

3.2 Mixtures	: Mixture				
Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
Voluene	REACH #: 01-2119471310-51 EC: 203-625-9 CAS: 108-88-3 Index: 601-021-00-3	≥10 - ≤25	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361d STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304	-	[1] [2]
Propan-2-ol	REACH #: 01-2119457558-25 EC: 200-661-7 CAS: 67-63-0 Index: 603-117-00-0	≥10 - ≤25	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	-	[1] [2]
titanium dioxide	REACH #: 01-2119489379-17 EC: 236-675-5 CAS: 13463-67-7	≥10 - ≤25	Carc. 2, H351 (inhalation)	-	[1] [*]
Butanone	REACH #: 01-2119457290-43 EC: 201-159-0 CAS: 78-93-3 Index: 606-002-00-3	≤10	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066	-	[1] [2]
Trizinc bis(orthophosphate)	REACH #: 01-2119485044-40 EC: 231-944-3 CAS: 7779-90-0 Index: 030-011-00-6	≤5	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 1 M [Chronic] = 1	[1]
Date of issue/Date of revision	: 15/05/2024 Date	e of previous is	sue : 05/09/2022	Version : 2	2/17
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## SECTION 3: Composition/information on ingredients See Section 16 for the full text of the H statements declared above.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Туре

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[\*] The classification as a carcinogen by inhalation applies only to mixtures placed on the market in powder form containing 1% or more of titanium dioxide particles with aerodynamic diameter  $\leq$  10 µm not bound within a matrix.

Occupational exposure limits, if available, are listed in Section 8.

### **SECTION 4: First aid measures**

4.1 Description of first aid r	1 Description of first aid measures		
Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.		
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.		
Skin contact	: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.		
Ingestion	: Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.		
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.		

#### 4.2 Most important symptoms and effects, both acute and delayed Over-exposure signs/symptoms

over exposure signs/sympt	
Eye contact	: Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness reduced foetal weight increase in foetal deaths skeletal malformations

Skin contact	: Adverse symptoms may include the following: irritation redness reduced foetal weight increase in foetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
4.3 Indication of any immed	iate medical attention and special treatment needed
Notes to physician	: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.
Specific treatments SECTION 5: Firefigh	
SECTION 5: Firefigh	
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#### 5.2 Special hazards arising from the substance or mixture

	-	
Hazards from the substance or mixture	:	Highly flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous combustion products	:	Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides phosphorus oxides metal oxide/oxides
5.3 Advice for firefighters		
Special protective actions for fire-fighters	:	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	-	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## **SECTION 6: Accidental release measures**

6.1 Personal precautions, protective equipment and emergency procedures	
For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

### **SECTION 6: Accidental release measures**

6.2 Environmental precautions	: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.
6.3 Methods and materia	al for containment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.
6.4 Reference to other sections	<ul> <li>See Section 1 for emergency contact information.</li> <li>See Section 8 for information on appropriate personal protective equipment.</li> <li>See Section 13 for additional waste treatment information.</li> </ul>

## **SECTION 7: Handling and storage**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

#### 7.1 Precautions for safe handling

Protective measures	: Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

#### 7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Seveso Directive - Reporting thresholds

Danger criteria

: 15/05/2024 Date of previous issue

S	SECTION 7: Handling and storage		
	Category	Notification and MAPP threshold	Safety report threshold
	P5c E2	5000 tonne 200 tonne	50000 tonne 500 tonne

#### 7.3 Specific end use(s)

Recommendations

: Not available.

Industrial sector specific solutions

: Not available.

## **SECTION 8: Exposure controls/personal protection**

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

#### 8.1 Control parameters

#### **Occupational exposure limits**

Product/ingredient name	Exposure limit values
Toluene	NAOSH (Ireland, 5/2021). Absorbed through skin. Notes: EU
	derived Occupational Exposure Limit Values
	OELV-8hr: 50 ppm 8 hours.
	OELV-8hr: 192 mg/m <sup>3</sup> 8 hours.
	OELV-15min: 100 ppm 15 minutes.
	OELV-15min: 384 mg/m <sup>3</sup> 15 minutes.
Propan-2-ol	NAOSH (Ireland, 5/2021). Absorbed through skin. Notes:
	Advisory Occupational Exposure Limit Values (OELVs)
	OELV-8hr: 200 ppm 8 hours.
	OELV-15min: 400 ppm 15 minutes.
Butanone	NAOSH (Ireland, 5/2021). Absorbed through skin. Notes: EU
	derived Occupational Exposure Limit Values
	OELV-8hr: 200 ppm 8 hours.
	OELV-8hr: 600 mg/m <sup>3</sup> 8 hours.
	OELV-15min: 300 ppm 15 minutes.
	OELV-15min: 900 mg/m <sup>3</sup> 15 minutes.

#### **Biological exposure indices**

Product/ingredient	name	Exposure indices			
Toluene		NAOSH (Ireland, 1/2011)BMGV: 0.3 mg/g creatinine, o-cresol [in urine]. Sampling time:end of shift - As soon as possible after exposure ceases.BMGV: 0.03 mg/l, toluene [in urine]. Sampling time: end of shift -As soon as possible after exposure ceases.BMGV: 0.02 mg/l, toluene [in blood]. Sampling time: prior to lastshift of workweek.			
Propan-2-ol		NAOSH (Ireland, 1/2011) BMGV: 40 mg/l, acetone [in urine]. Sampling time: end of shift at end of workweek.			
Butanone		<b>NAOSH (Ireland, 1/2011)</b> BMGV: 70 µmol/l, butan-2- one [in urine]. Sampling time: post shift.			
Recommended monitoring : procedures	European Sta assessment of values and m atmospheres of exposure to (Workplace a	Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance			
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## **SECTION 8: Exposure controls/personal protection**

documents for methods for the determination of hazardous substances will also be required.

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Product/ingredient name	Туре	Exposure	Value	Population	Effects
Voluene	DNEL	Long term Oral	8.13 mg/	General	Systemic
			kg bw/day	population	
	DNEL	Long term	56.5 mg/m <sup>3</sup>	General	Local
		Inhalation		population	
	DNEL	Long term	56.5 mg/m <sup>3</sup>	General	Systemic
		Inhalation		population	
	DNEL	Long term Inhalation	192 mg/m <sup>3</sup>	Workers	Local
	DNEL	Long term Inhalation	192 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	226 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	226 mg/m <sup>3</sup>	General population	Local
	DNEL	Short term Inhalation	226 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	384 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	384 mg/m <sup>3</sup>	Workers	Local
	DNEL	Short term Inhalation	384 mg/m³	Workers	Systemic
Propan-2-ol	DNEL	Long term Oral	26 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	89 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	319 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	500 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	888 mg/kg bw/day	Workers	Systemic
Butanone	DNEL	Long term Oral	31 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	106 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	412 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	600 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	1161 mg/ kg bw/day	Workers	Systemic
Trizinc bis(orthophosphate)	DNEL	Long term Oral	0.83 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	2.5 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Inhalation	5 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	83 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	83 mg/kg bw/day	Workers	Systemic

#### **PNECs**

No PNECs available

#### 8.2 Exposure controls

## **SECTION 8: Exposure controls/personal protection**

Appropriate engineering controls	: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
Individual protection measu	<u>res</u>
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
	Recommendations : Wear suitable gloves tested to EN374.
	< 1 hour (breakthrough time): Nitrile gloves. thickness > 0.3 mm
	> 8 hours (breakthrough time): 4H / Silver Shield® gloves.
	Wash hands before breaks and immediately after handling the product.
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
	Filter type: A
For the second state	Filter type (spray application): A P
Environmental exposure controls	<ul> <li>Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.</li> <li>In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.</li> </ul>

## **SECTION 9: Physical and chemical properties**

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

#### 9.1 Information on basic physical and chemical properties

Appearance			
Physical state	: Liquid.		
Colour	: Various		
Odour	: Slight		
Odour threshold	: Not available.		
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## **SECTION 9: Physical and chemical properties**

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: Not available. Melting point/freezing point Initial boiling point and ŝ boiling range

Ingredient name	°C	°F	Method
Butanone	79.59	175.3	
Propan-2-ol	83	181.4	

Flammability	: Not available.
Lower and upper explosion limit	: Kower: 1.1% Upper: 12%
Flash point	: Øpper: 12 %

wer: 1.1% per: 12%

: Ølosed cup: 2°C (35.6°F)

#### Auto-ignition temperature

Ingredient name	°C	°F	Method
Butanone	404	759.2	
Propan-2-ol	456	852.8	

Decomposition temperature	1
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Not available. : Not available.

- : Kinematic (40°C): >20.5 mm²/s

Solubility(ies)

Viscosity

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Not available.

Solubility in water

: Not available. Partition coefficient: n-octanol/ : Not applicable.

#### water Vapour pressure

	Va	Vapour Pressure at 20°C			Vapour pressure at 50°C		
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method	
Butanone	78.7564	10.5					
Propan-2-ol	33.00268	4.4					

Relative density	: Not available.
Density	: 1.4 g/cm <sup>3</sup>
Vapour density	: Not available.
Explosive properties	: Not available.
Oxidising properties	: Not available.
Particle characteristics	
Median particle size	: Not applicable.

## **SECTION 10: Stability and reactivity**

10.1 Reactivity	No specific test data related to reactivity available for this product or its ingredients.				
10.2 Chemical stability	The product is stable.				
10.3 Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.				
10.4 Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.				
10.5 Incompatible materials	: Reactive or incompatible with the following materials: oxidising materials				
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## **SECTION 10: Stability and reactivity**

## 10.6 Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## **SECTION 11: Toxicological information**

#### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Acute toxicity

Result	Species	Dose	Exposure
C50 Inhalation Vapour	Rat	49 g/m³	4 hours
D50 Oral	Rat	636 mg/kg	-
.D50 Dermal	Rabbit	12800 mg/kg	-
.D50 Oral	Rat	5000 mg/kg	-
.D50 Dermal	Rabbit	6480 mg/kg	-
.D50 Oral	Rat	2737 mg/kg	-
		0 0	-
	D50 Oral D50 Dermal D50 Oral D50 Dermal D50 Oral	D50 OralRatD50 DermalRabbitD50 OralRatD50 DermalRabbitD50 OralRat	D50 OralRat636 mg/kgD50 DermalRabbit12800 mg/kgD50 OralRat5000 mg/kgD50 DermalRabbit6480 mg/kg

## Acute toxicity estimates

Route	ATE value
Not available.	

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Voluene	Eyes - Mild irritant	Rabbit	-	0.5 minutes	-
	Eyes - Mild irritant	Rabbit	-	100 mg 870 ug	_
	Eyes - Severe irritant	Rabbit	-	24 hours 2	-
				mg	
	Skin - Mild irritant	Pig	-	24 hours 250	-
				uL	
	Skin - Mild irritant	Rabbit	-	435 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20	-
				mg	
	Skin - Moderate irritant	Rabbit	-	500 mg	-
Propan-2-ol	Eyes - Moderate irritant	Rabbit	-	10 mg	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 100	-
				mg	
	Eyes - Severe irritant	Rabbit	-	100 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-
titanium dioxide	Skin - Mild irritant	Human	-	72 hours 300	-
				ug l	
Butanone	Skin - Mild irritant	Rabbit	-	24 hours 14	-
				mg	
	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				mg	
Conclusion/Summary	: Causes skin irritation.				

 Sensitisation

 Conclusion/Summary
 : Based on available data, the classification criteria are not met.

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

 Conclusion/Summary
 : Based on available data, the classification criteria are not met.

#### **Carcinogenicity**

It has been observed that the carcinogenic hazard of this product arises when respirable dust is inhaled in quantities leading to significant impairment of particle clearance mechanisms in the lung.

<b>Conclusion/Summary</b>	: Based on available data, the class	sification criteria are no	ot met.	
Reproductive toxicity				
<b>Conclusion/Summary</b>	: Based on available data, the class	sification criteria are no	ot met.	
Teratogenicity				
Conclusion/Summary	: Suspected of damaging the unbo	orn child.		
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## **SECTION 11: Toxicological information**

### Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Toluene	Category 3	-	Narcotic effects
Propan-2-ol	Category 3	-	Narcotic effects
Butanone	Category 3	-	Narcotic effects

#### Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Toluene	Category 2	-	-

#### **Aspiration hazard**

Product/ingredient name	Result
Toluene	ASPIRATION HAZARD - Category 1

Information on likely routes of exposure	:	Not available.
Potential acute health effects		
Eye contact	1	Causes serious eye irritation.
Inhalation	:	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
Skin contact	1	Causes skin irritation.
Ingestion	:	Can cause central nervous system (CNS) depression.
Symptoms related to the phy	sic	cal, chemical and toxicological characteristics
Eye contact	:	Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	:	Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness reduced foetal weight increase in foetal deaths skeletal malformations
Skin contact	:	Adverse symptoms may include the following: irritation redness reduced foetal weight increase in foetal deaths skeletal malformations
Ingestion	:	Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
Delayed and immediate effec	ts	as well as chronic effects from short and long-term exposure
<u>Short term exposure</u>		
Potential immediate effects	:	Not available.
Potential delayed effects	1	Not available.
Long term exposure		

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## **SECTION 11: Toxicological information**

	-
Potential immediate effects	Not available.
Potential delayed effects	Not available.
Potential chronic health eff Not available.	<u>S</u>
Conclusion/Summary General Carcinogenicity	Not available. May cause damage to organs through prolonged or repeated exposure. No known significant effects or critical hazards.
Mutagenicity Reproductive toxicity	No known significant effects or critical hazards. Suspected of damaging the unborn child.

#### 11.2 Information on other hazards

11.2.1 Endocrine disrupting propertiesNot available.11.2.2 Other informationNot available.

## **SECTION 12: Ecological information**

12.1	Тох	icitv
		Joily

Product/ingredient name	Result	Species	Exposure
Voluene	Acute EC50 12500 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 11600 µg/l Fresh water	Crustaceans - Gammarus pseudolimnaeus - Adult	48 hours
	Acute EC50 5.56 mg/l Fresh water	, Daphnia - <i>Daphnia magna</i> - Neonate	48 hours
	Acute LC50 5500 µg/l Fresh water	Fish - Oncorhynchus kisutch - Fry	96 hours
	Chronic NOEC 1000 µg/l Fresh water	Daphnia - <i>Daphnia magna</i>	21 days
Propan-2-ol	Acute EC50 10100 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 1400000 µg/l Marine water	Crustaceans - Crangon crangon	48 hours
	Acute LC50 4200000 µg/l Fresh water	Fish - Rasbora heteromorpha	96 hours
titanium dioxide	Acute LC50 3 mg/l Fresh water	Crustaceans - <i>Ceriodaphnia</i> <i>dubia</i> - Neonate	48 hours
	Acute LC50 6.5 mg/l Fresh water	Daphnia - <i>Daphnia pulex</i> - Neonate	48 hours
	Acute LC50 >1000000 μg/l Marine water	Fish - Fundulus heteroclitus	96 hours
Butanone	Acute EC50 >500000 µg/l Marine water	Algae - Skeletonema costatum	96 hours
	Acute EC50 5091000 µg/l Fresh water	Daphnia - <i>Daphnia magna</i> - Larvae	48 hours
	Acute LC50 3220000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
Trizinc bis(orthophosphate)	Acute EC50 0.32 mg/l	Algae - Selenastrum capricornutum	72 hours
	Acute EC50 0.96 mg/l	Crustaceans - Ceriodaphnia dubia	48 hours

Conclusion/Summary :

: Toxic to aquatic life with long lasting effects.

#### 12.2 Persistence and degradability

Conclusion/Summary

: This product has not been tested for biodegradation.

#### 12.3 Bioaccumulative potential

SECTION 12: Ecological information				
Product/ingredient name	LogPow	BCF	Potential	
Voluene	2.73	90	Low	
Propan-2-ol	0.05	-	Low	
Butanone	0.3	-	Low	
Trizinc bis(orthophosphate)	-	60960	High	

12.4 Mobility in soil	
Soil/water partition coefficient (Koc)	: Not available.
Mobility	: Not available.

#### 12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

#### **12.6 Endocrine disrupting properties**

Not available.

#### 12.7 Other adverse effects

No known significant effects or critical hazards.

## **SECTION 13: Disposal considerations**

13.1 Waste treatment methods	
<u>Product</u>	
Methods of disposal :	The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.
European waste : catalogue (EWC)	080111*, 200127*
Packaging	
Methods of disposal :	The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.
Special precautions :	This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

## **SECTION 14: Transport information**

	ADR/RID	ADN	IMDG	IATA
14.1 UN number or ID number	UN1263	UN1263	UN1263	UN1263
14.2 UN proper shipping name	PAINT	PAINT	PAINT	PAINT
14.3 Transport hazard class(es)			3	3
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<b>SECTION 14:</b>	Transp	or	t information				
14.4 Packing group	11		II		11		II
14.5 Environmental hazards	Yes.		Yes.		Yes.		Yes. The environmentally hazardous substance mark is not required.
Additional information	<u>ation</u>						
ADR/RID		:	The environmentally h sizes of ≤5 L or ≤5 kg <u>Special provisions</u> 6 <u>Tunnel code</u> (D/E)		stance mar	k is not requii	red when transported in
ADN		:	The environmentally h sizes of ≤5 L or ≤5 kg <b>Special provisions</b> 6		stance mar	k is not requii	red when transported in
IMDG		:	The marine pollutant r	e pollutant mark is not required when transported in sizes of $\leq$ 5 L or $\leq$ 5 kg.			
ΙΑΤΑ		:	The environmentally h transportation regulati		stance mar	k may appea	r if required by other
14.6 Special preca user	utions for	: <b>Transport within user's premises:</b> always transport in closed containers that upright and secure. Ensure that persons transporting the product know what to the event of an accident or spillage.					
14.7 Maritime trans bulk according to instruments		:	Not relevant/applicabl	e due to natur	e of the pro	duct.	

## **SECTION 15: Regulatory information**

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture <u>EU Regulation (EC) No. 1907/2006 (REACH)</u>

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

#### Substances of very high concern

None of the components are listed.

# Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Product/ingredient name		%	Designation [Usage]			
KORRO E Toluene		≥90 ≥10 - ≤25	3 48			
Labelling	:					
<u> Dther EU regulations</u>						
Industrial emissions (integrated pollution prevention and control) - Air	: Not listed					
Industrial emissions (integrated pollution prevention and control) - Water	: Not listed					
Explosive precursors	: Not applicat	ole.				
Ozone depleting substanc Not listed.	<u>es (1005/2009/E</u>	<u>EU)</u>				
Prior Informed Consent (P	<u>IC) (649/2012/E</u>	<u>U)</u>				
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### **SECTION 15: Regulatory information**

Not listed.

#### Persistent Organic Pollutants Not listed.

#### **Seveso Directive**

This product is controlled under the Seveso Directive.

#### Danger criteria

Category	
P5c	
E2	

#### International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### **Montreal Protocol**

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### **UNECE Aarhus Protocol on POPs and Heavy Metals**

Not listed.

15.2 Chemical safety assessment

: This product contains substances for which Chemical Safety Assessments are still required.

### **SECTION 16: Other information**

Indicates information that has changed from previously issued version.

Abbreviations and acronyms	<ul> <li>ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement N/A = Not available</li> <li>PBT = Persistent, Bioaccumulative and Toxic</li> <li>PNEC = Predicted No Effect Concentration</li> <li>RRN = REACH Registration Number SGG = Segregation Group</li> </ul>
	vPvB = Very Persistent and Very Bioaccumulative

#### Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Flam. Liq. 2, H225	On basis of test data
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
Repr. 2, H361d	Calculation method
STOT SE 3, H336	Calculation method
STOT RE 2, H373	Calculation method
Aquatic Chronic 2, H411	Calculation method

Full text of abbreviated H statements

## **SECTION 16: Other information**

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated 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.
EUH066	Repeated exposure may cause skin dryness or cracking.

#### Full text of classifications [CLP/GHS]

Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Asp. Tox. 1	ASPIRATION HAZARD - Category 1
Carc. 2	CARCINOGENICITY - Category 2
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2
Repr. 2	REPRODUCTIVE TOXICITY - Category 2
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3
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revision	
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#### Notice to reader

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.

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