


## ALKYD ROAD MARKING PAINT WHITE

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

- 1.1 Product identifier:** ALKYD ROAD MARKING PAINT WHITE (Product code: 116821)
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**  
Relevant uses: Road sign paint: zebra crossings, yellow boxes, etc...  
Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Details of the supplier of the safety data sheet:**  
Berling S.A.  
Thesi Agia Paraskevi  
32011 Inofyta Viotias - Greece  
Phone.: +302262031663 - Fax: +302262031293  
info@berling.gr  
www.berling.gr
- 1.4 Emergency telephone number:** +30 210 7793 777 (Greek Poison Info Center)

### SECTION 2: HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture:**  
This product contains less than 1% respirable crystalline silica, so it does not require classification  
**CLP Regulation (EC) No 1272/2008:**  
Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.  
Eye Irrit. 2: Eye irritation, Category 2, H319  
Flam. Liq. 2: Flammable liquids, Category 2, H225  
Skin Irrit. 2: Skin irritation, Category 2, H315  
STOT RE 2: Specific target organ toxicity if swallowed, repeated exposure, Category 2, H373
- 2.2 Label elements:**  
**CLP Regulation (EC) No 1272/2008:**  
**Danger**
- 
- Hazard statements:**  
Eye Irrit. 2: H319 - Causes serious eye irritation  
Flam. Liq. 2: H225 - Highly flammable liquid and vapour  
Skin Irrit. 2: H315 - Causes skin irritation  
STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure (Oral)
- Precautionary statements:**  
P101: If medical advice is needed, have product container or label at hand  
P102: Keep out of reach of children  
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking  
P264: Wash thoroughly after handling  
P280: Wear protective gloves/protective clothing/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  
P370+P378: In case of fire: Use ABC powder extinguisher to extinguish  
P501: Dispose of the contents/containers in accordance with the current legislation on waste treatment
- Supplementary information:**  
EUH208: Contains 2-butanone oxime, Cobalt bis(2-ethylhexanoate). May produce an allergic reaction
- Substances that contribute to the classification**  
Xylene (CAS: 1330-20-7)
- 2.3 Other hazards:**  
Product contains PBT/vPvB substances: Octamethylcyclotetrasiloxane, Decamethylcyclopentasiloxane

\*\* Changes with regards to the previous version

- CONTINUED ON NEXT PAGE -

**ALKYD ROAD MARKING PAINT WHITE**
**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS \*\***
**3.1 Substance:**

Non-applicable

**3.2 Mixture:**
**Chemical description:** Mixture composed of additives, fillers, pigments and resins in solvents

**Components:**

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification		Concentration
CAS: 1330-20-7 EC: 215-535-7 Index: 601-022-00-9 REACH: 01-2119488216-32-XXXX	<b>Xylene<sup>(1)</sup></b>	Self-classified	9,9 - <19 %
	Regulation 1272/2008	Acute Tox. 4: H312+H332; Asp. Tox. 1: H304; Eye Irrit. 2: H319; Flam. Liq. 3: H226; Skin Irrit. 2: H315; STOT RE 2: H373; STOT SE 3: H335 - Danger	
CAS: 1330-20-7 EC: 215-535-7 Index: 601-022-00-9 REACH: 01-2119488216-32-XXXX	<b>Xylene<sup>(1)</sup></b>	ATP CLP00	9,9 - <19 %
	Regulation 1272/2008	Acute Tox. 4: H312+H332; Flam. Liq. 3: H226; Skin Irrit. 2: H315 - Warning	
CAS: 78-93-3 EC: 201-159-0 Index: 606-002-00-3 REACH: 01-2119457290-43-XXXX	<b>Butanone<sup>(1)</sup></b>	ATP CLP00	0,9 - <2,4 %
	Regulation 1272/2008	Eye Irrit. 2: H319; Flam. Liq. 2: H225; STOT SE 3: H336; EUH066 - Danger	
CAS: 67-64-1 EC: 200-662-2 Index: 606-001-00-8 REACH: 01-2119471330-49-XXXX	<b>acetone<sup>(2)</sup></b>	ATP CLP00	0,24 - <0,9 %
	Regulation 1272/2008	Eye Irrit. 2: H319; Flam. Liq. 2: H225; STOT SE 3: H336; EUH066 - Danger	
CAS: 136-51-6 EC: 205-249-0 Index: Non-applicable REACH: 01-2119978297-19-XXXX	<b>calcium bis(2-ethylhexanoate)<sup>(1)</sup></b>	Self-classified	0,24 - <0,9 %
	Regulation 1272/2008	Eye Dam. 1: H318; Repr. 2: H361d - Danger	
CAS: 96-29-7 EC: 202-496-6 Index: 616-014-00-0 REACH: 01-2119539477-28-XXXX	<b>2-butanone oxime<sup>(1)</sup></b>	ATP CLP00	0,24 - <0,9 %
	Regulation 1272/2008	Acute Tox. 4: H312; Carc. 2: H351; Eye Dam. 1: H318; Skin Sens. 1: H317 - Danger	
CAS: 22464-99-9 EC: 245-018-1 Index: Non-applicable REACH: 01-2119979088-21-XXXX	<b>2-ethylhexanoic acid, zirconium salt<sup>(1)</sup></b>	Self-classified	0,09 - <0,24 %
	Regulation 1272/2008	Repr. 2: H361d - Warning	
CAS: 136-52-7 EC: 205-250-6 Index: Non-applicable REACH: 01-2119524678-29-XXXX	<b>Cobalt bis(2-ethylhexanoate)<sup>(1)</sup></b>	Self-classified	0,09 - <0,24 %
	Regulation 1272/2008	Acute Tox. 4: H302; Aquatic Chronic 1: H410; Repr. 2: H361f; Skin Sens. 1: H317 - Warning	
CAS: 108-65-6 EC: 203-603-9 Index: 607-195-00-7 REACH: 01-2119475791-29-XXXX	<b>2-methoxy-1-methylethyl acetate<sup>(2)</sup></b>	ATP ATP01	<0,09 %
	Regulation 1272/2008	Flam. Liq. 3: H226 - Warning	
CAS: 112-07-2 EC: 203-933-3 Index: 607-038-00-2 REACH: 01-2119475112-47-XXXX	<b>2-butoxyethyl acetate<sup>(2)</sup></b>	Self-classified	<0,09 %
	Regulation 1272/2008	Acute Tox. 4: H302+H312+H332 - Warning	
CAS: 107-98-2 EC: 203-539-1 Index: 603-064-00-3 REACH: 01-2119457435-35-XXXX	<b>1-methoxy-2-propanol<sup>(2)</sup></b>	ATP ATP01	<0,09 %
	Regulation 1272/2008	Flam. Liq. 3: H226; STOT SE 3: H336 - Warning	
CAS: 100-41-4 EC: 202-849-4 Index: 601-023-00-4 REACH: 01-2119489370-35-XXXX	<b>Ethylbenzene<sup>(2)</sup></b>	ATP ATP06	<0,09 %
	Regulation 1272/2008	Acute Tox. 4: H332; Asp. Tox. 1: H304; Flam. Liq. 2: H225; STOT RE 2: H373 - Danger	

<sup>(1)</sup> Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2015/830



<sup>(2)</sup> Substance with a Union workplace exposure limit

\*\* Changes with regards to the previous version

- CONTINUED ON NEXT PAGE -

**ALKYD ROAD MARKING PAINT WHITE**

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS \*\* (continued)**

Identification	Chemical name/Classification		Concentration
CAS: 112-34-5 EC: 203-961-6 Index: 603-096-00-8 REACH: 01-2119475104-44-XXXX	<b>2-(2-butoxyethoxy)ethanol<sup>(2)</sup></b>	ATP CLP00	<0,09 %
	Regulation 1272/2008	Eye Irrit. 2: H319 - Warning 	
CAS: 108-88-3 EC: 203-625-9 Index: 601-021-00-3 REACH: 01-2119471310-51-XXXX	<b>Toluene<sup>(2)</sup></b>	ATP CLP00	<0,09 %
	Regulation 1272/2008	Asp. Tox. 1: H304; Flam. Liq. 2: H225; Repr. 2: H361d; Skin Irrit. 2: H315; STOT RE 2: H373; STOT SE 3: H336 - Danger 	

<sup>(1)</sup> Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2015/830

<sup>(2)</sup> Substance with a Union workplace exposure limit

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

**\*\* Changes with regards to the previous version**

**SECTION 4: FIRST AID MEASURES**

**4.1 Description of first aid measures:**

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

**By inhalation:**

This product is not classified as hazardous through inhalation. However, in case of intoxication symptoms it is recommended to remove the person affected from the area of exposure, provide clean air and keep at rest. Request medical attention if symptoms persist.

**By skin contact:**

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

**By eye contact:**

Rinse eyes thoroughly with water for at least 15 minutes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case removal could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS for the product.

**By ingestion/aspiration:**

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

**4.2 Most important symptoms and effects, both acute and delayed:**

Acute and delayed effects are indicated in sections 2 and 11.

**4.3 Indication of any immediate medical attention and special treatment needed:**

Non-applicable

**SECTION 5: FIREFIGHTING MEASURES**

**5.1 Extinguishing media:**

If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO<sub>2</sub>). IT IS RECOMMENDED NOT to use full jet water as an extinguishing agent.

**5.2 Special hazards arising from the substance or mixture:**

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

**5.3 Advice for firefighters:**

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

**Additional provisions:**

- CONTINUED ON NEXT PAGE -

## ALKYD ROAD MARKING PAINT WHITE

### SECTION 5: FIREFIGHTING MEASURES (continued)

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

#### 6.1 Personal precautions, protective equipment and emergency procedures:

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Destroy any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

#### 6.2 Environmental precautions:

This product is not classified as hazardous to the environment. Keep product away from drains, surface and underground water.

#### 6.3 Methods and material for containment and cleaning up:

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

#### 6.4 Reference to other sections:

See sections 8 and 13.

### SECTION 7: HANDLING AND STORAGE

#### 7.1 Precautions for safe handling:

##### A.- Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

##### B.- Technical recommendations for the prevention of fires and explosions

Transfer in well ventilated areas, preferably through localized extraction. Fully control sources of ignition (mobile phones, sparks,...) and ventilate during cleaning operations. Avoid the existence of dangerous atmospheres inside containers, applying inertization systems where possible. Transfer at a slow speed to avoid the creation of electrostatic charges. Against the possibility of electrostatic charges: ensure a perfect equipotential connection, always use groundings, do not wear work clothes made of acrylic fibres, preferably wearing cotton clothing and conductive footwear. Comply with the essential security requirements for equipment and systems defined in Directive 2014/34/EC (ATEX 100) and with the minimum requirements for protecting the security and health of workers under the selection criteria of Directive 1999/92/EC (ATEX 137). Consult section 10 for conditions and materials that should be avoided.

##### C.- Technical recommendations to prevent ergonomic and toxicological risks

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

##### D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

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

##### A.- Technical measures for storage

Minimum Temp.:	5 °C
Maximum Temp.:	35 °C
Maximum time:	0 Months

##### B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

#### 7.3 Specific end use(s):

- CONTINUED ON NEXT PAGE -

## ALKYD ROAD MARKING PAINT WHITE

### SECTION 7: HANDLING AND STORAGE (continued)

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace

Identification		Occupational exposure limits	
Xylene CAS: 1330-20-7 EC: 215-535-7		IOELV (8h)	50 ppm
		IOELV (STEL)	100 ppm
Xylene CAS: 1330-20-7 EC: 215-535-7		IOELV (8h)	50 ppm
		IOELV (STEL)	100 ppm
Butanone CAS: 78-93-3 EC: 201-159-0		IOELV (8h)	200 ppm
		IOELV (STEL)	300 ppm
2-methoxy-1-methylethyl acetate CAS: 108-65-6 EC: 203-603-9		IOELV (8h)	50 ppm
		IOELV (STEL)	100 ppm
2-butoxyethyl acetate CAS: 112-07-2 EC: 203-933-3		IOELV (8h)	20 ppm
		IOELV (STEL)	50 ppm
Ethylbenzene CAS: 100-41-4 EC: 202-849-4		IOELV (8h)	100 ppm
		IOELV (STEL)	200 ppm
1-methoxy-2-propanol CAS: 107-98-2 EC: 203-539-1		IOELV (8h)	100 ppm
		IOELV (STEL)	150 ppm
Toluene CAS: 108-88-3 EC: 203-625-9		IOELV (8h)	50 ppm
		IOELV (STEL)	100 ppm
2-(2-butoxyethoxy)ethanol CAS: 112-34-5 EC: 203-961-6		IOELV (8h)	10 ppm
		IOELV (STEL)	15 ppm
acetone CAS: 67-64-1 EC: 200-662-2		IOELV (8h)	500 ppm
		IOELV (STEL)	

#### DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Xylene CAS: 1330-20-7 EC: 215-535-7	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	212 mg/kg	Non-applicable
	Inhalation	442 mg/m <sup>3</sup>	442 mg/m <sup>3</sup>	221 mg/m <sup>3</sup>	221 mg/m <sup>3</sup>
Xylene CAS: 1330-20-7 EC: 215-535-7	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	212 mg/kg	Non-applicable
	Inhalation	442 mg/m <sup>3</sup>	442 mg/m <sup>3</sup>	221 mg/m <sup>3</sup>	221 mg/m <sup>3</sup>
Butanone CAS: 78-93-3 EC: 201-159-0	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	1161 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	600 mg/m <sup>3</sup>	Non-applicable
acetone CAS: 67-64-1 EC: 200-662-2	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	186 mg/kg	Non-applicable
	Inhalation	Non-applicable	2420 mg/m <sup>3</sup>	1210 mg/m <sup>3</sup>	Non-applicable
calcium bis(2-ethylhexanoate) CAS: 136-51-6 EC: 205-249-0	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	5,67 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	39,98 mg/m <sup>3</sup>	Non-applicable
2-butanone oxime CAS: 96-29-7 EC: 202-496-6	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	2,5 mg/kg	Non-applicable	1,3 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	9 mg/m <sup>3</sup>	3,33 mg/m <sup>3</sup>

- CONTINUED ON NEXT PAGE -

**ALKYD ROAD MARKING PAINT WHITE**
**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
2-ethylhexanoic acid, zirconium salt CAS: 22464-99-9 EC: 245-018-1	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	6,49 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	32,97 mg/m <sup>3</sup>	Non-applicable
Cobalt bis(2-ethylhexanoate) CAS: 136-52-7 EC: 205-250-6	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	Non-applicable	0,2351 mg/m <sup>3</sup>
2-butoxyethyl acetate CAS: 112-07-2 EC: 203-933-3	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	120 mg/kg	Non-applicable	169 mg/kg	Non-applicable
	Inhalation	Non-applicable	333 mg/m <sup>3</sup>	133 mg/m <sup>3</sup>	Non-applicable
1-methoxy-2-propanol CAS: 107-98-2 EC: 203-539-1	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	183 mg/kg	Non-applicable
	Inhalation	553,5 mg/m <sup>3</sup>	553,5 mg/m <sup>3</sup>	369 mg/m <sup>3</sup>	Non-applicable
Ethylbenzene CAS: 100-41-4 EC: 202-849-4	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	180 mg/kg	Non-applicable
	Inhalation	Non-applicable	293 mg/m <sup>3</sup>	77 mg/m <sup>3</sup>	Non-applicable
2-(2-butoxyethoxy)ethanol CAS: 112-34-5 EC: 203-961-6	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	83 mg/kg	Non-applicable
	Inhalation	Non-applicable	101,2 mg/m <sup>3</sup>	67,5 mg/m <sup>3</sup>	67,5 mg/m <sup>3</sup>
Toluene CAS: 108-88-3 EC: 203-625-9	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	384 mg/kg	Non-applicable
	Inhalation	384 mg/m <sup>3</sup>	384 mg/m <sup>3</sup>	192 mg/m <sup>3</sup>	192 mg/m <sup>3</sup>

**DNEL (General population):**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Xylene CAS: 1330-20-7 EC: 215-535-7	Oral	Non-applicable	Non-applicable	12,5 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	125 mg/kg	Non-applicable
	Inhalation	260 mg/m <sup>3</sup>	260 mg/m <sup>3</sup>	65,3 mg/m <sup>3</sup>	65,3 mg/m <sup>3</sup>
Xylene CAS: 1330-20-7 EC: 215-535-7	Oral	Non-applicable	Non-applicable	12,5 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	125 mg/kg	Non-applicable
	Inhalation	260 mg/m <sup>3</sup>	260 mg/m <sup>3</sup>	65,3 mg/m <sup>3</sup>	65,3 mg/m <sup>3</sup>
Butanone CAS: 78-93-3 EC: 201-159-0	Oral	Non-applicable	Non-applicable	31 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	412 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	106 mg/m <sup>3</sup>	Non-applicable
acetone CAS: 67-64-1 EC: 200-662-2	Oral	Non-applicable	Non-applicable	62 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	62 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	200 mg/m <sup>3</sup>	Non-applicable
calcium bis(2-ethylhexanoate) CAS: 136-51-6 EC: 205-249-0	Oral	Non-applicable	Non-applicable	2,83 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	2,83 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	9,86 mg/m <sup>3</sup>	Non-applicable
2-butanone oxime CAS: 96-29-7 EC: 202-496-6	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	1,5 mg/kg	Non-applicable	0,78 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	2,7 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>
2-ethylhexanoic acid, zirconium salt CAS: 22464-99-9 EC: 245-018-1	Oral	Non-applicable	Non-applicable	4,51 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	3,25 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	8,13 mg/m <sup>3</sup>	Non-applicable
Cobalt bis(2-ethylhexanoate) CAS: 136-52-7 EC: 205-250-6	Oral	Non-applicable	Non-applicable	0,175 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	Non-applicable	0,037 mg/m <sup>3</sup>

- CONTINUED ON NEXT PAGE -

## ALKYD ROAD MARKING PAINT WHITE

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
2-butoxyethyl acetate CAS: 112-07-2 EC: 203-933-3	Oral	36 mg/kg	Non-applicable	8,6 mg/kg	Non-applicable
	Dermal	72 mg/kg	Non-applicable	102 mg/kg	Non-applicable
	Inhalation	Non-applicable	200 mg/m <sup>3</sup>	80 mg/m <sup>3</sup>	Non-applicable
1-methoxy-2-propanol CAS: 107-98-2 EC: 203-539-1	Oral	Non-applicable	Non-applicable	33 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	78 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	43,9 mg/m <sup>3</sup>	Non-applicable
Ethylbenzene CAS: 100-41-4 EC: 202-849-4	Oral	Non-applicable	Non-applicable	1,6 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	15 mg/m <sup>3</sup>	Non-applicable
2-(2-butoxyethoxy)ethanol CAS: 112-34-5 EC: 203-961-6	Oral	Non-applicable	Non-applicable	5 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	50 mg/kg	Non-applicable
	Inhalation	Non-applicable	60,7 mg/m <sup>3</sup>	40,5 mg/m <sup>3</sup>	40,5 mg/m <sup>3</sup>
Toluene CAS: 108-88-3 EC: 203-625-9	Oral	Non-applicable	Non-applicable	8,13 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	226 mg/kg	Non-applicable
	Inhalation	226 mg/m <sup>3</sup>	226 mg/m <sup>3</sup>	56,5 mg/m <sup>3</sup>	56,5 mg/m <sup>3</sup>

#### PNEC:

Identification					
Xylene CAS: 1330-20-7 EC: 215-535-7	STP	6,58 mg/L	Fresh water	0,327 mg/L	
	Soil	2,31 mg/kg	Marine water	0,327 mg/L	
	Intermittent	0,327 mg/L	Sediment (Fresh water)	12,46 mg/kg	
	Oral	Non-applicable	Sediment (Marine water)	12,46 mg/kg	
Xylene CAS: 1330-20-7 EC: 215-535-7	STP	6,58 mg/L	Fresh water	0,327 mg/L	
	Soil	2,31 mg/kg	Marine water	0,327 mg/L	
	Intermittent	0,327 mg/L	Sediment (Fresh water)	12,46 mg/kg	
	Oral	Non-applicable	Sediment (Marine water)	12,46 mg/kg	
Butanone CAS: 78-93-3 EC: 201-159-0	STP	709 mg/L	Fresh water	55,8 mg/L	
	Soil	22,5 mg/kg	Marine water	55,8 mg/L	
	Intermittent	55,8 mg/L	Sediment (Fresh water)	284,74 mg/kg	
	Oral	1 g/kg	Sediment (Marine water)	284,7 mg/kg	
acetone CAS: 67-64-1 EC: 200-662-2	STP	100 mg/L	Fresh water	10,6 mg/L	
	Soil	29,5 mg/kg	Marine water	1,06 mg/L	
	Intermittent	21 mg/L	Sediment (Fresh water)	30,4 mg/kg	
	Oral	Non-applicable	Sediment (Marine water)	3,04 mg/kg	
2-butanone oxime CAS: 96-29-7 EC: 202-496-6	STP	177 mg/L	Fresh water	0,256 mg/L	
	Soil	Non-applicable	Marine water	Non-applicable	
	Intermittent	0,118 mg/L	Sediment (Fresh water)	Non-applicable	
	Oral	Non-applicable	Sediment (Marine water)	Non-applicable	
Cobalt bis(2-ethylhexanoate) CAS: 136-52-7 EC: 205-250-6	STP	0,37 mg/L	Fresh water	0,00062 mg/L	
	Soil	10,9 mg/kg	Marine water	0,00236 mg/L	
	Intermittent	Non-applicable	Sediment (Fresh water)	53,8 mg/kg	
	Oral	Non-applicable	Sediment (Marine water)	69,8 mg/kg	
2-butoxyethyl acetate CAS: 112-07-2 EC: 203-933-3	STP	90 mg/L	Fresh water	0,304 mg/L	
	Soil	0,415 mg/kg	Marine water	0,03 mg/L	
	Intermittent	0,56 mg/L	Sediment (Fresh water)	2,03 mg/kg	
	Oral	0,06 g/kg	Sediment (Marine water)	0,203 mg/kg	
1-methoxy-2-propanol CAS: 107-98-2 EC: 203-539-1	STP	100 mg/L	Fresh water	10 mg/L	
	Soil	4,59 mg/kg	Marine water	1 mg/L	
	Intermittent	100 mg/L	Sediment (Fresh water)	52,3 mg/kg	
	Oral	Non-applicable	Sediment (Marine water)	5,2 mg/kg	

- CONTINUED ON NEXT PAGE -

## ALKYD ROAD MARKING PAINT WHITE

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification				
Ethylbenzene CAS: 100-41-4 EC: 202-849-4	STP	9,6 mg/L	Fresh water	0,1 mg/L
	Soil	2,68 mg/kg	Marine water	0,01 mg/L
	Intermittent	0,1 mg/L	Sediment (Fresh water)	13,7 mg/kg
	Oral	0,02 g/kg	Sediment (Marine water)	1,37 mg/kg
2-(2-butoxyethoxy)ethanol CAS: 112-34-5 EC: 203-961-6	STP	200 mg/L	Fresh water	1,1 mg/L
	Soil	0,32 mg/kg	Marine water	0,11 mg/L
	Intermittent	11 mg/L	Sediment (Fresh water)	4,4 mg/kg
	Oral	0,056 g/kg	Sediment (Marine water)	0,44 mg/kg
Toluene CAS: 108-88-3 EC: 203-625-9	STP	13,61 mg/L	Fresh water	0,68 mg/L
	Soil	2,89 mg/kg	Marine water	0,68 mg/L
	Intermittent	0,68 mg/L	Sediment (Fresh water)	16,39 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	16,39 mg/kg



#### 8.2 Exposure controls:

##### A.- General security and hygiene measures in the work place



As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Directive 89/686/EC. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1.

All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

##### B.- Respiratory protection



Pictogram	PPE	Labelling	CEN Standard	Remarks
 Compulsory use of face mask	Filter mask for particles	 CAT III	EN 149:2001+A1:2009	Replace when an increase in resistance to breathing is observed.

##### C.- Specific protection for the hands



Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Protective gloves against minor risks	 CAT I		Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN 420:2003+A1:2009 and EN ISO 374-1:2016

"As the product is a mixture of several substances, the resistance of the glove material can not be predicted in advance with total reliability and has therefore to be checked prior to the application"

##### D.- Ocular and facial protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.	 CAT II	EN 166:2001 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.



##### E.- Body protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory complete body protection	Antistatic and fireproof protective clothing	 CAT III	EN 1149-1:2006 EN 1149-2:1997 EN 1149-3:2004 EN 168:2001 EN ISO 14116:2015 EN 1149-5:2018	Limited protection against flames.



- CONTINUED ON NEXT PAGE -

## ALKYD ROAD MARKING PAINT WHITE

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory foot protection	Safety footwear with antistatic and heat resistant properties		EN ISO 13287:2012 EN ISO 20345:2011	Replace boots at any sign of deterioration.

#### F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

#### Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

#### Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

V.O.C. (Supply):	Not available
V.O.C. density at 25 °C:	Not available
Average carbon number:	Not available
Average molecular weight:	Not available

With regard to Directive 2004/42/EC, this product which is ready to use has the following characteristics:

V.O.C. density at 25 °C:	500 kg/m <sup>3</sup> (500 g/L)
EU limit for the product (Cat. A.I):	500 g/L (2010)
Components:	SOLVENT E - 20 % v/v

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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

For complete information see the product datasheet.

##### Appearance:

Physical state at 20 °C:	Liquid
Appearance:	Not available
Colour:	<input type="checkbox"/> White
Odour:	Aromatic
Odour threshold:	Non-applicable *

##### Volatility:

Boiling point at atmospheric pressure:	126 °C
Vapour pressure at 25 °C:	3561 Pa
Vapour pressure at 50 °C:	10924,93 Pa (10,92 kPa)
Evaporation rate at 25 °C:	Non-applicable *

##### Product description:

Density at 25 °C:	1620 - 1680 kg/m <sup>3</sup>
Relative density at 25 °C:	Non-applicable *
Dynamic viscosity at 25 °C:	1988,44 - 1882,6 cP
Kinematic viscosity at 25 °C:	Non-applicable *

\*Not relevant due to the nature of the product, not providing information property of its hazards.

- CONTINUED ON NEXT PAGE -

## ALKYD ROAD MARKING PAINT WHITE

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Kinematic viscosity at 40 °C:	Non-applicable *
Concentration:	Non-applicable *
pH:	Non-applicable *
Vapour density at 25 °C:	Non-applicable *
Partition coefficient n-octanol/water 25 °C:	Non-applicable *
Solubility in water at 25 °C:	Non-applicable *
Solubility properties:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *

#### Flammability:

Flash Point:	21 °C
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	204 °C
Lower flammability limit:	Not available
Upper flammability limit:	Not available

#### Explosive:

Lower explosive limit:	Non-applicable *
Upper explosive limit:	Non-applicable *

#### 9.2 Other information:

Surface tension at 25 °C:	Non-applicable *
Refraction index:	Non-applicable *

\*Not relevant due to the nature of the product, not providing information property of its hazards.

### SECTION 10: STABILITY AND REACTIVITY

#### 10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

#### 10.2 Chemical stability:

Chemically stable under the conditions of storage, handling and use.

#### 10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

#### 10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Risk of combustion	Avoid direct impact	Not applicable

#### 10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases

#### 10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO<sub>2</sub>), carbon monoxide and other organic compounds.

\*\* Changes with regards to the previous version

- CONTINUED ON NEXT PAGE -

**ALKYD ROAD MARKING PAINT WHITE**

**SECTION 11: TOXICOLOGICAL INFORMATION \*\***

**11.1 Information on toxicological effects:**

The experimental information related to the toxicological properties of the product itself is not available

Contains glycols. It is recommended not to breathe the vapours for prolonged periods of time due to the possibility of effects that are hazardous to the health.

**Dangerous health implications:**

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous for inhalation. For more information see section 3.

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Produces skin inflammation.
- Contact with the eyes: Produces eye damage after contact.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous for inhalation. For more information see section 3.  
IARC: Xylene (3); Quartz (RCS < 1 %) (1); Xylene (3); Titanium dioxide (aerodynamic diameter  $\geq 10 \mu\text{m}$ ) (2B); Cobalt bis(2-ethylhexanoate) (2B); Ethylbenzene (2B); Toluene (3)
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met. However, it does contain substances classified as dangerous for this effect. For more information see section 3.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects. For more information see section 3.
- Cutaneous: Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous with sensitising effects. For more information see section 3.

F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous for inhalation. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Exposure in high concentration can interfere with the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.
- Skin: Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

H- Aspiration hazard:

Based on available data, the classification criteria are not met. However, it does contain substances classified as dangerous for this effect. For more information see section 3.

**Other information:**

Non-applicable

*\*\* Changes with regards to the previous version*

- CONTINUED ON NEXT PAGE -

## ALKYD ROAD MARKING PAINT WHITE

### SECTION 11: TOXICOLOGICAL INFORMATION \*\* (continued)

#### Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
Xylene CAS: 1330-20-7 EC: 215-535-7	LD50 oral	2100 mg/kg	Rat
	LD50 dermal	1100 mg/kg (ATEi)	Rat
	LC50 inhalation	11 mg/L (4 h) (ATEi)	
Xylene CAS: 1330-20-7 EC: 215-535-7	LD50 oral	2100 mg/kg	Rat
	LD50 dermal	1100 mg/kg (ATEi)	Rat
	LC50 inhalation	11 mg/L (4 h) (ATEi)	
Butanone CAS: 78-93-3 EC: 201-159-0	LD50 oral	4000 mg/kg	Rat
	LD50 dermal	6400 mg/kg	Rabbit
	LC50 inhalation	23,5 mg/L (4 h)	Rat
acetone CAS: 67-64-1 EC: 200-662-2	LD50 oral	5800 mg/kg	Rat
	LD50 dermal	7426 mg/kg	Rabbit
	LC50 inhalation	76 mg/L (4 h)	Rat
calcium bis(2-ethylhexanoate) CAS: 136-51-6 EC: 205-249-0	LD50 oral	2043 mg/kg	Rat
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>5 mg/L	
2-butanone oxime CAS: 96-29-7 EC: 202-496-6	LD50 oral	2100 mg/kg	Rat
	LD50 dermal	1100 mg/kg	Rat
	LC50 inhalation	>20 mg/L	
2-ethylhexanoic acid, zirconium salt CAS: 22464-99-9 EC: 245-018-1	LD50 oral	2043 mg/kg	Rat
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>5 mg/L	
Cobalt bis(2-ethylhexanoate) CAS: 136-52-7 EC: 205-250-6	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>5 mg/L	
2-methoxy-1-methylethyl acetate CAS: 108-65-6 EC: 203-603-9	LD50 oral	8532 mg/kg	Rat
	LD50 dermal	5100 mg/kg	Rat
	LC50 inhalation	30 mg/L (4 h)	Rat
2-butoxyethyl acetate CAS: 112-07-2 EC: 203-933-3	LD50 oral	1880 mg/kg	Rat
	LD50 dermal	1500 mg/kg	Rabbit
	LC50 inhalation	>20 mg/L	
1-methoxy-2-propanol CAS: 107-98-2 EC: 203-539-1	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>20 mg/L	
Ethylbenzene CAS: 100-41-4 EC: 202-849-4	LD50 oral	3500 mg/kg	Rat
	LD50 dermal	15354 mg/kg	Rabbit
	LC50 inhalation	17,2 mg/L (4 h)	Rat
2-(2-butoxyethoxy)ethanol CAS: 112-34-5 EC: 203-961-6	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>20 mg/L	
Toluene CAS: 108-88-3 EC: 203-625-9	LD50 oral	5580 mg/kg	Rat
	LD50 dermal	12124 mg/kg	Rat
	LC50 inhalation	28,1 mg/L (4 h)	Rat

\*\* Changes with regards to the previous version

### SECTION 12: ECOLOGICAL INFORMATION \*\*

The experimental information related to the eco-toxicological properties of the product itself is not available

#### 12.1 Toxicity:

\*\* Changes with regards to the previous version

- CONTINUED ON NEXT PAGE -

## ALKYD ROAD MARKING PAINT WHITE

### SECTION 12: ECOLOGICAL INFORMATION \*\* (continued)

Identification	Acute toxicity		Species	Genus
Xylene CAS: 1330-20-7 EC: 215-535-7	LC50	13.5 mg/L (96 h)	Oncorhynchus mykiss	Fish
	EC50	3.4 mg/L (48 h)	Ceriodaphnia dubia	Crustacean
	EC50	10 mg/L (72 h)	Skeletonema costatum	Algae
Xylene CAS: 1330-20-7 EC: 215-535-7	LC50	13.5 mg/L (96 h)	Oncorhynchus mykiss	Fish
	EC50	3.4 mg/L (48 h)	Ceriodaphnia dubia	Crustacean
	EC50	10 mg/L (72 h)	Skeletonema costatum	Algae
Butanone CAS: 78-93-3 EC: 201-159-0	LC50	3220 mg/L (96 h)	Pimephales promelas	Fish
	EC50	5091 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	4300 mg/L (168 h)	Scenedesmus quadricauda	Algae
acetone CAS: 67-64-1 EC: 200-662-2	LC50	5540 mg/L (96 h)	Oncorhynchus mykiss	Fish
	EC50	23.5 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	3400 mg/L (48 h)	Chlorella pyrenoidosa	Algae
calcium bis(2-ethylhexanoate) CAS: 136-51-6 EC: 205-249-0	LC50	270 mg/L (96 h)	N/A	Fish
	EC50	Non-applicable		
	EC50	Non-applicable		
2-butanone oxime CAS: 96-29-7 EC: 202-496-6	LC50	843 mg/L (96 h)	Pimephales promelas	Fish
	EC50	750 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	83 mg/L (72 h)	Scenedesmus subspicatus	Algae
Cobalt bis(2-ethylhexanoate) CAS: 136-52-7 EC: 205-250-6	LC50	0.1 - 1 mg/L (96 h)		Fish
	EC50	0.1 - 1 mg/L		Crustacean
	EC50	0.1 - 1 mg/L		Algae
2-methoxy-1-methylethyl acetate CAS: 108-65-6 EC: 203-603-9	LC50	161 mg/L (96 h)	Pimephales promelas	Fish
	EC50	481 mg/L (48 h)	Daphnia sp.	Crustacean
	EC50	Non-applicable		
1-methoxy-2-propanol CAS: 107-98-2 EC: 203-539-1	LC50	20800 mg/L (96 h)	Pimephales promelas	Fish
	EC50	23300 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	1000 mg/L (168 h)	Selenastrum capricornutum	Algae
Ethylbenzene CAS: 100-41-4 EC: 202-849-4	LC50	42.3 mg/L (96 h)	Pimephales promelas	Fish
	EC50	75 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	63 mg/L (3 h)	Chlorella vulgaris	Algae
2-(2-butoxyethoxy)ethanol CAS: 112-34-5 EC: 203-961-6	LC50	1300 mg/L (96 h)	Lepomis macrochirus	Fish
	EC50	2850 mg/L (24 h)	Daphnia magna	Crustacean
	EC50	53 mg/L (192 h)	Microcystis aeruginosa	Algae
Toluene CAS: 108-88-3 EC: 203-625-9	LC50	13 mg/L (96 h)	Carassius auratus	Fish
	EC50	11.5 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	125 mg/L (48 h)	Scenedesmus subspicatus	Algae

### 12.2 Persistence and degradability:

Identification	Degradability		Biodegradability	
Xylene CAS: 1330-20-7 EC: 215-535-7	BOD5	Non-applicable	Concentration	Non-applicable
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	88 %
Xylene CAS: 1330-20-7 EC: 215-535-7	BOD5	Non-applicable	Concentration	Non-applicable
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	88 %
Butanone CAS: 78-93-3 EC: 201-159-0	BOD5	2.03 g O2/g	Concentration	Non-applicable
	COD	2.31 g O2/g	Period	20 days
	BOD5/COD	0.88	% Biodegradable	89 %
acetone CAS: 67-64-1 EC: 200-662-2	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	0.96	% Biodegradable	96 %

\*\* Changes with regards to the previous version

- CONTINUED ON NEXT PAGE -

## ALKYD ROAD MARKING PAINT WHITE

### SECTION 12: ECOLOGICAL INFORMATION \*\* (continued)

Identification	Degradability		Biodegradability	
calcium bis(2-ethylhexanoate)	BOD5	Non-applicable	Concentration	20 mg/L
CAS: 136-51-6	COD	Non-applicable	Period	28 days
EC: 205-249-0	BOD5/COD	Non-applicable	% Biodegradable	99 %
2-butanone oxime	BOD5	Non-applicable	Concentration	100 mg/L
CAS: 96-29-7	COD	Non-applicable	Period	28 days
EC: 202-496-6	BOD5/COD	Non-applicable	% Biodegradable	24 %
2-ethylhexanoic acid, zirconium salt	BOD5	Non-applicable	Concentration	20 mg/L
CAS: 22464-99-9	COD	Non-applicable	Period	28 days
EC: 245-018-1	BOD5/COD	Non-applicable	% Biodegradable	99 %
2-methoxy-1-methylethyl acetate	BOD5	Non-applicable	Concentration	785 mg/L
CAS: 108-65-6	COD	Non-applicable	Period	8 days
EC: 203-603-9	BOD5/COD	Non-applicable	% Biodegradable	100 %
2-butoxyethyl acetate	BOD5	Non-applicable	Concentration	30 mg/L
CAS: 112-07-2	COD	Non-applicable	Period	28 days
EC: 203-933-3	BOD5/COD	0.51	% Biodegradable	77,3 %
1-methoxy-2-propanol	BOD5	Non-applicable	Concentration	100 mg/L
CAS: 107-98-2	COD	Non-applicable	Period	28 days
EC: 203-539-1	BOD5/COD	Non-applicable	% Biodegradable	90 %
Ethylbenzene	BOD5	Non-applicable	Concentration	100 mg/L
CAS: 100-41-4	COD	Non-applicable	Period	14 days
EC: 202-849-4	BOD5/COD	Non-applicable	% Biodegradable	90 %
2-(2-butoxyethoxy)ethanol	BOD5	0.25 g O2/g	Concentration	100 mg/L
CAS: 112-34-5	COD	2.08 g O2/g	Period	28 days
EC: 203-961-6	BOD5/COD	0.12	% Biodegradable	92 %
Toluene	BOD5	2.5 g O2/g	Concentration	100 mg/L
CAS: 108-88-3	COD	Non-applicable	Period	14 days
EC: 203-625-9	BOD5/COD	Non-applicable	% Biodegradable	100 %

#### 12.3 Bioaccumulative potential:

Identification	Bioaccumulation potential	
Xylene	BCF	9
CAS: 1330-20-7	Pow Log	2.77
EC: 215-535-7	Potential	Low
Xylene	BCF	9
CAS: 1330-20-7	Pow Log	2.77
EC: 215-535-7	Potential	Low
Butanone	BCF	3
CAS: 78-93-3	Pow Log	0.29
EC: 201-159-0	Potential	Low
acetone	BCF	1
CAS: 67-64-1	Pow Log	-0.24
EC: 200-662-2	Potential	Low
calcium bis(2-ethylhexanoate)	BCF	
CAS: 136-51-6	Pow Log	2.96
EC: 205-249-0	Potential	
2-butanone oxime	BCF	5
CAS: 96-29-7	Pow Log	0.59
EC: 202-496-6	Potential	Low
2-ethylhexanoic acid, zirconium salt	BCF	
CAS: 22464-99-9	Pow Log	2.96
EC: 245-018-1	Potential	

\*\* Changes with regards to the previous version

- CONTINUED ON NEXT PAGE -

# ALKYD ROAD MARKING PAINT WHITE

## SECTION 12: ECOLOGICAL INFORMATION \*\* (continued)

Identification	Bioaccumulation potential	
2-methoxy-1-methylethyl acetate CAS: 108-65-6 EC: 203-603-9	BCF	1
	Pow Log	0.43
	Potential	Low
2-butoxyethyl acetate CAS: 112-07-2 EC: 203-933-3	BCF	3
	Pow Log	1.51
	Potential	Low
1-methoxy-2-propanol CAS: 107-98-2 EC: 203-539-1	BCF	3
	Pow Log	-0.44
	Potential	Low
Ethylbenzene CAS: 100-41-4 EC: 202-849-4	BCF	1
	Pow Log	3.15
	Potential	Low
2-(2-butoxyethoxy)ethanol CAS: 112-34-5 EC: 203-961-6	BCF	0.46
	Pow Log	0.56
	Potential	Low
Toluene CAS: 108-88-3 EC: 203-625-9	BCF	13
	Pow Log	2.73
	Potential	Low

### 12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
Xylene CAS: 1330-20-7 EC: 215-535-7	Koc	202	Henry	524,86 Pa·m <sup>3</sup> /mol
	Conclusion	Moderate	Dry soil	Yes
	Surface tension	Non-applicable	Moist soil	Yes
Xylene CAS: 1330-20-7 EC: 215-535-7	Koc	202	Henry	524,86 Pa·m <sup>3</sup> /mol
	Conclusion	Moderate	Dry soil	Yes
	Surface tension	Non-applicable	Moist soil	Yes
Butanone CAS: 78-93-3 EC: 201-159-0	Koc	30	Henry	5,77 Pa·m <sup>3</sup> /mol
	Conclusion	Very High	Dry soil	Yes
	Surface tension	2,396E-2 N/m (25 °C)	Moist soil	Yes
acetone CAS: 67-64-1 EC: 200-662-2	Koc	1	Henry	2,93 Pa·m <sup>3</sup> /mol
	Conclusion	Very High	Dry soil	Yes
	Surface tension	2,304E-2 N/m (25 °C)	Moist soil	Yes
calcium bis(2-ethylhexanoate) CAS: 136-51-6 EC: 205-249-0	Koc	Non-applicable	Henry	2,94E-1 Pa·m <sup>3</sup> /mol
	Conclusion	Non-applicable	Dry soil	Yes
	Surface tension	Non-applicable	Moist soil	Yes
2-butanone oxime CAS: 96-29-7 EC: 202-496-6	Koc	3	Henry	Non-applicable
	Conclusion	Very High	Dry soil	Non-applicable
	Surface tension	2,57E-2 N/m (25 °C)	Moist soil	Non-applicable
2-ethylhexanoic acid, zirconium salt CAS: 22464-99-9 EC: 245-018-1	Koc	Non-applicable	Henry	2,94E-1 Pa·m <sup>3</sup> /mol
	Conclusion	Non-applicable	Dry soil	Yes
	Surface tension	Non-applicable	Moist soil	Yes
2-butoxyethyl acetate CAS: 112-07-2 EC: 203-933-3	Koc	Non-applicable	Henry	5,532E-1 Pa·m <sup>3</sup> /mol
	Conclusion	Non-applicable	Dry soil	No
	Surface tension	Non-applicable	Moist soil	Yes
Ethylbenzene CAS: 100-41-4 EC: 202-849-4	Koc	520	Henry	798,44 Pa·m <sup>3</sup> /mol
	Conclusion	Moderate	Dry soil	Yes
	Surface tension	2,859E-2 N/m (25 °C)	Moist soil	Yes
2-(2-butoxyethoxy)ethanol CAS: 112-34-5 EC: 203-961-6	Koc	48	Henry	7,2E-9 Pa·m <sup>3</sup> /mol
	Conclusion	Very High	Dry soil	No
	Surface tension	3,395E-2 N/m (25 °C)	Moist soil	No

\*\* Changes with regards to the previous version

- CONTINUED ON NEXT PAGE -

## ALKYD ROAD MARKING PAINT WHITE

### SECTION 12: ECOLOGICAL INFORMATION \*\* (continued)

Identification	Absorption/desorption		Volatility	
Toluene	Koc	178	Henry	672,8 Pa·m <sup>3</sup> /mol
CAS: 108-88-3	Conclusion	Moderate	Dry soil	Yes
EC: 203-625-9	Surface tension	2,793E-2 N/m (25 °C)	Moist soil	Yes

#### 12.5 Results of PBT and vPvB assessment:

Product contains PBT/vPvB substances: Octamethylcyclotetrasiloxane, Decamethylcyclopentasiloxane

#### 12.6 Other adverse effects:

Not described

\*\* Changes with regards to the previous version

### SECTION 13: DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances	Dangerous

#### Type of waste (Regulation (EU) No 1357/2014):

HP3 Flammable, HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity, HP6 Acute Toxicity, HP4 Irritant — skin irritation and eye damage

#### Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommend disposal down the drain. See paragraph 6.2.

#### Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

### SECTION 14: TRANSPORT INFORMATION

#### Transport of dangerous goods by land:

With regard to ADR 2019 and RID 2019:



- 14.1 UN number: UN1263
- 14.2 UN proper shipping name: PAINT
- 14.3 Transport hazard class(es): 3
- Labels: 3
- 14.4 Packing group: II
- 14.5 Environmental hazards: No
- 14.6 Special precautions for user
  - Special regulations: 163, 367, 640D, 650
  - Tunnel restriction code: D/E
  - Physico-Chemical properties: see section 9
  - Limited quantities: 5 L
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code: Non-applicable

#### Transport of dangerous goods by sea:

With regard to IMDG 39-18:

- CONTINUED ON NEXT PAGE -

**ALKYD ROAD MARKING PAINT WHITE**

**SECTION 14: TRANSPORT INFORMATION (continued)**



- 14.1 UN number:** UN1263  
**14.2 UN proper shipping name:** PAINT  
**14.3 Transport hazard class(es):** 3  
 Labels: 3  
**14.4 Packing group:** II  
**14.5 Environmental hazards:** No  
**14.6 Special precautions for user**  
 Special regulations: 367, 163  
 EmS Codes: F-E, S-E  
 Physico-Chemical properties: see section 9  
 Limited quantities: 5 L  
 Segregation group: Non-applicable  
**14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:** Non-applicable

**Transport of dangerous goods by air:**

With regard to IATA/ICAO 2020:



- 14.1 UN number:** UN1263  
**14.2 UN proper shipping name:** PAINT  
**14.3 Transport hazard class(es):** 3  
 Labels: 3  
**14.4 Packing group:** II  
**14.5 Environmental hazards:** No  
**14.6 Special precautions for user**  
 Physico-Chemical properties: see section 9  
**14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:** Non-applicable

**SECTION 15: REGULATORY INFORMATION**

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

Regulation (EC) No 528/2012: contains a preservative to protect the initial properties of the treated article. Contains 1,2-benzisothiazol-3(2H)-one, reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1), 2-phenoxyethanol.

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: Non-applicable

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

**Seveso III:**

Section	Description	Lower-tier requirements	Upper-tier requirements
P5c	FLAMMABLE LIQUIDS	5000	50000

**Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc ....):**

- CONTINUED ON NEXT PAGE -

## ALKYD ROAD MARKING PAINT WHITE

### SECTION 15: REGULATORY INFORMATION (continued)

Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following:

- metallic glitter intended mainly for decoration,
- artificial snow and frost,
- "whoopie" cushions,
- silly string aerosols,
- imitation excrement,
- horns for parties,
- decorative flakes and foams,
- artificial cobwebs,
- stink bombs.

Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with:

'For professional users only'.

Regulation (EU) No 98/2013 of the European Parliament and of the Council of 15 January 2013 on the marketing and use of explosives precursors: Contains acetone. Product under the provisions of Article 9

Shall not be used in:

- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
- tricks and jokes,
- games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

Contains Octamethylcyclotetrasiloxane, Decamethylcyclopentasiloxane. 1. | Shall not be placed on the market in wash-off cosmetic products in a concentration equal to or greater than 0,1 % by weight of either substance, after 31 January 2020. | 2. | For the purposes of this entry, "wash-off cosmetic products" means cosmetic products as defined in Article 2(1)(a) of Regulation (EC) No 1223/2009 that, under normal conditions of use, are washed off with water after application.'

Occupational exposure to respirable crystalline silica must be controlled pursuant to Directive (EU) 2019/130.

#### Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

#### Other legislation:

The product could be affected by sectorial legislation

#### 15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

### SECTION 16: OTHER INFORMATION

#### Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (Regulation (EC) No 2015/830)

#### Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

COMPOSITION/INFORMATION ON INGREDIENTS (SECTION 3, SECTION 11, SECTION 12):

- New declared substances
- 1-methoxy-2-propanol (107-98-2)

#### Texts of the legislative phrases mentioned in section 2:

- H315: Causes skin irritation
- H373: May cause damage to organs through prolonged or repeated exposure (Oral)
- H225: Highly flammable liquid and vapour
- H319: Causes serious eye irritation

#### Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

#### CLP Regulation (EC) No 1272/2008:

- CONTINUED ON NEXT PAGE -

**ALKYD ROAD MARKING PAINT WHITE**

**SECTION 16: OTHER INFORMATION (continued)**

Acute Tox. 4: H302 - Harmful if swallowed  
Acute Tox. 4: H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled  
Acute Tox. 4: H312 - Harmful in contact with skin  
Acute Tox. 4: H312+H332 - Harmful in contact with skin or if inhaled  
Acute Tox. 4: H332 - Harmful if inhaled  
Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects  
Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways  
Carc. 2: H351 - Suspected of causing cancer  
Eye Dam. 1: H318 - Causes serious eye damage  
Eye Irrit. 2: H319 - Causes serious eye irritation  
Flam. Liq. 2: H225 - Highly flammable liquid and vapour  
Flam. Liq. 3: H226 - Flammable liquid and vapour  
Repr. 2: H361d - Suspected of damaging the unborn child.  
Repr. 2: H361f - Suspected of damaging fertility.  
Skin Irrit. 2: H315 - Causes skin irritation  
Skin Sens. 1: H317 - May cause an allergic skin reaction  
STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure  
STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure (Oral)  
STOT SE 3: H335 - May cause respiratory irritation  
STOT SE 3: H336 - May cause drowsiness or dizziness

**Classification procedure:**

Skin Irrit. 2: Calculation method  
STOT RE 2: Calculation method  
Flam. Liq. 2: Calculation method (2.6.4.3)  
Eye Irrit. 2: Calculation method

**Advice related to training:**

Minimal training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

**Principal bibliographical sources:**

<http://echa.europa.eu>  
<http://eur-lex.europa.eu>

**Abbreviations and acronyms:**

ADR: European agreement concerning the international carriage of dangerous goods by road  
IMDG: International maritime dangerous goods code  
IATA: International Air Transport Association  
ICAO: International Civil Aviation Organisation  
COD: Chemical Oxygen Demand  
BOD5: 5-day biochemical oxygen demand  
BCF: Bioconcentration factor  
LD50: Lethal Dose 50  
LC50: Lethal Concentration 50  
EC50: Effective concentration 50  
Log-POW: Octanol-water partition coefficient  
Koc: Partition coefficient of organic carbon

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -