Platinum LCD Resin - General Purpose - Translucent Colors

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

1.1 Product identifier: Platinum LCD Resin - General Purpose - Translucent Colors

Other means of identification:

Clear UFI: PTTC-CY56-M755-A4W5
Translucent Black UFI: D8K8-NYWA-X75N-QDHM
Translucent Red UFI: FPJ8-4Y2J-T756-30F5
Translucent Blue UFI: 72J8-KY7S-N75Q-FMCQ
Translucent Orange UFI: SVVC-GYQQ-Y751-6AVQ
Translucent Yellow UFI: UDUC-VYYY-R75M-XHYM

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

Relevant uses (Consumer use): Resin for 3D Printing
Relevant uses (Professional users): Resin for 3D Printing
Relevant uses (Industrial user): Resin for 3D Printing
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:

FormFutura B.V.
Tarweweg 3
6534 AM Nijmegen - Netherlands
Phone: +31 (0)88 743 4000
product.compliance@formfutura.com
www.formfutura.com

1.4 Emergency telephone number: +31 (0)30 274 8888, only for the doctor

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
Eye Irrit. 2: Eye irritation, Category 2, H319
Skin Irrit. 2: Skin irritation, Category 2, H315
Skin Sens. 1B: Sensitisation, skin, Category 1B, 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.
Eye Irrit. 2: H319 - Causes serious eye irritation.
Skin Irrit. 2: H315 - Causes skin irritation.
Skin Sens. 1B: H317 - May cause an allergic skin reaction.

Precautionary statements:

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SECTION 2: HAZARDS IDENTIFICATION (continued)

P101: If medical advice is needed, have product container or label at hand.
P102: Keep out of reach of children.
P261: Avoid breathing vapours
P264: Wash thoroughly after handling.
P272: Contaminated work clothing should not be allowed out of the workplace.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/respiratory protection/eye protection/protective footwear.
P302+P352: IF ON SKIN: Wash with plenty of water.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321: Specific treatment is urgently needed (go to see a doctor with the Safety data sheet for this product).
P332+P313: If skin irritation occurs: Get medical advice/attention.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P337+P313: If eye irritation persists: Get medical advice/attention.
P362+P364: Take off contaminated clothing and wash it before reuse.
P501: Dispose of contents/container according to the separated collection system used in your municipality.

Supplementary information:

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

Additional labeling:

Clear UFI: 65GY-1104-G00E-2UF2
Black UFI: 82GY-H19R-500X-DGV0
Red UFI: 4NXX-1258-X00N-3C0T
Blue UFI: 4QXX-H2UP-8004-RPKV
Orange UFI: YTXX-12J2-J00N-E15X
Yellow UFI: HWXX-J27F-V004-2CS0

2.3 Other hazards:

Product does not meet PBT/vPvB criteria
Endocrine-disrupting properties: The product does not meet the criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Not relevant

3.2 Mixture:

Chemical description: Mixture of substances

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: Not relevant REACH: 01-2119980659-17-XXXX	**Esterification products of 4,4´-isopropylidenediphenol, ethoxylated and 2-methylprop-2-enoic acid**[1]	Self-classified	**65 - <85%**
	Regulation 1272/2008	Aquatic Chronic 4: H413	
CAS: 4986-89-4 EC: 225-644-1 Index: 607-122-00-9 REACH: Not relevant	**pentaerythritol tetraacrylate**[1]	ATP CLP00	**9 - <30%**
	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	**2 - <2.5%**
	Regulation 1272/2008	Aquatic Chronic 2: H411; Repr. 2: H361f; Skin Sens. 1B: H317 - Warning 	
CAS: 25550-98-5 EC: 247-098-3 Index: Not relevant REACH: 01-2119962888-14-XXXX	**diisodecyl phenyl phosphite**[1]	Self-classified	**0.1 - <0.5%**
	Regulation 1272/2008	Skin Sens. 1: 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 	

[1] Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2020/878
[2] Substance with a Union workplace exposure limit

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

Identification	Chemical name/Classification		Concentration
CAS: 108-88-3 EC: 203-625-9 Index: 601-021-00-3 REACH: 01-2119471310-51-XXXX	**Toluene**[2] ATP CLP00		<0.01%
	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: 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. 2020/878
[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

Acute toxicity estimate for the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or as determined in accordance with Annex I to that Regulation:

Identification	Acute toxicity		Genus
phenol CAS: 108-95-2 EC: 203-632-7	LD50 oral	100 mg/kg	
	LD50 dermal	630 mg/kg	
	LC50 inhalation vapour	3 mg/L *	

*Equivalent ATE value of the substance applicable to the exposure route of the product. For the ATE value associated with the exposure route of the substance, see section 11.

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 lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of 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:

Not relevant

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Suitable extinguishing media:

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SECTION 5: FIREFIGHTING MEASURES (continued)

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

Unsuitable extinguishing media:

Non-applicable

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/EEC.

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:

For non-emergency personnel:

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. Remove 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.

For emergency responders:

Wear protective equipment. Keep unprotected persons away. See section 8.

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:

Prevent the entrance of product in drains, sewers or watercourses. Absorb the spill using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. Collect the product in appropriate containers and manage it according to current legislation.
Spillages in water or sea:
Small spillages:
Contain spillage using barriers or similar equipment. Use suitable absorbents for collection and treat the waste in accordance with current regulations.
Large spillages:
If possible, contain spillage in open water using barriers or similar equipment. If this is not possible, try to control its spread and collect the product with suitable mechanical means. Always consult experts before using dispersants and make sure you have the necessary approvals if they are to be used. Treat the waste according to current regulations.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- General precautions for safe use

Comply with the current legislation concerning the prevention of industrial risks with regards manually handling weights. Maintain order, cleanliness and dispose of using safe methods (section 6).

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. Consult section 10 for conditions and materials that should be avoided.

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SECTION 7: HANDLING AND STORAGE (continued)

C.- Technical recommendations on general occupational hygiene

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.- Specific storage requirements

Minimum Temp.: 5 ºC

Maximum Temp.: 30 ºC

Maximum time: 18 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	IOELV (8h)	200 ppm	700 mg/m³
CAS: 110-82-7 EC: 203-806-2	IOELV (STEL)		
Toluene [1]	IOELV (8h)	50 ppm	192 mg/m³
CAS: 108-88-3 EC: 203-625-9	IOELV (STEL)	100 ppm	384 mg/m³
phenol [1]	IOELV (8h)	2 ppm	8 mg/m³
CAS: 108-95-2 EC: 203-632-7	IOELV (STEL)	4 ppm	16 mg/m³

[1] Skin

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Esterification products of 4,4´-isopropylidenediphenol, ethoxylated and 2-methylprop-2-enoic acid	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 41637-38-1	Dermal	Not relevant	Not relevant	2 mg/kg	Not relevant
EC: 609-946-4	Inhalation	Not relevant	Not relevant	3,52 mg/m³	Not relevant
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 75980-60-8	Dermal	Not relevant	Not relevant	0,233 mg/kg	Not relevant
EC: 278-355-8	Inhalation	Not relevant	Not relevant	0,822 mg/m³	Not relevant
diisodecyl phenyl phosphite	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 25550-98-5	Dermal	Not relevant	Not relevant	50 mg/kg	Not relevant
EC: 247-098-3	Inhalation	Not relevant	Not relevant	70,5 mg/m³	Not relevant
cyclohexane	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 110-82-7	Dermal	Not relevant	Not relevant	2016 mg/kg	Not relevant
EC: 203-806-2	Inhalation	1400 mg/m³	1400 mg/m³	700 mg/m³	700 mg/m³
Toluene	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 108-88-3	Dermal	Not relevant	Not relevant	384 mg/kg	Not relevant
EC: 203-625-9	Inhalation	384 mg/m³	384 mg/m³	192 mg/m³	192 mg/m³
phenol	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 108-95-2	Dermal	Not relevant	Not relevant	1,23 mg/kg	Not relevant
EC: 203-632-7	Inhalation	Not relevant	16 mg/m³	8 mg/m³	Not relevant

DNEL (General population):

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Esterification products of 4,4´-isopropylidenediphenol, ethoxylated and 2-methylprop-2-enoic acid	Oral	Not relevant	Not relevant	0,5 mg/kg	Not relevant
CAS: 41637-38-1	Dermal	Not relevant	Not relevant	1 mg/kg	Not relevant
EC: 609-946-4	Inhalation	Not relevant	Not relevant	0,87 mg/m³	Not relevant
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	Oral	Not relevant	Not relevant	0,0833 mg/kg	Not relevant
CAS: 75980-60-8	Dermal	Not relevant	Not relevant	0,0833 mg/kg	Not relevant
EC: 278-355-8	Inhalation	Not relevant	Not relevant	0,145 mg/m³	Not relevant
cyclohexane	Oral	Not relevant	Not relevant	59,4 mg/kg	Not relevant
CAS: 110-82-7	Dermal	Not relevant	Not relevant	1186 mg/kg	Not relevant
EC: 203-806-2	Inhalation	412 mg/m³	412 mg/m³	206 mg/m³	206 mg/m³
Toluene	Oral	Not relevant	Not relevant	8,13 mg/kg	Not relevant
CAS: 108-88-3	Dermal	Not relevant	Not relevant	226 mg/kg	Not relevant
EC: 203-625-9	Inhalation	226 mg/m³	226 mg/m³	56,5 mg/m³	56,5 mg/m³
phenol	Oral	Not relevant	Not relevant	0,4 mg/kg	Not relevant
CAS: 108-95-2	Dermal	Not relevant	Not relevant	0,4 mg/kg	Not relevant
EC: 203-632-7	Inhalation	Not relevant	Not relevant	1,32 mg/m³	Not relevant

PNEC:

Identification				
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	STP	Not relevant	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	Not relevant	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	Not relevant	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	Not relevant	Sediment (Marine water)	16,39 mg/kg
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	Not relevant	Sediment (Marine water)	0,009 mg/kg

8.2 Exposure controls:

A.- Individual protection measures, such as personal protective equipment

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 (Filter type: FFP2)	CE CAT III	EN 405:2001+A1:2009	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.
 Mandatory respiratory tract protection	Filter mask for gases and vapours (Filter type: A)	CE CAT III	EN 405:2001+A1:2009	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.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

C.- Specific protection for the hands

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Protective gloves against minor risks (Material: Nitrile)	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 ISO 21420:2020 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.- Eye and face protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.	CE CAT II	EN ISO 16321-1:2022 + EN ISO 16321-3:2022 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 20347:2022/A1:2024	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 20345:2022 y EN 13832-1:2019

F.- Additional emergency measures

It is advised to implement additional emergency equipments in workplaces that are particularly exposed to the product or in situations where risk assessments highlight the necessity of such equipments.

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:

To comply with environmental protection regulations, it is recommended to prevent any spillage of the product and its container. For more detailed information, please refer to subsection 7.1.D.

Volatile organic compounds:

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

V.O.C. (Supply):	0,08 % weight
V.O.C. density at 20 ºC:	0,95 kg/m³ (0,95 g/L)
Average carbon number:	6,09
Average molecular weight:	84,92 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:	According to the markings on the package

*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)

Odour:	Resin
Odour threshold:	Not relevant *
Volatility:	
Boiling point at atmospheric pressure:	Not relevant *
Vapour pressure at 20 ºC:	Not relevant *
Vapour pressure at 50 ºC:	Not relevant *
Evaporation rate at 20 ºC:	Not relevant *
Product description:	
Density at 20 ºC:	1129,2 kg/m³
Relative density at 20 ºC:	1,129
Dynamic viscosity at 20 ºC:	Not relevant *
Kinematic viscosity at 20 ºC:	Not relevant *
Kinematic viscosity at 40 ºC:	>20,5 mm²/s
Concentration:	Not relevant *
pH:	≈6 - 8 (at 100 %)
Vapour density at 20 ºC:	Not relevant *
Partition coefficient n-octanol/water 20 ºC:	Not relevant *
Solubility in water at 20 ºC:	Not relevant *
Solubility properties:	Not relevant *
Decomposition temperature:	Not relevant *
Melting point/freezing point:	Not relevant *
Flammability:	
Flash Point:	Non Flammable (>60 ºC)
Flammability (solid, gas):	Not relevant *
Autoignition temperature:	260 ºC
Lower flammability limit:	Not relevant *
Upper flammability limit:	Not relevant *
Particle characteristics:	
Median equivalent diameter:	Not relevant *

9.2 Other information:

Information with regard to physical hazard classes:	
Explosive properties:	Not relevant *
Oxidising properties:	Not relevant *
Corrosive to metals:	Not relevant *
Heat of combustion:	Not relevant *
Aerosols-total percentage (by mass) of flammable components:	Not relevant *
Other safety characteristics:	
Surface tension at 20 ºC:	Not relevant *
Refraction index:	Not relevant *

*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 from Safety Data Sheet.

10.2 Chemical stability:

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SECTION 10: STABILITY AND REACTIVITY (continued)

Chemically stable under the indicated 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	Avoid direct impact	Not applicable

10.5 Incompatible materials:

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

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO_2), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

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

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 hazardous 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 hazardous 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: Causes serious eye irritation.

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 hazardous for the effects mentioned. For more information see section 3.
  IARC: Toluene (3: Not classifiable as to its carcinogenicity to humans); phenol (3: Not classifiable as to its carcinogenicity to humans)
- 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 hazardous 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 hazardous with sensitising effects. For more information see section 3.
- Skin: 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 hazardous for inhalation. For more information see section 3.

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

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

- 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, as it does not contain substances classified as hazardous for this effect. 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 hazardous for this effect. For more information see section 3.

Other information:

Not relevant

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide CAS: 75980-60-8 EC: 278-355-8	LD50 oral	>5000 mg/kg	Rat
	LD50 dermal		
	LC50 inhalation dust		
cyclohexane CAS: 110-82-7 EC: 203-806-2	LD50 oral	5100 mg/kg	Rat
	LD50 dermal		
	LC50 inhalation vapour		
Toluene CAS: 108-88-3 EC: 203-625-9	LD50 oral	5580 mg/kg	Rat
	LD50 dermal	12124 mg/kg	Rat
	LC50 inhalation vapour	28,1 mg/L (4 h)	Rat
phenol CAS: 108-95-2 EC: 203-632-7	LD50 oral	100 mg/kg	Rat
	LD50 dermal	630 mg/kg	Rabbit
	LC50 inhalation dust	0,5 mg/L	

11.2 Information on other hazards:

Endocrine disrupting properties

Endocrine-disrupting properties: The product does not meet the criteria.

Other information

Not relevant

SECTION 12: ECOLOGICAL INFORMATION

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

May cause long lasting harmful effects to aquatic life.

12.1 Toxicity:

Acute toxicity:

Identification	Concentration		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
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	5,5 mg/L (96 h)	Oncorhynchus kisutch	Fish
CAS: 108-88-3	EC50	3,78 mg/L (48 h)	Ceriodaphnia dubia	Crustacean
EC: 203-625-9	EC50	Not relevant		
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

Chronic toxicity:

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Concentration		Species	Genus
phenol	NOEC	0,077 mg/L	Cirrhina mrigala	Fish
CAS: 108-95-2 EC: 203-632-7	NOEC	0,16 mg/L	Daphnia magna	Crustacean

12.2 Persistence and degradability:

Substance-specific information:

Identification	Degradability		Biodegradability	
cyclohexane	BOD5	Not relevant	Concentration	100 mg/L
CAS: 110-82-7	COD	Not relevant	Period	28 days
EC: 203-806-2	BOD5/COD	Not relevant	% Biodegradable	0 %
Toluene	BOD5	2,5 g O2/g	Concentration	100 mg/L
CAS: 108-88-3	COD	Not relevant	Period	14 days
EC: 203-625-9	BOD5/COD	Not relevant	% Biodegradable	100 %
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:

Substance-specific information:

Identification	Bioaccumulation potential	
cyclohexane	BCF	66
CAS: 110-82-7	Pow Log	3.44
EC: 203-806-2	Potential	Moderate
Toluene	BCF	90
CAS: 108-88-3	Pow Log	2.73
EC: 203-625-9	Potential	Moderate
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	Not relevant	Henry	Not relevant
CAS: 110-82-7	Conclusion	Not relevant	Dry soil	Not relevant
EC: 203-806-2	Surface tension	2,465E-2 N/m (25 ºC)	Moist soil	Not relevant
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
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 does not meet PBT/vPvB criteria

12.6 Endocrine disrupting properties:

Endocrine-disrupting properties: The product does not meet the criteria.

12.7 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	Hazardous

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SECTION 13: DISPOSAL CONSIDERATIONS (continued)

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

HP14 Ecotoxic, HP13 Sensitising, HP4 Irritant – skin irritation and eye damage

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-hazardous residue. Waste should not be disposed of to drains. 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:

- Article 95, REGULATION (EU) No 528/2012: Not relevant
- Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH):
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide (75980-60-8)
- Regulation (EU) 2019/1021 on persistent organic pollutants: Not relevant
- Regulation (EU) No 2024/590, about substances that deplete the ozone layer: Not relevant
- REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Not relevant
- Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Not relevant

Seveso III:

Not relevant

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:

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 (COMMISSION REGULATION (EU) 2020/878).

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

Not relevant

Texts of the legislative phrases mentioned in section 2:

H413: May cause long lasting harmful effects to aquatic life.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.

Texts of the legislative phrases mentioned in section 3:

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SECTION 16: OTHER INFORMATION (continued)

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.
Muta. 2: H341 - Suspected of causing genetic defects.
Repr. 2: H361d - Suspected of damaging the unborn child.
Repr. 2: H361f - Suspected of damaging fertility.
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 Irrit. 2: Calculation method
Skin Sens. 1B: Calculation method
Eye Irrit. 2: Calculation method

Advice related to training:

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

Principal bibliographical sources:

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

Abbreviations and acronyms:

ADR: European agreement concerning the international carriage of dangerous goods by road
IMDG: International maritime dangerous goods code
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
COD: Chemical Oxygen Demand
BOD5: 5day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
LC50: Lethal Concentration 50
EC50: Effective concentration 50
LogPOW: Octanolwater partition coefficient
Koc: Partition coefficient of organic carbon
UFI: unique formula identifier
IARC: International Agency for Research on Cancer

- END OF SAFETY DATA SHEET -