LIQCREATE

Liqcreate - Premium White

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

1.1 Product identifier: Liqcreate - Premium White

Other means of identification:

Non-applicable

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

Relevant uses: Resin for 3D Printing. For professional user/industrial user only.

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:

ALT Group BV
Texasdreef 7
3565 CL Utrecht - The Netherlands
Phone.: +31850605849
info@liqcreate.com
www.liqcreate.com

1.4 Emergency telephone number: +31850605849 Mo-Fr 8:30-17:00

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 4: Hazardous to the aquatic environment, long-term hazard, Category 4, H413
Skin Sens. 1: Sensitisation, skin, Category 1, H317

2.2 Label elements:

CLP Regulation (EC) No 1272/2008:

Warning

Hazard statements:

Aquatic Chronic 4: H413 - May cause long lasting harmful effects to aquatic life.
Skin Sens. 1: H317 - May cause an allergic skin reaction.

Precautionary statements:

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P272: Contaminated work clothing should not be allowed out of the workplace.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352: IF ON SKIN: Wash with plenty of water.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P501: Dispose of contents/container in accordance with regulations on hazardous waste or packaging and packaging waste respectively.

Supplementary information:

Contains Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide, pentaerythritol tetraacrylate.

UFI: EP00-01U0-1007-1AVA

2.3 Other hazards:

Product fails to meet PBT/vPvB criteria

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Non-applicable

3.2 Mixture:

Chemical description: Mixture of substances

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

Components:

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

Identification	Chemical name/Classification		Concentration
CAS: 41637-38-1 EC: 609-946-4 Index: Non-applicable REACH: 01-2119980659-17-XXXX	**Esterification products of 4,4´-isopropylidenediphenol, ethoxylated and 2-methylprop-2-enoic acid(1)**	Self-classified	**85 - <100 %**
	Regulation 1272/2008	Aquatic Chronic 4: H413	
CAS: 4986-89-4 EC: 225-644-1 Index: 607-122-00-9 REACH: Non-applicable	**pentaerythritol tetraacrylate(1)**	ATP CLP00	**3 - <9 %**
	Regulation 1272/2008	Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Warning	
CAS: 75980-60-8 EC: 278-355-8 Index: 015-203-00-X REACH: 01-2119972295-29-XXXX	**Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide(1)**	Self-classified	**0.5 - <2 %**
	Regulation 1272/2008	Aquatic Chronic 2: H411; Repr. 2: H361; Skin Sens. 1B: H317 - Warning	
CAS: 110-82-7 EC: 203-806-2 Index: 601-017-00-1 REACH: 01-2119463273-41-XXXX	**cyclohexane(2)**	ATP CLP00	**0.01 - <0.1 %**
	Regulation 1272/2008	Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Asp. Tox. 1: H304; Flam. Liq. 2: H225; Skin Irrit. 2: H315; STOT SE 3: H336 - Danger	
CAS: 108-88-3 EC: 203-625-9 Index: 601-021-00-3 REACH: 01-2119471310-51-XXXX	**Toluene(2)**	ATP CLP00	**0.01 - <0.1 %**
	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	
CAS: 123-86-4 EC: 204-658-1 Index: 607-025-00-1 REACH: 01-2119485493-29-XXXX	**N-butyl acetate(2)**	ATP CLP00	**0.01 - <0.1 %**
	Regulation 1272/2008	Flam. Liq. 3: H226; STOT SE 3: H336; EUH066 - Warning	
CAS: 108-95-2 EC: 203-632-7 Index: 604-001-00-2 REACH: 01-2119471329-32-XXXX	**phenol(2)**	ATP CLP00	**<0.01 %**
	Regulation 1272/2008	Acute Tox. 3: H301+H311+H331; Muta. 2: H341; Skin Corr. 1B: H314; STOT RE 2: H373 - Danger	

(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.

Other information:

Identification	Specific concentration limit
phenol CAS: 108-95-2 EC: 203-632-7	% (w/w) >=3: Skin Corr. 1B - H314 1<= % (w/w) <3: Skin Irrit. 2 - H315 % (w/w) >=1: Eye Irrit. 2 - H319

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.

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SECTION 4: FIRST AID MEASURES (continued)

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:

Product is non-flammable under normal conditions of storage, manipulation and use, but the product contains flammable substances. In the case of inflammation as a result of improper manipulation, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems.

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:

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

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SECTION 7: HANDLING AND STORAGE (continued)

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

Avoid the evaporation of the product as it contains flammable substances, which could form flammable vapour/air mixtures in the presence of sources of ignition. Control sources of ignition (mobile phones, sparks,...) and transfer at slow speeds to avoid the creation of electrostatic charges. Avoid splashes and pulverizations. 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 ºC

Maximum Temp.: 30 ºC

Maximum time: 15 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		
cyclohexane CAS: 110-82-7 EC: 203-806-2	IOELV (8h) IOELV (STEL)	200 ppm	700 mg/m³
Toluene CAS: 108-88-3 EC: 203-625-9	IOELV (8h) IOELV (STEL)	50 ppm 100 ppm	192 mg/m³ 384 mg/m³
N-butyl acetate CAS: 123-86-4 EC: 204-658-1	IOELV (8h) IOELV (STEL)	50 ppm 150 ppm	241 mg/m³ 723 mg/m³
phenol CAS: 108-95-2 EC: 203-632-7	IOELV (8h) IOELV (STEL)	2 ppm 4 ppm	8 mg/m³ 16 mg/m³

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Esterification products of 4,4´-isopropylidenediphenol, ethoxylated and 2-methylprop-2-enoic acid CAS: 41637-38-1 EC: 609-946-4	Oral Dermal Inhalation	Non-applicable Non-applicable Non-applicable	Non-applicable Non-applicable Non-applicable	Non-applicable 2 mg/kg 3,52 mg/m³	Non-applicable Non-applicable Non-applicable
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide CAS: 75980-60-8 EC: 278-355-8	Oral Dermal Inhalation	Non-applicable Non-applicable Non-applicable	Non-applicable Non-applicable Non-applicable	Non-applicable 0,233 mg/kg 0,822 mg/m³	Non-applicable Non-applicable Non-applicable
cyclohexane CAS: 110-82-7 EC: 203-806-2	Oral Dermal Inhalation	Non-applicable Non-applicable 1400 mg/m³	Non-applicable Non-applicable 1400 mg/m³	Non-applicable 2016 mg/kg 700 mg/m³	Non-applicable Non-applicable 700 mg/m³

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Toluene	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 108-88-3	Dermal	Non-applicable	Non-applicable	384 mg/kg	Non-applicable
EC: 203-625-9	Inhalation	384 mg/m³	384 mg/m³	192 mg/m³	192 mg/m³
N-butyl acetate	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 123-86-4	Dermal	11 mg/kg	Non-applicable	11 mg/kg	Non-applicable
EC: 204-658-1	Inhalation	600 mg/m³	600 mg/m³	300 mg/m³	300 mg/m³
phenol	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 108-95-2	Dermal	Non-applicable	Non-applicable	1,23 mg/kg	Non-applicable
EC: 203-632-7	Inhalation	Non-applicable	16 mg/m³	8 mg/m³	Non-applicable

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Esterification products of 4,4´-isopropylidenediphenol, ethoxylated and 2-methylprop-2-enoic acid	Oral	Non-applicable	Non-applicable	0,5 mg/kg	Non-applicable
CAS: 41637-38-1	Dermal	Non-applicable	Non-applicable	1 mg/kg	Non-applicable
EC: 609-946-4	Inhalation	Non-applicable	Non-applicable	0,87 mg/m³	Non-applicable
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	Oral	Non-applicable	Non-applicable	0,0833 mg/kg	Non-applicable
CAS: 75980-60-8	Dermal	Non-applicable	Non-applicable	0,0833 mg/kg	Non-applicable
EC: 278-355-8	Inhalation	Non-applicable	Non-applicable	0,145 mg/m³	Non-applicable
cyclohexane	Oral	Non-applicable	Non-applicable	59,4 mg/kg	Non-applicable
CAS: 110-82-7	Dermal	Non-applicable	Non-applicable	1186 mg/kg	Non-applicable
EC: 203-806-2	Inhalation	412 mg/m³	412 mg/m³	206 mg/m³	206 mg/m³
Toluene	Oral	Non-applicable	Non-applicable	8,13 mg/kg	Non-applicable
CAS: 108-88-3	Dermal	Non-applicable	Non-applicable	226 mg/kg	Non-applicable
EC: 203-625-9	Inhalation	226 mg/m³	226 mg/m³	56,5 mg/m³	56,5 mg/m³
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/m³	300 mg/m³	35,7 mg/m³	35,7 mg/m³
phenol	Oral	Non-applicable	Non-applicable	0,4 mg/kg	Non-applicable
CAS: 108-95-2	Dermal	Non-applicable	Non-applicable	0,4 mg/kg	Non-applicable
EC: 203-632-7	Inhalation	Non-applicable	Non-applicable	1,32 mg/m³	Non-applicable

PNEC:

Identification				
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	STP	Non-applicable	Fresh water	0,0014 mg/L
CAS: 75980-60-8	Soil	0,0222 mg/kg	Marine water	0,00014 mg/L
EC: 278-355-8	Intermittent	0,014 mg/L	Sediment (Fresh water)	0,115 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,0115 mg/kg
cyclohexane	STP	3,24 mg/L	Fresh water	0,207 mg/L
CAS: 110-82-7	Soil	3,38 mg/kg	Marine water	0,207 mg/L
EC: 203-806-2	Intermittent	0,207 mg/L	Sediment (Fresh water)	16,68 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	16,68 mg/kg
Toluene	STP	13,61 mg/L	Fresh water	0,68 mg/L
CAS: 108-88-3	Soil	2,89 mg/kg	Marine water	0,68 mg/L
EC: 203-625-9	Intermittent	0,68 mg/L	Sediment (Fresh water)	16,39 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	16,39 mg/kg
N-butyl acetate	STP	35,6 mg/L	Fresh water	0,18 mg/L
CAS: 123-86-4	Soil	0,09 mg/kg	Marine water	0,018 mg/L
EC: 204-658-1	Intermittent	0,36 mg/L	Sediment (Fresh water)	0,981 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,098 mg/kg

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification				
phenol	STP	2,1 mg/L	Fresh water	0,008 mg/L
CAS: 108-95-2	Soil	0,136 mg/kg	Marine water	0,001 mg/L
EC: 203-632-7	Intermittent	0,031 mg/L	Sediment (Fresh water)	0,091 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,009 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 Regulation (EU) 2016/425. 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
 Mandatory respiratory tract protection	Filter mask for gases and vapours	CE CAT III	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	Protective gloves against minor risks	CE 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 420:2004+A1:2010 and EN ISO 374-1:2016+A1:2018

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	Panoramic glasses against splash/projections.	CE CAT II	EN 166:2002 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

Pictogram	PPE	Labelling	CEN Standard	Remarks
	Work clothing	CE CAT I		Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 6529:2013, EN ISO 6530:2005, EN ISO 13688:2013, EN 464:1994.
	Anti-slip work shoes	CE CAT II	EN ISO 20347:2012	Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 20345:2012 y EN 13832-1:2007

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

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Volatile organic compounds:

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

V.O.C. (Supply):	0,21 % weight
V.O.C. density at 20 ºC:	2,42 kg/m³ (2,42 g/L)
Average carbon number:	6,43
Average molecular weight:	92,08 g/mol

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 ºC:	Liquid
Appearance:	Viscous
Colour:	White
Odour:	Resin
Odour threshold:	Non-applicable *

Volatility:

Boiling point at atmospheric pressure:	Non-applicable *
Vapour pressure at 20 ºC:	5682 Pa
Vapour pressure at 50 ºC:	20715,46 Pa (20,72 kPa)
Evaporation rate at 20 ºC:	Non-applicable *

Product description:

Density at 20 ºC:	1129,2 kg/m³
Relative density at 20 ºC:	1,129
Dynamic viscosity at 20 ºC:	Non-applicable *
Kinematic viscosity at 20 ºC:	Non-applicable *
Kinematic viscosity at 40 ºC:	>20,5 cSt
Concentration:	Non-applicable *
pH:	≈6 - 8 (at 100 %)
Vapour density at 20 ºC:	Non-applicable *
Partition coefficient n-octanol/water 20 ºC:	Non-applicable *
Solubility in water at 20 ºC:	
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:	Non Flammable (>60 ºC)
Heat of combustion:	Non-applicable *
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	260 ºC
Lower flammability limit:	Non-applicable *
Upper flammability limit:	Non-applicable *

*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)

Explosive:

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

9.2 Other information:

Surface tension at 20 ºC:	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	Precaution	Precaution	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 (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: 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.

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

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

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: Toluene (3); phenol (3)
- Mutagenicity: Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous with mutagenic effects. 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: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.

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: 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.
- 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

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	LD50 oral	5500 mg/kg	Rat
CAS: 75980-60-8	LD50 dermal	Non-applicable	
EC: 278-355-8	LC50 inhalation	Non-applicable	
cyclohexane	LD50 oral	5100 mg/kg	Rat
CAS: 110-82-7	LD50 dermal	Non-applicable	
EC: 203-806-2	LC50 inhalation	Non-applicable	
Toluene	LD50 oral	5580 mg/kg	Rat
CAS: 108-88-3	LD50 dermal	12124 mg/kg	Rat
EC: 203-625-9	LC50 inhalation	28,1 mg/L (4 h)	Rat
N-butyl acetate	LD50 oral	12789 mg/kg	Rat
CAS: 123-86-4	LD50 dermal	14112 mg/kg	Rabbit
EC: 204-658-1	LC50 inhalation	23,4 mg/L (4 h)	Rat
phenol	LD50 oral	100 mg/kg	Rat
CAS: 108-95-2	LD50 dermal	630 mg/kg	Rabbit
EC: 203-632-7	LC50 inhalation	Non-applicable	

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
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	LC50	>1 - 10 mg/L (96 h)		Fish
CAS: 75980-60-8	EC50	>1 - 10 mg/L (48 h)		Crustacean
EC: 278-355-8	EC50	>1 - 10 mg/L (72 h)		Algae

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Acute toxicity		Species	Genus
cyclohexane	LC50	>0.1 - 1 mg/L (96 h)		Fish
CAS: 110-82-7	EC50	>0.1 - 1 mg/L (48 h)		Crustacean
EC: 203-806-2	EC50	>0.1 - 1 mg/L (72 h)		Algae
Toluene	LC50	13 mg/L (96 h)	Carassius auratus	Fish
CAS: 108-88-3	EC50	11.5 mg/L (48 h)	Daphnia magna	Crustacean
EC: 203-625-9	EC50	125 mg/L (48 h)	Scenedesmus subspicatus	Algae
N-butyl acetate	LC50	62 mg/L (96 h)	Leuciscus idus	Fish
CAS: 123-86-4	EC50	73 mg/L (24 h)	Daphnia magna	Crustacean
EC: 204-658-1	EC50	675 mg/L (72 h)	Scenedesmus subspicatus	Algae
phenol	LC50	14 mg/L (96 h)	Leuciscus idus	Fish
CAS: 108-95-2	EC50	12 mg/L (24 h)	Daphnia magna	Crustacean
EC: 203-632-7	EC50	370 mg/L (96 h)	Chlorella vulgaris	Algae

12.2 Persistence and degradability:

Identification	Degradability		Biodegradability	
cyclohexane	BOD5	Non-applicable	Concentration	100 mg/L
CAS: 110-82-7	COD	Non-applicable	Period	28 days
EC: 203-806-2	BOD5/COD	Non-applicable	% Biodegradable	0 %
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 %
N-butyl acetate	BOD5	Non-applicable	Concentration	Non-applicable
CAS: 123-86-4	COD	Non-applicable	Period	5 days
EC: 204-658-1	BOD5/COD	Non-applicable	% Biodegradable	84 %
phenol	BOD5	1,68 g O2/g	Concentration	100 mg/L
CAS: 108-95-2	COD	2,33 g O2/g	Period	14 days
EC: 203-632-7	BOD5/COD	0,72	% Biodegradable	85 %

12.3 Bioaccumulative potential:

Identification	Bioaccumulation potential	
cyclohexane	BCF	66
CAS: 110-82-7	Pow Log	3.44
EC: 203-806-2	Potential	Moderate
Toluene	BCF	13
CAS: 108-88-3	Pow Log	2.73
EC: 203-625-9	Potential	Low
N-butyl acetate	BCF	4
CAS: 123-86-4	Pow Log	1.78
EC: 204-658-1	Potential	Low
phenol	BCF	17
CAS: 108-95-2	Pow Log	1.48
EC: 203-632-7	Potential	Low

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
cyclohexane	Koc	Non-applicable	Henry	Non-applicable
CAS: 110-82-7	Conclusion	Non-applicable	Dry soil	Non-applicable
EC: 203-806-2	Surface tension	2,465E-2 N/m (25 ºC)	Moist soil	Non-applicable
Toluene	Koc	178	Henry	672,8 Pa·m³/mol
CAS: 108-88-3	Conclusion	Moderate	Dry soil	Yes
EC: 203-625-9	Surface tension	2,793E-2 N/m (25 ºC)	Moist soil	Yes
N-butyl acetate	Koc	Non-applicable	Henry	Non-applicable
CAS: 123-86-4	Conclusion	Non-applicable	Dry soil	Non-applicable
EC: 204-658-1	Surface tension	2,478E-2 N/m (25 ºC)	Moist soil	Non-applicable

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Absorption/desorption		Volatility	
phenol	Koc	50	Henry	2,2E-2 Pa·m³/mol
CAS: 108-95-2	Conclusion	Very High	Dry soil	Yes
EC: 203-632-7	Surface tension	1,847E-2 N/m (231,01 ºC)	Moist soil	Yes

12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
20 01 27*	paint, inks, adhesives and resins containing hazardous substances	Dangerous

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

HP14 Ecotoxic

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 recommended 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

This product is not regulated for transport (ADR/RID,IMDG,IATA)

SECTION 15: REGULATORY INFORMATION

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

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:

Non-applicable

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.

Specific provisions in terms of protecting people or the environment:

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SECTION 15: REGULATORY INFORMATION (continued)

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.:

Non-applicable

Texts of the legislative phrases mentioned in section 2:

H413: May cause long lasting harmful effects to aquatic life.
H317: May cause an allergic skin reaction.

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. 3: H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled.
Aquatic Acute 1: H400 - Very toxic to aquatic life.
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.
Aquatic Chronic 4: H413 - May cause long lasting harmful effects to aquatic life.
Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways.
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.
Muta. 2: H341 - Suspected of causing genetic defects.
Repr. 2: H361 - Suspected of damaging fertility or the unborn child.
Repr. 2: H361d - Suspected of damaging the unborn child.
Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.
Skin Irrit. 2: H315 - Causes skin irritation.
Skin Sens. 1: H317 - May cause an allergic skin reaction.
Skin Sens. 1B: H317 - May cause an allergic skin reaction.
STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure.
STOT SE 3: H336 - May cause drowsiness or dizziness.

Classification procedure:

Aquatic Chronic 4: Calculation method
Skin Sens. 1: 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:

- CONTINUED ON NEXT PAGE -

SECTION 16: OTHER INFORMATION (continued)

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

- END OF SAFETY DATA SHEET -