

## Safety data sheet

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

**1.1. Product identifier**

 Product name **VEROLAC**
**1.2. Relevant identified uses of the substance or mixture and uses advised against**

 Intended use **Solventborne enamel ideal for painting metallic surfaces**
**1.3. Details of the supplier of the safety data sheet**

Name	<b>VITEX - HERMES YANNIDIS BROS S.A.</b>		
Full address	<b>IMEROS TOPOS</b>		
District and Country	<b>19300 ASPROPYRGOS</b>		<b>(ATTIKI)</b>
	<b>GREECE</b>		
Tel.	<b>(0030) 2105589400</b>		
Fax	<b>(0030) 2105597859</b>		

e-mail address of the competent person responsible for the Safety Data Sheet

**vitexlab@vitex.gr**

Product distribution by

**YANNIDIS BROS S.A.**
**1.4. Emergency telephone number**

For urgent inquiries refer to	<b>(0030) 2105589400</b>
	<b>(0030) 2107793777</b>

### SECTION 2. Hazards identification.

**2.1. Classification of the substance or mixture.**

The product is classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

**2.1.1. Regulation 1272/2008 (CLP) and following amendments and adjustments.**

Hazard classification and indication:

Flammable liquid, category 3	H226	Flammable liquid and vapour.
Eye irritation, category 2	H319	Causes serious eye irritation.
Specific target organ toxicity - single exposure, category 3	H336	May cause drowsiness or dizziness.
Hazardous to the aquatic environment, chronic toxicity, category 3	H412	Harmful to aquatic life with long lasting effects.

**2.1.2. 67/548/EEC and 1999/45/EC Directives and following amendments and adjustments.**

Danger Symbols:	--
R phrases:	10-52/53-66-67

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

**2.2. Label elements.**

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:


 Signal words: **Warning**

Hazard statements:

**VEROLAC**
**SECTION 2. Hazards identification. ... / >>**

<b>H226</b>	Flammable liquid and vapour.
<b>H319</b>	Causes serious eye irritation.
<b>H336</b>	May cause drowsiness or dizziness.
<b>H412</b>	Harmful to aquatic life with long lasting effects.
<b>EUH066</b>	Repeated exposure may cause skin dryness or cracking.
<b>EUH208</b>	Contains: COBALT BIS (2-ETHYLHEXANOATE) ETHYL METHYL KETOXIME
	May produce an allergic reaction.

## Precautionary statements:

<b>P101</b>	If medical advice is needed, have product container or label at hand.
<b>P102</b>	Keep out of reach of children.
<b>P210</b>	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
<b>P271</b>	Use only outdoors or in a well-ventilated area.
<b>P405</b>	Store locked up.
<b>P501</b>	Dispose of contents / container to . . .

**Contains:** HYDROCARBONS, C9-C11, n-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS

**2.3. Other hazards.**

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

**SECTION 3. Composition/information on ingredients.**
**3.1. Substances.**

Information not relevant.

**3.2. Mixtures.**
**Contains:**

<b>Identification.</b>	<b>Conc. %.</b>	<b>Classification 67/548/EEC.</b>	<b>Classification 1272/2008 (CLP).</b>
<b>HYDROCARBONS, C9-C11, n-ALKANES, ISOALKANES, CYCLICS, &lt;2% AROMATICS</b>			
CAS. 64742-48-9	25 - 35	R10, R66, R67, Xn R65, Note P	Flam. Liq. 3 H226, Asp. Tox. 1 H304, STOT SE 3 H336, EUH066, Note P
EC. 919-857-5			
INDEX. 649-327-00-6			
Reg. no. 01-2119463258-XXXX			
<b>HYDROCARBONS, C10-C13, n-ALKANES, ISOALKANES, CYCLICS, &lt;2% AROMATICS</b>			
CAS. 64742-48-9	3 - 6	R66, Xn R65, Note P	Asp. Tox. 1 H304, EUH066, Note P
EC. 918-481-9			
INDEX. 649-327-00-6			
Reg. no. 01-2119457273-XXXX			
<b>XYLENE (MIXTURE OF ISOMERS)</b>			
CAS. 1330-20-7	3 - 5	R10, Xn R20/21, Xi R38, Note C	Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Note C
EC. 215-535-7			
INDEX. 601-022-00-9			
Reg. no. 01-2119488216-XXXX			
<b>CALCIUM BIS (2-ETHYLHEXANOATE)</b>			
CAS. 136-51-6	1 - 2,5	Repr. Cat. 3 R63, Xi R41	Repr. 2 H361d, Eye Dam. 1 H318
EC. 205-249-0			
INDEX.			
Reg. no. 01-2119978297-19-XXXX			
<b>HYDROCARBONS, C9-C12, n-ALKANES, ISOALKANES, CYCLICS, AROMATICS (2-25%)</b>			
CAS. 64742-82-1	0,1 - 0,9	R10, R66, R67, Xn R65, N R51/53, Note P	Flam. Liq. 3 H226, STOT RE 1 H372, Asp. Tox. 1 H304, STOT SE 3 H336, Aquatic Chronic 2 H411, EUH066, Note P
EC. 919-446-0			
INDEX. 649-330-00-2			
Reg. no. 01-2119458049-XXXX			
<b>ETHYL METHYL KETOXIME</b>			
CAS. 96-29-7	0,3 - 0,5	Carc. Cat. 3 R40, Xn R21, Xi R41, Xi R43	Carc. 2 H351, Acute Tox. 4 H312, Eye Dam. 1 H318, Skin Sens. 1 H317
EC. 202-496-6			
INDEX. 616-014-00-0			

**VEROLAC**
**SECTION 3. Composition/information on ingredients. ... / >>**
**COBALT BIS (2-ETHYLHEXANOATE)**

CAS. 136-52-7 0,2 - 0,4 Xn R21/22, Xi R38, Xi R43, N R50/53

EC. 205-250-6

INDEX.

 Acute Tox. 4 H302, Acute Tox. 4 H312, Skin Irrit. 2 H315,  
 Skin Sens. 1 H317, Aquatic Chronic 1 H410

Note: Upper limit is not included into the range.

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

T+ = Very Toxic(T+), T = Toxic(T), Xn = Harmful(Xn), C = Corrosive(C), Xi = Irritant(Xi), O = Oxidizing(O), E = Explosive(E), F+ = Extremely Flammable(F+), F = Highly Flammable(F), N = Dangerous for the Environment(N)

**SECTION 4. First aid measures.**
**4.1. Description of first aid measures.**
**EYES:** Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

**SKIN:** Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

**INGESTION:** Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

**INHALATION:** Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

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

For symptoms and effects caused by the contained substances, see chap. 11.

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

Information not available.

**SECTION 5. Firefighting measures.**
**5.1. Extinguishing media.**
**SUITABLE EXTINGUISHING EQUIPMENT**

Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

**UNSUITABLE EXTINGUISHING EQUIPMENT**

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

**5.2. Special hazards arising from the substance or mixture.**
**HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE**

Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

**5.3. Advice for firefighters.**
**GENERAL INFORMATION**

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health.

Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

**SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS**

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

**SECTION 6. Accidental release measures.**
**6.1. Personal precautions, protective equipment and emergency procedures.**

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

**6.2. Environmental precautions.**

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

**6.3. Methods and material for containment and cleaning up.**

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Check incompatibility for container material in section 7. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

**6.4. Reference to other sections.**

Any information on personal protection and disposal is given in sections 8 and 13.

**VEROLAC**
**SECTION 7. Handling and storage.**
**7.1. Precautions for safe handling.**

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.

**7.2. Conditions for safe storage, including any incompatibilities.**

Store only in the original container. Store in a well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

**SECTION 8. Exposure controls/personal protection.**
**8.1. Control parameters.**

Regulatory References:

BGR	България	МИНИСТЕРСТВО НА ТРУДА И СОЦИАЛНАТА ПОЛИТИКА МИНИСТЕРСТВО НА ЗДРАВЕОПАЗВАНЕТО НАРЕДБА No 13 от 30 декември 2003 г
CYP	Κύπρος	Κ.Δ.Π. 268/2001; Κ.Δ.Π. 55/2004; Κ.Δ.Π. 295/2007; Κ.Δ.Π. 70/2012
CZE	Česká Republika	Nařízení vlády č. 361/2007 Sb. kterým se stanoví podmínky ochrany zdraví při práci
GRB	United Kingdom	EH40/2005 Workplace exposure limits
GRC	Ελλάδα	ΕΦΗΜΕΡΙΣ ΤΗΣ ΚΥΒΕΡΝΗΣΕΩΣ - ΤΕΥΧΟΣ ΠΡΩΤΟ Αρ. Φύλλου 19 - 9 Φεβρουαρίου 2012
HRV	Hrvatska	NN13/09- Institut za sigurnost Zagreb
HUN	Magyarország	50/2011. (XII. 22.) NGM rendelet a munkahelyek kémiai biztonságáról
EU	OEL EU	Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC.
	TLV-ACGIH	ACGIH 2014

**HYDROCARBONS, C9-C11, n-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS**
**Threshold Limit Value.**

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
OEL	EU	1200			

**Health - Derived no-effect level - DNEL / DMEL**

Route of exposure	Effects on consumers.				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral.			VND	300 mg/kg/d				
Inhalation.			VND	900 mg/m3	VND	1500 mg/m3		
Skin.			VND	300 mg/kg/d			VND	300 mg/kg/d

**HYDROCARBONS, C10-C13, n-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS**
**Threshold Limit Value.**

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
OEL	EU	1200			

**VEROLAC**
**SECTION 8. Exposure controls/personal protection. ... / >>**
**XYLENE (MIXTURE OF ISOMERS)**
**Threshold Limit Value.**

Type	Country	TWA/8h		STEL/15min		
		mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	
TLV	BGR	221		442		SKIN.
TLV	CYP	221	50	442	100	SKIN.
TLV	CZE	200		400		SKIN.
WEL	GRB	220	50	441	100	
TLV	GRC	435	100	650	150	SKIN.
GVI	HRV	221	50	442	100	SKIN.
MDK	HRV	440	100	655	150	
AK	HUN	221		442		SKIN.
OEL	EU	221	50	442	100	SKIN.
TLV-ACGIH		434	100	651	150	

**Health - Derived no-effect level - DNEL / DMEL**

Route of exposure	Effects on consumers.				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral.			VND	1,6 mg/kg/d				
Inhalation.	174 mg/m <sup>3</sup>	174 mg/m <sup>3</sup>	VND	14,8 mg/m <sup>3</sup>	289 mg/m <sup>3</sup>	289 mg/m <sup>3</sup>	VND	77 mg/m <sup>3</sup>
Skin.			VND	108 mg/kg/d			VND	180 mg/kg/d

**CALCIUM BIS (2-ETHYLHEXANOATE)**
**Threshold Limit Value.**

Type	Country	TWA/8h		STEL/15min	
		mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm
TLV	GRC	5000			

**Health - Derived no-effect level - DNEL / DMEL**

Route of exposure	Effects on consumers.				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral.			VND	2,83 mg/m <sup>3</sup>				
Inhalation.			VND	9,86 mg/m <sup>3</sup>			VND	39,98 mg/m <sup>3</sup>
Skin.			VND	2,83 mg/m <sup>3</sup>			VND	5,67 mg/kg/d

**HYDROCARBONS, C9-C12, n-ALKANES, ISOALKANES, CYCLICS, AROMATICS (2-25%)**
**Threshold Limit Value.**

Type	Country	TWA/8h		STEL/15min	
		mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm
OEL	EU	350			

**Health - Derived no-effect level - DNEL / DMEL**

Route of exposure	Effects on consumers.				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral.			VND	26 mg/kg/d				
Inhalation.			VND	71 mg/m <sup>3</sup>			VND	330 mg/m <sup>3</sup>
Skin.			VND	26 mg/kg/d			VND	44 mg/kg/d

**COBALT BIS (2-ETHYLHEXANOATE)**
**Threshold Limit Value.**

Type	Country	TWA/8h		STEL/15min	
		mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm
TLV	GRC	5			

**Legend:**

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.  
 VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

**VEROLAC**
**SECTION 8. Exposure controls/personal protection. ... / >>**
**8.2. Exposure controls.**

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration. Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

**HAND PROTECTION**

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The 'work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

**SKIN PROTECTION**

Wear category I professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

**EYE PROTECTION**

Wear airtight protective goggles (see standard EN 166).

**RESPIRATORY PROTECTION**

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

**ENVIRONMENTAL EXPOSURE CONTROLS.**

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

**SECTION 9. Physical and chemical properties.**
**9.1. Information on basic physical and chemical properties.**

Appearance	viscous liquid	
Colour	as showed in color folder	
Odour	characteristic	
Odour threshold.	Not available.	
pH.	Not available.	
Melting point / freezing point.	Not available.	
Initial boiling point.	Not available.	
Boiling range.	Not available.	
Flash point.	23 ≤ T ≤ 60	°C.
Evaporation Rate	Not available.	
Flammability of solids and gases	Not available.	
Lower flammability limit.	Not available.	
Upper flammability limit.	Not available.	
Lower explosive limit.	0,6 % (V/V).	
Upper explosive limit.	7,1 % (V/V).	
Vapour pressure.	Not available.	
Vapour density	Not available.	
Relative density.	0,96-1,26	g/ml
Solubility	insoluble in water	
Partition coefficient: n-octanol/water	Not available.	
Auto-ignition temperature.	Not available.	
Decomposition temperature.	Not available.	
Viscosity	65-75 KU	
Explosive properties	Not available.	
Oxidising properties	Not available.	

**9.2. Other information.**

Information not available.

**SECTION 10. Stability and reactivity.**
**10.1. Reactivity.**

There are no particular risks of reaction with other substances in normal conditions of use.

2-BUTANONE OXIME: decomposes under the effect of heat.

**10.2. Chemical stability.**

The product is stable in normal conditions of use and storage.

**VEROLAC**
**SECTION 10. Stability and reactivity. ... / >>**
**10.3. Possibility of hazardous reactions.**

The vapours may also form explosive mixtures with the air.

2-BUTANONE OXIME: thermal decomposition can have an explosive course. It reacts violently with strong oxidising agents and acids. Above the flash point (69°C), explosive mixtures can form with air.

XYLENE (MIXTURE OF ISOMERS): stable, but may develop violent reactions in the presence of strong oxidising agents such as sulphuric and nitric acids and perchlorates. May form explosive mixtures with the air.

**10.4. Conditions to avoid.**

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

**10.5. Incompatible materials.**

2-BUTANONE OXIME: oxidising substances and strong acids.

**10.6. Hazardous decomposition products.**

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

2-BUTANONE OXIME: nitrogen oxides, carbon oxides.

**SECTION 11. Toxicological information.**
**11.1. Information on toxicological effects.**

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

Acute effects: stinging eyes. Symptoms may include: rubescence, edema, pain and lachrymation. Ingestion may cause health problems, including stomach pain and sting, nausea and sickness.

This product contains highly volatile substances, which may cause serious depression of the central nervous system (CNS) and have negative effects, such as drowsiness, dizziness, slow reflexes, narcosis.

This product may have a degreasing action on the skin, producing dryness and chapped skin after repeated exposure.

This product contains sensitizing substance/s and may cause allergic reactions.

XYLENE (MIXTURE OF ISOMERS): has a toxic effect on the CNS (encephalopathies). Irritating to the skin, conjunctivae, cornea and respiratory apparatus.

**ETHYL METHYL KETOXIME**

LD50 (Oral). 2400 mg/kg Rat  
 LD50 (Dermal). 1000 mg/kg Rabbit  
 LC50 (Inhalation). 20 mg/l/4h Rat

**XYLENE (MIXTURE OF ISOMERS)**

LD50 (Oral). > 2000 mg/kg Rat  
 LC50 (Inhalation). > 10 mg/l/4h Rat

HYDROCARBONS,	C9-C11,	n-ALKANES,	ISOALKANES,	CYCLICS,	<2%	AROMATICS
LD50 (Oral).	> 5000 mg/kg Rat					
LD50 (Dermal).	> 5000 mg/kg Rabbit					
LC50 (Inhalation).	> 20 mg/l/4h Rat					

HYDROCARBONS,	C10-C13,	n-ALKANES,	ISOALKANES,	CYCLICS,	<2%	AROMATICS
LD50 (Oral).	> 5000 mg/kg					
LD50 (Dermal).	> 5000 mg/kg					
LC50 (Inhalation).	> 20 mg/l/4h Rat					

HYDROCARBONS,	C9-C12,	n-ALKANES,	ISOALKANES,	CYCLICS,	AROMATICS	(2-25%)
LD50 (Oral).	> 5000 mg/kg Rat					
LC50 (Inhalation).	> 20 mg/l/4h Rat					

**SECTION 12. Ecological information.**

This product is dangerous for the environment and the aquatic organisms. In the long term, it have negative effects on aquatic environment.

**12.1. Toxicity.**

**VEROLAC**
**SECTION 12. Ecological information. ... / >>**
**COBALT BIS (2-ETHYLHEXANOATE)**

LC50 - for Fish. > 10 mg/l/96h  
 EC50 - for Crustacea. > 10 mg/l/48h  
 EC50 - for Algae / Aquatic Plants. > 1 mg/l/72h

**XYLENE (MIXTURE OF ISOMERS)**

LC50 - for Fish. > 1 mg/l/96h  
 EC50 - for Crustacea. > 1 mg/l/48h  
 EC50 - for Algae / Aquatic Plants. > 1 mg/l/72h  
 Chronic NOEC for Fish. > 1 mg/l based on test data  
 Chronic NOEC for Crustacea. > 0,1 mg/l

HYDROCARBONS,	C9-C11,	n-ALKANES,	ISOALKANES,	CYCLICS,	<2%	AROMATICS
LC50 - for Fish.		> 100 mg/l/96h				
EC50 - for Crustacea.		> 100 mg/l/48h				
EC50 - for Algae / Aquatic Plants.		> 100 mg/l/72h				
Chronic NOEC for Fish.		> 0,1 mg/l based on modeled data				
Chronic NOEC for Crustacea.		> 0,1 mg/l based on modeled data				

HYDROCARBONS,	C10-C13,	n-ALKANES,	ISOALKANES,	CYCLICS,	<2%	AROMATICS
LC50 - for Fish.		> 100 mg/l/96h				
EC50 - for Crustacea.		> 100 mg/l/48h				
EC50 - for Algae / Aquatic Plants.		> 100 mg/l/72h				
Chronic NOEC for Fish.		> 0,1 mg/l based on modeled data				
Chronic NOEC for Crustacea.		> 0,1 mg/l based on modeled data				

**CALCIUM BIS (2-ETHYLHEXANOATE)**

LC50 - for Fish. 180 mg/l/96h  
 EC50 - for Crustacea. 85,4 mg/l/48h  
 EC50 - for Algae / Aquatic Plants. 49,3 mg/l/72h

HYDROCARBONS,	C9-C12,	n-ALKANES,	ISOALKANES,	CYCLICS,	AROMATICS	(2-25%)
LC50 - for Fish.		> 1 mg/l/96h				
EC50 - for Crustacea.		> 1 mg/l/48h				
EC50 - for Algae / Aquatic Plants.		> 1 mg/l/72h				
Chronic NOEC for Fish.		> 0,1 mg/l based on modeled data				
Chronic NOEC for Crustacea.		> 0,1 mg/l based on test data				

**12.2. Persistence and degradability.**
**XYLENE (MIXTURE OF ISOMERS)**

Rapidly biodegradable.

HYDROCARBONS,	C9-C11,	n-ALKANES,	ISOALKANES,	CYCLICS,	<2%	AROMATICS
Rapidly biodegradable.						

HYDROCARBONS,	C10-C13,	n-ALKANES,	ISOALKANES,	CYCLICS,	<2%	AROMATICS
Rapidly biodegradable.						

**CALCIUM BIS (2-ETHYLHEXANOATE)**

Rapidly biodegradable.

HYDROCARBONS,	C9-C12,	n-ALKANES,	ISOALKANES,	CYCLICS,	AROMATICS	(2-25%)
Rapidly biodegradable.						

**12.3. Bioaccumulative potential.**
**XYLENE (MIXTURE OF ISOMERS)**

Partition coefficient: n-octanol/water. 3,12

HYDROCARBONS,	C9-C11,	n-ALKANES,	ISOALKANES,	CYCLICS,	<2%	AROMATICS
Partition coefficient: n-octanol/water.		5				

HYDROCARBONS,	C9-C12,	n-ALKANES,	ISOALKANES,	CYCLICS,	AROMATICS	(2-25%)
Partition coefficient: n-octanol/water.		3,7				

**12.4. Mobility in soil.**

Information not available.

**12.5. Results of PBT and vPvB assessment.**



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**SECTION 12. Ecological information. ... / >>**

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

**12.6. Other adverse effects.**

Information not available.

**SECTION 13. Disposal considerations.**
**13.1. Waste treatment methods.**

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

**SECTION 14. Transport information.**
**14.1. UN number.**

ADR / RID, IMDG, IATA: UN: 1263

The product, if packaged in packages of less than 450 litres, is not subject to ADR regulations as stated in 2.2.3.1.5.

The product, if packaged in packages of less than 30 litres, is not subject to obligations relating to marking, labelling and package testing in accordance with 2.3.2.5 of the IMDG CODE.

**14.2. UN proper shipping name.**

ADR / RID: PAINT or PAINT RELATED MATERIAL

IMDG: PAINT or PAINT RELATED MATERIAL

IATA: PAINT or PAINT RELATED MATERIAL

**14.3. Transport hazard class(es).**

ADR / RID: Class: 3 Label: 3



IMDG: Class: 3 Label: 3



IATA: Class: 3 Label: 3


**14.4. Packing group.**

ADR / RID, IMDG, IATA: III

**14.5. Environmental hazards.**

ADR / RID: NO

IMDG: NO

IATA: NO

**14.6. Special precautions for user.**

ADR / RID: HIN - Kemler: 30  
Special Provision: 640E

Limited Quantities: 5 L

Tunnel restriction code: (D/E)

IMDG: EMS: F-E, S-E

Limited Quantities: 5 L

IATA: Cargo:

Maximum quantity: 220 L

Packaging instructions: 366

Pass.:

Maximum quantity: 60 L

Packaging instructions: 355

Special Instructions:

A3, A72, A192

**14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code.**

Information not relevant.

## SECTION 15. Regulatory information.

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

Seveso category. 6

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006.

Product.

Point. 3 - 40

Substances in Candidate List (Art. 59 REACH).

None.

Substances subject to authorisation (Annex XIV REACH).

None.

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None.

Substances subject to the Rotterdam Convention:

None.

Substances subject to the Stockholm Convention:

None.

Healthcare controls.

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

VOC (Directive 2004/42/EC) :

One-pack performance coatings.

VOC given in g/litre of product in a ready-to-use condition :

Limit value: 500,00 (2010)

VOC of product : 495,00

### 15.2. Chemical safety assessment.

No chemical safety assessment has been processed for the mixture and the substances it contains.

## SECTION 16. Other information.

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

<b>Flam. Liq. 3</b>	Flammable liquid, category 3
<b>Carc. 2</b>	Carcinogenicity, category 2
<b>Repr. 2</b>	Reproductive toxicity, category 2
<b>Acute Tox. 4</b>	Acute toxicity, category 4
<b>STOT RE 1</b>	Specific target organ toxicity - repeated exposure, category 1
<b>Asp. Tox. 1</b>	Aspiration hazard, category 1
<b>STOT RE 2</b>	Specific target organ toxicity - repeated exposure, category 2
<b>Eye Dam. 1</b>	Serious eye damage, category 1
<b>Eye Irrit. 2</b>	Eye irritation, category 2
<b>Skin Irrit. 2</b>	Skin irritation, category 2
<b>STOT SE 3</b>	Specific target organ toxicity - single exposure, category 3
<b>Skin Sens. 1</b>	Skin sensitization, category 1
<b>Aquatic Chronic 1</b>	Hazardous to the aquatic environment, chronic toxicity, category 1
<b>Aquatic Chronic 2</b>	Hazardous to the aquatic environment, chronic toxicity, category 2
<b>Aquatic Chronic 3</b>	Hazardous to the aquatic environment, chronic toxicity, category 3
<b>H226</b>	Flammable liquid and vapour.
<b>H351</b>	Suspected of causing cancer.
<b>H361D</b>	Suspected of damaging the unborn child.
<b>H302</b>	Harmful if swallowed.
<b>H312</b>	Harmful in contact with skin.
<b>H332</b>	Harmful if inhaled.
<b>H372</b>	Causes damage to organs through prolonged or repeated exposure.
<b>H304</b>	May be fatal if swallowed and enters airways.
<b>H373</b>	May cause damage to organs through prolonged or repeated exposure.
<b>H318</b>	Causes serious eye damage.
<b>H319</b>	Causes serious eye irritation.
<b>H315</b>	Causes skin irritation.
<b>H335</b>	May cause respiratory irritation.
<b>H317</b>	May cause an allergic skin reaction.
<b>H336</b>	May cause drowsiness or dizziness.

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<b>H410</b>	Very toxic to aquatic life with long lasting effects.
<b>H411</b>	Toxic to aquatic life with long lasting effects.
<b>H412</b>	Harmful to aquatic life with long lasting effects.
<b>EUH066</b>	Repeated exposure may cause skin dryness or cracking.

Text of risk (R) phrases mentioned in section 2-3 of the sheet:

<b>R10</b>	FLAMMABLE.
<b>R20/21</b>	HARMFUL BY INHALATION AND IN CONTACT WITH SKIN.
<b>R21</b>	HARMFUL IN CONTACT WITH SKIN.
<b>R21/22</b>	HARMFUL IN CONTACT WITH SKIN AND IF SWALLOWED.
<b>R38</b>	IRRITATING TO SKIN.
<b>Carc. Cat. 3</b>	Carcinogenicity, category 3.
<b>R40</b>	LIMITED EVIDENCE OF A CARCINOGENIC EFFECT.
<b>R41</b>	RISK OF SERIOUS DAMAGE TO EYES.
<b>R43</b>	MAY CAUSE SENSITISATION BY SKIN CONTACT.
<b>R50/53</b>	VERY TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.
<b>R51/53</b>	TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.
<b>R52/53</b>	HARMFUL TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.
<b>Repr. Cat. 3</b>	Reproductive toxicity, development, category 3.
<b>R63</b>	POSSIBLE RISK OF HARM TO THE UNBORN CHILD.
<b>R65</b>	HARMFUL: MAY CAUSE LUNG DAMAGE IF SWALLOWED.
<b>R66</b>	REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING.
<b>R67</b>	VAPOURS MAY CAUSE DROWSINESS AND DIZZINESS.

**LEGEND:**

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

**GENERAL BIBLIOGRAPHY**

1. Directive 1999/45/EC and following amendments
2. Directive 67/548/EEC and following amendments and adjustments
3. Regulation (EU) 1907/2006 (REACH) of the European Parliament
4. Regulation (EU) 1272/2008 (CLP) of the European Parliament
5. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
6. Regulation (EU) 453/2010 of the European Parliament
7. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
8. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
9. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
10. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament

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11. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament

- The Merck Index. - 10th Edition
- Handling Chemical Safety
- Niosh - Registry of Toxic Effects of Chemical Substances
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- ECHA website

**Note for users:**

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

**Changes to previous review:**

The following sections were modified:

01 / 07 / 09.