

**RADIATEUR
114650**

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

1.1 Product identifier: RADIATEUR
114650

Other means of identification:

Non-applicable

1.2 Relevant identified uses of the substance or mixture and uses advised against:

Relevant uses: High performance coatings for metal

Enamel, resistant to high temperatures, suitable for heated metallic surfaces and especially for central heating devices (Radiators).

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 Aghia Paraskevi
32011 Inofita - Viotia - 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:

CLP Regulation (EC) No 1272/2008:

Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.

Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard, Category 3, H412

Flam. Liq. 3: Flammable liquids, Category 3, H226

Skin Irrit. 2: Skin irritation, Category 2, H315

STOT RE 1: Specific target organ toxicity, repeated exposure, Category 1, H372

2.2 Label elements:

CLP Regulation (EC) No 1272/2008:

Danger



Hazard statements:

Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.

Flam. Liq. 3: H226 - Flammable liquid and vapour.

Skin Irrit. 2: H315 - Causes skin irritation.

STOT RE 1: H372 - Causes damage to organs through prolonged or repeated exposure.

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.

P302+P352: IF ON SKIN: Wash with plenty of water.

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 Cobalt bis(2-ethylhexanoate). May produce an allergic reaction.

Substances that contribute to the classification

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) (CAS: 64742-82-1)

** Changes with regards to the previous version

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SECTION 2: HAZARDS IDENTIFICATION ** (continued)

2.3 Other hazards:

Product fails to meet PBT/vPvB criteria

*** Changes with regards to the previous version*

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: 64742-82-1 EC: 919-446-0 Index: Non-applicable REACH: 01-2119458049-33-XXXX	Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)⁽¹⁾ Regulation 1272/2008	Self-classified Aquatic Chronic 2: H411; Asp. Tox. 1: H304; Flam. Liq. 3: H226; STOT RE 1: H372; STOT SE 3: H336; EUH066 - Danger	19 - <24 %
CAS: 1330-20-7 EC: 215-535-7 Index: 601-022-00-9 REACH: 01-2119488216-32-XXXX	Xylene⁽¹⁾ Regulation 1272/2008	ATP CLP00 Acute Tox. 4: H312+H332; Flam. Liq. 3: H226; Skin Irrit. 2: H315 - Warning	9,9 - <19 %
CAS: 136-51-6 EC: 205-249-0 Index: Non-applicable REACH: 01-2119978297-19-XXXX	calcium bis(2-ethylhexanoate)⁽¹⁾ Regulation 1272/2008	Self-classified Eye Dam. 1: H318; Repr. 2: H361d - Danger	0,24 - <0,9 %
CAS: 136-52-7 EC: 205-250-6 Index: Non-applicable REACH: 01-2119524678-29-XXXX	Cobalt bis(2-ethylhexanoate)⁽¹⁾ Regulation 1272/2008	Self-classified Acute Tox. 4: H302; Aquatic Chronic 1: H410; Repr. 2: H361f; Skin Sens. 1: H317 - Warning	0,09 - <0,24 %
CAS: 22464-99-9 EC: 245-018-1 Index: Non-applicable REACH: 01-2119979088-21-XXXX	2-ethylhexanoic acid, zirconium salt⁽¹⁾ Regulation 1272/2008	Self-classified Repr. 2: H361d - Warning	0,09 - <0,24 %
CAS: 85203-81-2 EC: 286-272-3 Index: Non-applicable REACH: 01-2119979093-30-XXXX	Hexanoic acid, 2-ethyl-, zinc salt, basic⁽¹⁾ Regulation 1272/2008	Self-classified Eye Irrit. 2: H319; Repr. 2: H361; Skin Irrit. 2: H315 - Warning	0,09 - <0,24 %
CAS: 77-99-6 EC: 201-074-9 Index: Non-applicable REACH: 01-2119486799-10-XXXX	Propylidynetrimethanol⁽¹⁾ Regulation 1272/2008	Self-classified Repr. 2: H361fd - Warning	0,09 - <0,24 %
CAS: 123-86-4 EC: 204-658-1 Index: 607-025-00-1 REACH: 01-2119485493-29-XXXX	N-butyl acetate⁽²⁾ Regulation 1272/2008	ATP CLP00 Flam. Liq. 3: H226; STOT SE 3: H336; EUH066 - Warning	<0,09 %

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

⁽²⁾ 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.

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SECTION 4: FIRST AID MEASURES (continued)

By inhalation:

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

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:

Suitable extinguishing media:

If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO₂).

Unsuitable extinguishing media:

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:

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:

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

6.3 Methods and material for containment and cleaning up:

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SECTION 6: ACCIDENTAL RELEASE MEASURES (continued)

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

Due to the danger of this product for the environment it is recommended to use it within an area containing contamination control barriers in case of spillage, as well as having absorbent material in close proximity.

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):

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 (European OEL, not country-specific legislation):

Directive (EU) 2000/39, Directive 2004/37/EC, Directive (EU) 2006/15, Directive (EU) 2009/161, Directive (EU) 2017/164, Directive (EU) 2019/1831:

Identification	Occupational exposure limits		
	IOELV (8h)	50 ppm	221 mg/m ³
Xylene CAS: 1330-20-7 EC: 215-535-7	IOELV (STEL)	100 ppm	442 mg/m ³
N-butyl acetate CAS: 123-86-4 EC: 204-658-1	IOELV (8h)	50 ppm	241 mg/m ³
	IOELV (STEL)	150 ppm	723 mg/m ³

DNEL (Workers):

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) CAS: 64742-82-1 EC: 919-446-0	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	21 mg/kg	Non-applicable
	Inhalation	570 mg/m ³	Non-applicable	330 mg/m ³	Non-applicable
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 ³	442 mg/m ³	221 mg/m ³	221 mg/m ³
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 ³	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 ³
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 ³	Non-applicable
Hexanoic acid, 2-ethyl-, zinc salt, basic CAS: 85203-81-2 EC: 286-272-3	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	6,41 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	20,83 mg/m ³	Non-applicable
Propylidynetrimethanol CAS: 77-99-6 EC: 201-074-9	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	0,94 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	3,3 mg/m ³	Non-applicable
N-butyl acetate CAS: 123-86-4 EC: 204-658-1	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	11 mg/kg	Non-applicable	11 mg/kg	Non-applicable
	Inhalation	600 mg/m ³	600 mg/m ³	300 mg/m ³	300 mg/m ³

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) CAS: 64742-82-1 EC: 919-446-0	Oral	Non-applicable	Non-applicable	21 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	12 mg/kg	Non-applicable
	Inhalation	570 mg/m ³	Non-applicable	71 mg/m ³	Non-applicable
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 ³	260 mg/m ³	65,3 mg/m ³	65,3 mg/m ³
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 ³	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 ³
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 ³	Non-applicable
Hexanoic acid, 2-ethyl-, zinc salt, basic CAS: 85203-81-2 EC: 286-272-3	Oral	Non-applicable	Non-applicable	3,21 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	3,21 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	10,42 mg/m ³	Non-applicable
Propylidynetrimethanol CAS: 77-99-6 EC: 201-074-9	Oral	Non-applicable	Non-applicable	0,34 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	0,34 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	0,58 mg/m ³	Non-applicable

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
N-butyl acetate	Oral	2 mg/kg	Non-applicable	2 mg/kg	Non-applicable
CAS: 123-86-4	Dermal	6 mg/kg	Non-applicable	6 mg/kg	Non-applicable
EC: 204-658-1	Inhalation	300 mg/m ³	300 mg/m ³	35,7 mg/m ³	35,7 mg/m ³

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	
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	
N-butyl acetate CAS: 123-86-4 EC: 204-658-1	STP	35,6 mg/L	Fresh water	0,18 mg/L	
	Soil	0,09 mg/kg	Marine water	0,018 mg/L	
	Intermittent	0,36 mg/L	Sediment (Fresh water)	0,981 mg/kg	
	Oral	Non-applicable	Sediment (Marine water)	0,098 mg/kg	



8.2 Exposure controls:

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



In accordance with the order of importance to control professional exposure (Directive 98/24/EC) it is recommended to use localized extraction in the work area as a collective protection measure to avoid exceeding the occupational exposure limits. In case of using personal protective equipment it should have CE marking in accordance with Directive 2016/425/EC. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For additional 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
 Mandatory respiratory tract protection	Filter mask for gases and vapours		EN 405:2002+A1:2010	Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment.

C.- Specific protection for the hands

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	NON-disposable chemical protective gloves		EN ISO 374-1:2016+A1:2018 EN 16523-1:2015+A1:2018 EN 420:2004+A1:2010	The Breakthrough Time indicated by the manufacturer must exceed the period during which the product is being used. Do not use protective creams after the product has come into contact with skin.

As the product is a mixture of several substances, the resistance of the glove material can not be calculated 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	Face shield		EN 166:2002 EN 167:2002 EN 168:2002 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



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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory complete body protection	Disposable clothing for protection against chemical risks, with antistatic and fireproof properties		EN 1149-1,2,3 EN 13034:2005+A1:2009 EN ISO 13982-1:2004/A1:2010 EN ISO 6529:2013 EN ISO 6530:2005 EN ISO 13688:2013 EN 464:1994	For professional use only. Clean periodically according to the manufacturer's instructions.
 Mandatory foot protection	Safety footwear for protection against chemical risk, with antistatic and heat resistant properties		EN ISO 13287:2013 EN ISO 20345:2011 EN 13832-1:2019	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 ³ (500 g/L)
EU limit for the product (Cat. A.I):	500 g/L (2010)
Components:	WHITE SPIRIT - 15 % 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:	Viscous
Colour:	<input type="checkbox"/> White
Odour:	Not available
Odour threshold:	Non-applicable *

Volatility:

Boiling point at atmospheric pressure:	145 °C
Vapour pressure at 25 °C:	595 Pa
Vapour pressure at 50 °C:	2618,31 Pa (2,62 kPa)
Evaporation rate at 25 °C:	Non-applicable *

Product description:

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

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Density at 25 °C:	1190 - 1250 kg/m ³
Relative density at 25 °C:	Non-applicable *
Dynamic viscosity at 25 °C:	1458,62 - 1352,79 cP
Kinematic viscosity at 25 °C:	Non-applicable *
Kinematic viscosity at 40 °C:	>20,5 cSt
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:	
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:	33 °C
Heat of combustion:	Non-applicable *
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	275 °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:

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SECTION 10: STABILITY AND REACTIVITY (continued)

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 (CO₂), carbon monoxide and other organic compounds.

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

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, as it does not contain substances classified as dangerous for this effect. 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: 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.

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

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.
IARC: Xylene (3); naphtha (petroleum), hydrodesulphurized heavy , < 0.1 % EC 200-753-7 (3); Cobalt bis(2-ethylhexanoate) (2B); Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) (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: Serious health effects in the case of prolonged consumption, including death, serious functional disorders or morphological changes of toxicological importance.
- Skin: Based on available data, the classification criteria are not met. However, it does contain substances which are classified as dangerous due to repetitive exposure. For more information see section 3.

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

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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	Rat
	LC50 inhalation	11 mg/L (4 h) (ATEi)	
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) CAS: 64742-82-1 EC: 919-446-0	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>20 mg/L (4 h)	
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	
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-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	
Hexanoic acid, 2-ethyl-, zinc salt, basic CAS: 85203-81-2 EC: 286-272-3	LD50 oral	2043 mg/kg	Rat
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>20 mg/L	
Propylidynetrimethanol CAS: 77-99-6 EC: 201-074-9	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>5 mg/L	
N-butyl acetate CAS: 123-86-4 EC: 204-658-1	LD50 oral	12789 mg/kg	Rat
	LD50 dermal	14112 mg/kg	Rabbit
	LC50 inhalation	23,4 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:

Identification	Acute toxicity		Species	Genus
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) CAS: 64742-82-1 EC: 919-446-0	LC50	>1 - 10 mg/L (96 h)		Fish
	EC50	>1 - 10 mg/L (48 h)		Crustacean
	EC50	>1 - 10 mg/L (72 h)		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
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		
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 (48 h)		Crustacean
	EC50	>0.1 - 1 mg/L (72 h)		Algae
N-butyl acetate CAS: 123-86-4 EC: 204-658-1	LC50	62 mg/L (96 h)	Leuciscus idus	Fish
	EC50	73 mg/L (24 h)	Daphnia magna	Crustacean
	EC50	675 mg/L (72 h)	Scenedesmus subspicatus	Algae

12.2 Persistence and degradability:

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SECTION 12: ECOLOGICAL INFORMATION ** (continued)

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 %
calcium bis(2-ethylhexanoate) CAS: 136-51-6 EC: 205-249-0	BOD5	Non-applicable	Concentration	20 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	99 %
2-ethylhexanoic acid, zirconium salt CAS: 22464-99-9 EC: 245-018-1	BOD5	Non-applicable	Concentration	20 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	99 %
N-butyl acetate CAS: 123-86-4 EC: 204-658-1	BOD5	Non-applicable	Concentration	Non-applicable
	COD	Non-applicable	Period	5 days
	BOD5/COD	Non-applicable	% Biodegradable	84 %

12.3 Bioaccumulative potential:

Identification	Bioaccumulation potential	
Xylene CAS: 1330-20-7 EC: 215-535-7	BCF	9
	Pow Log	2.77
	Potential	Low
calcium bis(2-ethylhexanoate) CAS: 136-51-6 EC: 205-249-0	BCF	
	Pow Log	2.96
	Potential	
2-ethylhexanoic acid, zirconium salt CAS: 22464-99-9 EC: 245-018-1	BCF	
	Pow Log	2.96
	Potential	
N-butyl acetate CAS: 123-86-4 EC: 204-658-1	BCF	4
	Pow Log	1.78
	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 ³ /mol
	Conclusion	Moderate	Dry soil	Yes
	Surface tension	Non-applicable	Moist soil	Yes
calcium bis(2-ethylhexanoate) CAS: 136-51-6 EC: 205-249-0	Koc	Non-applicable	Henry	2,94E-1 Pa·m ³ /mol
	Conclusion	Non-applicable	Dry soil	Yes
	Surface tension	Non-applicable	Moist soil	Yes
2-ethylhexanoic acid, zirconium salt CAS: 22464-99-9 EC: 245-018-1	Koc	Non-applicable	Henry	2,94E-1 Pa·m ³ /mol
	Conclusion	Non-applicable	Dry soil	Yes
	Surface tension	Non-applicable	Moist soil	Yes
Propylidynetrimethanol CAS: 77-99-6 EC: 201-074-9	Koc	Non-applicable	Henry	Non-applicable
	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	2,357E-2 N/m (246,93 °C)	Moist soil	Non-applicable
N-butyl acetate CAS: 123-86-4 EC: 204-658-1	Koc	Non-applicable	Henry	Non-applicable
	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	2,478E-2 N/m (25 °C)	Moist soil	Non-applicable

12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

12.6 Other adverse effects:

Not described

** Changes with regards to the previous version

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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):

HP14 Ecotoxic, HP3 Flammable, HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

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:** III
- 14.5 Environmental hazards:** No
- 14.6 Special precautions for user**
 - Special regulations: 163, 367, 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:



- 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:** III
- 14.5 Marine pollutant:** No
- 14.6 Special precautions for user**
 - Special regulations: 223, 955, 163, 367
 - 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:

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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: III
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).
 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):

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.
 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:

The SDS shall be supplied in an official language of the country where the product is placed on the market. 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.:

** Changes with regards to the previous version

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SECTION 16: OTHER INFORMATION ** (continued)

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

- New declared substances
 - Propylidyntrimethanol (77-99-6)
 - N-butyl acetate (123-86-4)
- Removed substances
 - 2-(2-butoxyethoxy)ethanol (112-34-5)
 - Ethylbenzene (100-41-4)
 - Toluene (108-88-3)
 - 1-methoxy-2-propanol (107-98-2)
 - 2-methoxy-1-methylethyl acetate (108-65-6)
 - naphtha (petroleum), hydrodesulphurized heavy , < 0.1 % EC 200-753-7 (64742-82-1)
 - 2-butanone oxime (96-29-7)
 - Xylene (1330-20-7)
 - 2-butoxyethyl acetate (112-07-2)

Substances that contribute to the classification (SECTION 2):

- Removed substances
 - naphtha (petroleum), hydrodesulphurized heavy , < 0.1 % EC 200-753-7 (64742-82-1)

CLP Regulation (EC) No 1272/2008 (SECTION 2, SECTION 16):

- Pictograms
- Hazard statements
- Precautionary statements
- Supplementary information
- Substances contained in EUH208:
 - Removed substances
 - 2-butanone oxime (96-29-7)

Texts of the legislative phrases mentioned in section 2:

H315: Causes skin irritation.
H412: Harmful to aquatic life with long lasting effects.
H372: Causes damage to organs through prolonged or repeated exposure.
H226: Flammable liquid and vapour.

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:

Acute Tox. 4: H302 - Harmful if swallowed.
Acute Tox. 4: H312+H332 - Harmful in contact with skin or if inhaled.
Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects.
Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects.
Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways.
Eye Dam. 1: H318 - Causes serious eye damage.
Eye Irrit. 2: H319 - Causes serious eye irritation.
Flam. Liq. 3: H226 - Flammable liquid and vapour.
Repr. 2: H361 - Suspected of damaging fertility or the unborn child.
Repr. 2: H361d - Suspected of damaging the unborn child.
Repr. 2: H361f - Suspected of damaging fertility.
Repr. 2: H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child.
Skin Irrit. 2: H315 - Causes skin irritation.
Skin Sens. 1: H317 - May cause an allergic skin reaction.
STOT RE 1: H372 - Causes damage to organs through prolonged or repeated exposure.
STOT SE 3: H336 - May cause drowsiness or dizziness.

Classification procedure:

Skin Irrit. 2: Calculation method
Aquatic Chronic 3: Calculation method
STOT RE 1: Calculation method
Flam. Liq. 3: Calculation method (2.6.4.3)

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>

** Changes with regards to the previous version

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Safety data sheet

This SDS is an English translation of Regulation (EU) n° 2015/830, without any country-specific legislation

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SECTION 16: OTHER INFORMATION ** (continued)

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

*** Changes with regards to the previous version*

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 -

