

## Safety Data Sheet

According to Annex II to REACH - Regulation 2020/878 and to Annex II to UK REACH

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

#### 1.1. Product identifier

Product name **PLT UV: 110, 111, 112, 115, 117, 120, 121, 122, 124,130, 131, 132, 133, 134, 136, 140, 141, 142, 150, 151, 165, 165 HD,**  
 UFI : **09Y1-A08J-300D-YF3E**

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

Intended use **Pad printing ink.**

#### 1.3. Details of the supplier of the safety data sheet

Name **COMEC ITALIA SRL**  
 Full address **Piazzale del lavoro 149**  
 District and Country **21044 Cavarina (VA)**  
**ITALIA**  
**Tel. +39 0331 219516**  
**Fax +39 0331 216161**

e-mail address of the competent person responsible for the Safety Data Sheet Supplier: **info@comec-italia.it**  
**Edgardo Baggini**

#### 1.4. Emergency telephone number

For urgent inquiries refer to **CENTRO ANTIVELENI OSPEDALE NIGUARDA MILANO Tel. 02/66101029 (24/24h) -**  
**CENTRO ANTIVELENI POLICLINICO A.GEMELL ROMA Tel. 06/3054343 (24/24h) -**

### SECTION 2. Hazards identification

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

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

#### Hazard classification and indication:

Flammable liquid, category 3	H226	Flammable liquid and vapour.
Serious eye damage, category 1	H318	Causes serious eye damage.
Skin irritation, category 2	H315	Causes skin irritation.
Skin sensitization, category 1A	H317	May cause an allergic skin reaction.
Hazardous to the aquatic environment, chronic toxicity, category 3	H412	Harmful to aquatic life with long lasting effects.

#### 2.2. Label elements

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

Hazard pictograms:



Signal words: Danger

Hazard statements:

**H226** Flammable liquid and vapour.  
**H318** Causes serious eye damage.  
**H315** Causes skin irritation.  
**H317** May cause an allergic skin reaction.  
**H412** Harmful to aquatic life with long lasting effects.

Precautionary statements:

**P210** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
**P305+P351+P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
**P280** Wear protective gloves/ protective clothing / eye protection / face protection.  
**P310** Immediately call a POISON CENTER or a doctor.  
**P370+P378** In case of fire: use chemical powder, CO2 or dry send to extinguish.  
**P261** Avoid breathing dust, gas or vapours.

**Contains:** Dipropylene glycol diacrylate  
 CYCLOHEXANONE  
 1,6-HEXANEDIOL DIACRYLATE  
 2-Propenoic acid, 1,6-hexanedyl ester, polymer  
 2-Propenoic acid, reaction products with dipentaerythritol  
 2,4,6-trimethylbenzoylphenylphosphinic acid ethyl ester  
 Bisphenol A diglycidyl-ethyl diacrylate (BADGE-DA)  
 ACRYLIC ACID ESTER  
 Fatty acids, C18, unsaturated, dimers, products. Reaction with N, N-dimethyl-1, 3propanediamine and 1,3-propanediamine

**2.3. Other hazards**

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

The product does not contain substances with endocrine disrupting properties in concentration  $\geq$  0.1%.

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

**3.2. Mixtures**

**PLT UV: 110, 111, 112, 115, 117, 120, 121, 122, 124,130, 131, 132, 133, 134, 136, 140, 141, 142, 150, 151, 165, 165 HD,**

Contains:

Identification	x = Conc. %	Classification (EC) 1272/2008 (CLP)
<b>1,6-HEXANEDIOL DIACRYLATE</b> INDEX 607-109-00-8 EC 235-921-9 CAS 13048-33-4 REACH Reg. 01-2119484737-22-xxxx	15 ≤ x < 16,5	Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Acute 1 H400 M=1, Aquatic Chronic 2 H411, Classification note according to Annex VI to the CLP Regulation: D
<b>ACRYLIC POLYMER</b> INDEX EC CAS -	10,5 ≤ x < 12	
<b>CYCLOHEXANONE</b> INDEX 606-010-00-7 EC 203-631-1 CAS 108-94-1 REACH Reg. 01-2119453616-35-xxxx	8,5 ≤ x < 10	Flam. Liq. 3 H226, Acute Tox. 4 H302, Acute Tox. 4 H312, Acute Tox. 4 H332, Eye Dam. 1 H318, Skin Irrit. 2 H315 LD50 Oral: 1535 mg/kg, LD50 Dermal: 1100 mg/kg, LC50 Inhalation vapours: 11 mg/l/4h
<b>HYDROCARBONS, C10-C13, n-alkanes, isoalkanes, CYCLIC, &lt;2% AROMATIC</b> INDEX - EC 918-481-9 CAS - REACH Reg. 01-2119457273-39-xxxx	5 ≤ x < 6	Asp. Tox. 1 H304, EUH066, Classification note according to Annex VI to the CLP Regulation: P
<b>Acrylate resin</b> INDEX EC CAS -	4,5 ≤ x < 5	Eye Irrit. 2 H319, Skin Irrit. 2 H315
<b>N-BUTYL ACETATE</b> INDEX 607-025-00-1 EC 204-658-1 CAS 123-86-4 REACH Reg. 01-2119485493-29-xxxx	4,5 ≤ x < 5	Flam. Liq. 3 H226, STOT SE 3 H336, EUH066
<b>2-Propenoic acid, reaction products with dipentaerythritol</b> INDEX - EC 800-838-4 CAS 1384855-91-7 REACH Reg. 01-2119980666-22-xxxx	4 ≤ x < 4,5	Eye Irrit. 2 H319, Skin Sens. 1A H317, Aquatic Chronic 3 H412
<b>2-METHOXY-1-METHYLETHYL ACETATE</b> INDEX 607-195-00-7 EC 203-603-9	3,5 ≤ x < 4	Flam. Liq. 3 H226, STOT SE 3 H336

**PLT UV: 110, 111, 112, 115, 117, 120, 121, 122, 124,130, 131, 132, 133, 134, 136, 140, 141, 142, 150, 151, 165, 165 HD,**

CAS 108-65-6		
REACH Reg. 01-2119475791-29-xxxx		
<b>2,4,6-trimethylbenzoylphenylphosphinic acid ethyl ester</b>		
INDEX -	3,5 ≤ x < 4	Skin Sens. 1B H317, Aquatic Chronic 2 H411
EC 282-810-6		
CAS 84434-11-7		
REACH Reg. 01-2119987994-10-0000		
<b>Dipropylene glycol diacrylate</b>		
INDEX -	3 ≤ x < 3,5	Eye Dam. 1 H318, Skin Irrit. 2 H315, Skin Sens. 1 H317
EC 260-754-3		
CAS 57472-68-1		
REACH Reg. 01-2119484629-21-xxxx		
<b>2-Propenoic acid, 1,6-hexanediyl ester, polymer</b>		
INDEX	3 ≤ x < 3,5	Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1 H317
EC -		
CAS 67906-98-3		
<b>2-hydroxy-2-Methylpropiophenone</b>		
INDEX -	2,5 ≤ x < 3	Acute Tox. 4 H302, Aquatic Chronic 3 H412 LD50 Oral: 1694 mg/kg
EC 231-272-0		
CAS 7473-98-5		
REACH Reg. 01-2119472306-39-xxxx		
<b>BUTANOL</b>		
INDEX 603-004-00-6	2,5 ≤ x < 3	Flam. Liq. 3 H226, Acute Tox. 4 H302, Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335, STOT SE 3 H336 STA Oral: 500 mg/kg
EC 200-751-6		
CAS 71-36-3		
REACH Reg. 01-2119484630-38		
<b>BENZOPHENONE</b>		
INDEX -	1 ≤ x < 1,5	STOT RE 2 H373, Aquatic Chronic 3 H412
EC 204-337-6		
CAS 119-61-9		
REACH Reg. 01-2119899704-20-xxxx		
<b>(Phenyl) (hydroxycyclohexyl) ketone</b>		
INDEX -	1 ≤ x < 1,5	
EC 213-426-9		
CAS 947-19-3		
REACH Reg. 01-2119457404-40-xxxx		
<b>AROMATIC HYDROCARBONS, C9</b>		
INDEX -	0,34 ≤ x < 0,36	Flam. Liq. 3 H226, Asp. Tox. 1 H304, STOT SE 3 H335, STOT SE 3 H336, Aquatic Chronic 2 H411, EUH066, Classification note according to Annex VI to the CLP Regulation: P
EC 918-668-5		

**PLT UV: 110, 111, 112, 115, 117, 120, 121, 122, 124,130, 131, 132, 133, 134, 136, 140, 141, 142, 150, 151, 165, 165 HD,**

CAS -

REACH Reg. 01-2119455851-35-xxxx

**Fatty acids, C18, unsaturated, dimers, products. Reaction with N, N-dimethyl-1, 3propanediamine and 1,3-propanediamine**

INDEX - 0,14 ≤ x < 0,16 Skin Sens. 1 H317

EC 605-296-0

CAS 162627-17-0

**ACRYLIC ACID ESTER**

INDEX - 0,13 ≤ x < 0,15 Eye Irrit. 2 H319, Skin Sens. 1 H317

EC 500-114-5

CAS 52408-84-1

REACH Reg. 01-2119487948-12

**Bisphenol A diglycidyl-ethyl diacrylate (BADGE-DA)**

INDEX - 0,12 ≤ x < 0,14 Skin Sens. 1 H317

EC 500-130-2

CAS 55818-57-0

REACH Reg. 01-2119490020-53-xxxx

**METHYL METHACRYLATE**

INDEX 607-035-00-6 0,08 ≤ x < 0,1 Flam. Liq. 2 H225, Skin Irrit. 2 H315, STOT SE 3 H335, Skin Sens. 1 H317, Classification note according to Annex VI to the CLP Regulation: D

EC 201-297-1

CAS 80-62-6

**1-METHOXY-2-PROPANOL**

INDEX 603-064-00-3 0,07 ≤ x < 0,09 Flam. Liq. 3 H226, STOT SE 3 H336

EC 203-539-1

CAS 107-98-2

REACH Reg. 01-2119457435-35xxxx

**ACRYLIC ACID**

INDEX 607-061-00-8 0 ≤ x < 0,02 Flam. Liq. 3 H226, Acute Tox. 4 H302, Acute Tox. 4 H312, Acute Tox. 4 H332, Skin Corr. 1A H314, Eye Dam. 1 H318, STOT SE 3 H335, Aquatic Acute 1 H400 M=1, Aquatic Chronic 2 H411, Classification note according to Annex VI to the CLP Regulation: D

EC 201-177-9

CAS 79-10-7

STOT SE 3 H335: ≥ 1%  
STA Oral: 500 mg/kg, STA Dermal: 1100 mg/kg, STA Inhalation vapours: 11 mg/l, STA Inhalation mists/powders: 1,5 mg/l

REACH Reg. 01-2119452449-31

**QUARTZ**

INDEX - 0 ≤ x < 0,02 STOT RE 2 H373

EC 238-878-4

CAS 14808-60-7

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

## SECTION 4. First aid measures

**PLT UV: 110, 111, 112, 115, 117, 120, 121, 122, 124,130, 131, 132, 133,  
134, 136, 140, 141, 142, 150, 151, 165, 165 HD,**

#### 4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.

INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

## SECTION 5. Firefighting measures

#### 5.1. Extinguishing media

##### SUITABLE EXTINGUISHING EQUIPMENT

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

##### UNSUITABLE EXTINGUISHING EQUIPMENT

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

#### 5.2. Special hazards arising from the substance or mixture

##### HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

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

##### METHYL METHACRYLATE

Heat may cause the product to polymerise, which could lead to explosion.

#### 5.3. Advice for firefighters

##### GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

##### SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

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

## SECTION 6. Accidental release measures

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

Block the leakage if there is no hazard.

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

Send away individuals who are not suitably equipped. Use explosion-proof equipment. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.)

from the leakage site.

## 6.2. Environmental precautions

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

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

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

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

## 6.4. Reference to other sections

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

# SECTION 7. Handling and storage

## 7.1. Precautions for safe handling

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

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

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

## 7.3. Specific end use(s)

Information not available

# SECTION 8. Exposure controls/personal protection

## 8.1. Control parameters

Regulatory References:

BGR	България	НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г. ЗА ЗАЩИТА НА РАБОТЕЩИТЕ ОТ РИСКОВЕ, СВЪРЗАНИ С ЕКСПОЗИЦИЯ НА ХИМИЧНИ АГЕНТИ ПРИ РАБОТА (изм. ДВ. бр.5 от 17 Януари 2020г.)
CZE	Česká Republika	Nařízení vlády č. 41/2020 Sb. Nařízení vlády, kterým se mění nařízení vlády č. 361/2007 Sb., kterým se stanoví podmínky ochrany zdraví při práci, ve znění pozdějších předpisů
DEU	Deutschland	Technischen Regeln für Gefahrstoffe (TRGS 900) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte. MAK- und BAT-Werte-Liste 2020, Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Mitteilung 56
DNK	Danmark	Bekendtgørelse om grænseværdier for stoffer og materialer - BEK nr 1458 af 13/12/2019
ESP	España	Límites de exposición profesional para agentes químicos en España 2021
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
NLD	Nederland	Arbeidsomstandighedenregeling. Lijst van wettelijke grenswaarden op grond van de artikelen 4.3, eerste lid, en 4.16, eerste lid, van het Arbeidsomstandighedenbesluit
PRT	Portugal	Decreto-Lei n.º 1/2021 de 6 de janeiro, valores-limite de exposição profissional indicativos para os agentes químicos. Decreto-Lei n.º 35/2020 de 13 de julho, proteção dos trabalhadores contra os riscos ligados à exposição durante o trabalho a agentes cancerígenos ou mutagénicos

# COMEC ITALIA SRL

Revision nr. 2

Dated 09/09/2022

Printed on 19/10/2022

Page n. 8/39

Replaced revision:1 (Dated: 10/03/2021)

**PLT UV: 110, 111, 112, 115, 117, 120, 121, 122, 124,130, 131, 132, 133,  
134, 136, 140, 141, 142, 150, 151, 165, 165 HD,**

POL	Polska	Rozporządzenie ministra rozwoju, pracy i technologii z dnia 18 lutego 2021 r. Zmieniające rozporządzenie w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy
ROU	România	Hotărârea nr. 53/2021 pentru modificarea hotărârii guvernului nr. 1.218/2006, precum și pentru modificarea și completarea hotărârii guvernului nr. 1.093/2006
SWE	Sverige	Hygieniska gränsvärden, Arbetsmiljöverkets föreskrifter och allmänna råd om hygieniska gränsvärden (AFS 2018:1)
TUR	Türkiye	Kimyasal Maddelerle Çalışmalarda Sağlık ve Güvenlik Önlemleri Hakkında Yönetmelik 12.08.2013 / 28733
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
EU	OEL EU	Directive (EU) 2022/431; Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2021

## 1,6-HEXANEDIOL DIACRYLATE

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,0015	mg/l
Normal value in marine water	0,00015	mg/l
Normal value for fresh water sediment	0,0137	mg/kg
Normal value for marine water sediment	0,00243	mg/kg
Normal value of STP microorganisms	2,7	mg/l
Normal value for the terrestrial compartment	0,00397	mg/kg

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

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral			VND	2,08 mg/kg/d			VND	2,77 mg/kg
Inhalation			VND	7,24 mg/m3			VND	24,48 mg/m3
Skin			VND	1,66 mg/kg/d				2,77 mg/kg bw/d

## ACRYLIC POLYMER

### Threshold Limit Value

Type	Country	TWA/8h	STEL/15min	Remarks / Observations
		mg/m3	ppm	
TLV-ACGIH		10		INHAL
TLV-ACGIH		3		RESP

## CYCLOHEXANONE

### Threshold Limit Value

Type	Country	TWA/8h	STEL/15min	Remarks / Observations
		mg/m3	ppm	
TLV	BGR	40,8	10	SKIN
TLV	CZE	40	9,8	SKIN
AGW	DEU	80	20	SKIN
TLV	DNK	41	10	SKIN E
VLA	ESP	41	10	SKIN
VLEP	FRA	40,8	10	SKIN
VLEP	ITA	40,8	10	SKIN
TGG	NLD		50	SKIN



**COMEC ITALIA SRL**

Revision nr. 2

Dated 09/09/2022

**PLT UV: 110, 111, 112, 115, 117, 120, 121, 122, 124,130, 131, 132, 133,  
134, 136, 140, 141, 142, 150, 151, 165, 165 HD,**

Printed on 19/10/2022

Page n. 9/39

Replaced revision:1 (Dated: 10/03/2021)

VLE	PRT	40,8	10	81,6	20	SKIN
NDS/NDSch	POL	40		80		SKIN
TLV	ROU	40,8	10	81,6	20	SKIN
NGV/KGV	SWE	41	10	81	20	SKIN
ESD	TUR	40,8	10	81,6	20	SKIN
WEL	GBR	41	10	82	20	SKIN
OEL	EU	40,8	10	81,6	20	SKIN
TLV-ACGIH		80	20	201	50	SKIN

Predicted no-effect concentration - PNEC						
Normal value in fresh water				0,1		mg/l
Normal value in marine water				0,01		mg/l
Normal value for fresh water sediment				0,512		mg/kg
Normal value for marine water sediment				0,0512		mg/kg
Normal value for water, intermittent release				0,329		mg/l
Normal value of STP microorganisms				10		mg/l
Normal value for the terrestrial compartment				0,0435		mg/kg

Health - Derived no-effect level - DNEL / DMEL								
Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				1,5 mg/kg bw/d				
Inhalation			VND	10 mg/m3			VND	40 mg/m3
Skin			VND	1 mg/kg bw/d			VND	4 mg/kg bw/d

CALCIUM CARBONATE						
Threshold Limit Value						
Type	Country	TWA/8h	STEL/15min	Remarks / Observations		
		mg/m3	ppm	mg/m3	ppm	
VLEP	FRA	10				
NDS/NDSch	POL	10				INHAL

Polymer based on vinyl compounds						
Threshold Limit Value						
Type	Country	TWA/8h	STEL/15min	Remarks / Observations		
		mg/m3	ppm	mg/m3	ppm	
VLEP	ITA	2	1			

Health - Derived no-effect level - DNEL / DMEL								
Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation								1 mg/m3

HYDROCARBONS, C10-C13, n-alkanes, isoalkanes, CYCLIC, <2% AROMATIC						
Threshold Limit Value						
Type	Country	TWA/8h	STEL/15min	Remarks / Observations		



**COMEC ITALIA SRL**

Revision nr. 2

Dated 09/09/2022

**PLT UV: 110, 111, 112, 115, 117, 120, 121, 122, 124,130, 131, 132, 133,  
134, 136, 140, 141, 142, 150, 151, 165, 165 HD,**

Printed on 19/10/2022

Page n. 11/39

Replaced revision:1 (Dated: 10/03/2021)

Inhalation	859,7 mg/m3	895,7 mg/m3	102,34 mg/m3	systemic 102,34 mg/m3	960 mg/m3	systemic 960 mg/m3	480 mg/m3	systemic 480 mg/m3
------------	-------------	-------------	--------------	--------------------------	-----------	-----------------------	-----------	-----------------------

**2-Propenoic acid, reaction products with dipentaerythritol**

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,013	mg/l
Normal value in marine water	0,0013	mg/l
Normal value for fresh water sediment	2,8	mg/kg/d
Normal value for marine water sediment	0,28	mg/kg/d
Normal value for water, intermittent release	0,13	mg/l
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	0,55	mg/kg/d

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

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation								1,76 mg/m3
Skin								0,5 mg/kg/d

**2-METHOXY-1-METHYLETHYL ACETATE**

**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	BGR	275	50	550	100	SKIN
TLV	CZE	270	49,14	550	100,1	SKIN
AGW	DEU	270	50	270	50	
MAK	DEU	270	50	270	50	
TLV	DNK	275	50			SKIN E
VLA	ESP	275	50	550	100	SKIN
VLEP	FRA	275	50	550	100	SKIN
VLEP	ITA	275	50	550	100	SKIN
TGG	NLD	550				
VLE	PRT	275	50	550	100	SKIN
NDS/NDSch	POL	260		520		SKIN
TLV	ROU	275	50	550	100	SKIN
NGV/KGV	SWE	275	50	550	100	SKIN
ESD	TUR	275	50	550	100	SKIN
WEL	GBR	274	50	548	100	SKIN
OEL	EU	275	50	550	100	SKIN

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,635	mg/l
Normal value in marine water	0,0635	mg/l
Normal value for fresh water sediment	3,29	mg/kg
Normal value for marine water sediment	0,329	mg/l

**PLT UV: 110, 111, 112, 115, 117, 120, 121, 122, 124,130, 131, 132, 133, 134, 136, 140, 141, 142, 150, 151, 165, 165 HD,**

Normal value for water, intermittent release	6,35	mg/l
Normal value of STP microorganisms	100	mg/l
Normal value for the terrestrial compartment	0,29	mg/kg

Health - Derived no-effect level - DNEL / DMEL								
Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral			VND	1,67 mg/kg				
Inhalation			33 mg/m3	33 mg/m3	550 mg/m3		VND	275 mg/m3
Skin			VND	54,8 mg/kg			VND	153,5 mg/kg

**2,4,6-trimethylbenzoylphenylphosphinic acid ethyl ester**

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,001	mg/l
Normal value in marine water	0	mg/l
Normal value for fresh water sediment	0,24	mg/kg/d
Normal value for marine water sediment	0,024	mg/kg/d
Normal value for water, intermittent release	0,035	mg/l
Normal value of STP microorganisms	NPI	
Normal value for the food chain (secondary poisoning)	NPI	
Normal value for the terrestrial compartment	0,047	mg/kg/d
Normal value for the atmosphere	NPI	

Health - Derived no-effect level - DNEL / DMEL								
Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation							VND	5,88 mg/m3
Skin							VND	1,7 mg/kg bw/d

**Dipropylene glycol diacrylate**

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,0034	mg/l
Normal value in marine water	0,00034	mg/l
Normal value for fresh water sediment	0,00884	mg/kg/d
Normal value for water, intermittent release	0,034	mg/l
Normal value of STP microorganisms	100	mg/l
Normal value for the terrestrial compartment	0,0013	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL								
Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral			VND	2,08 mg/kg/d				
Inhalation			VND	7,24 mg/m3			VND	24,48 mg/m3
Skin			VND	1,66 mg/kg/d			VND	2,77 mg/kg

**2-hydroxy-2-Methylpropiophenone**

**COMEC ITALIA SRL**

Revision nr. 2

Dated 09/09/2022

**PLT UV: 110, 111, 112, 115, 117, 120, 121, 122, 124,130, 131, 132, 133,  
134, 136, 140, 141, 142, 150, 151, 165, 165 HD,**

Printed on 19/10/2022

Page n. 13/39

Replaced revision:1 (Dated: 10/03/2021)

**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV-ACGIH		6				INHAL
Predicted no-effect concentration - PNEC						
Normal value in fresh water				0,002		mg/l
Normal value in marine water				0,0002		mg/l
Normal value for fresh water sediment				0,009		mg/kg
Normal value for marine water sediment				0,001		mg/kg
Normal value for water, intermittent release				0,02		mg/l
Normal value of STP microorganisms				45		mg/l
Normal value for the terrestrial compartment				0,001		mg/kg

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

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation								3,5 mg/m3
Skin								1,25 mg/kg/d

**BUTANOL**

**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	BGR	100		150		
TLV	CZE	300	97,5	600	195	
AGW	DEU	310	100	310	100	
MAK	DEU	310	100	310	100	
TLV	DNK			150 (C)	50 (C)	SKIN
VLA	ESP	61	20	154	50	
VLEP	FRA			150	50	
TGG	NLD			45		
NDS/NDSch	POL	50		150		SKIN
TLV	ROU	100	33	200	66	
NGV/KGV	SWE	45	15	90	30	SKIN
WEL	GBR			154	50	SKIN
TLV-ACGIH		61	20			
Predicted no-effect concentration - PNEC						
Normal value in fresh water				0,082		mg/l
Normal value in marine water				0,0082		mg/l
Normal value for fresh water sediment				0,178		mg/kg
Normal value for marine water sediment				0,0178		mg/kg
Normal value for water, intermittent release				2,25		mg/l
Normal value of STP microorganisms				2476		mg/l

**COMEC ITALIA SRL**

Revision nr. 2

Dated 09/09/2022

**PLT UV: 110, 111, 112, 115, 117, 120, 121, 122, 124,130, 131, 132, 133, 134, 136, 140, 141, 142, 150, 151, 165, 165 HD,**

Printed on 19/10/2022

Page n. 14/39

Replaced revision:1 (Dated: 10/03/2021)

Normal value for the terrestrial compartment 0,015 mg/kg

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

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral			VND	3125 mg/kg				
Inhalation			55 mg/m3	VND			310 mg/m3	VND

**HYDROM HYDROPHONE SILICATE**

**Threshold Limit Value**

Type	Country	TWA/8h	STEL/15min	Remarks / Observations
		mg/m3	ppm	
AGW	DEU	4		INHAL
MAK	DEU	4		INHAL

**BENZOPHENONE**

**Threshold Limit Value**

Type	Country	TWA/8h	STEL/15min	Remarks / Observations
		mg/m3	ppm	
TLV-ACGIH		5		

**(Phenyl) (hydroxycyclohexyl) ketone**

**Threshold Limit Value**

Type	Country	TWA/8h	STEL/15min	Remarks / Observations
		mg/m3	ppm	
TLV-ACGIH		10		INHAL
TLV-ACGIH		3		RESP

**AROMATIC HYDROCARBONS, C9**

**Threshold Limit Value**

Type	Country	TWA/8h	STEL/15min	Remarks / Observations
		mg/m3	ppm	
VLEP	ITA	100	20	1,2,3 trimetilbenzene
OEL	EU	100	20	1,2,3 trimetilbenzene
TLV-ACGIH			25	1,2,3 trimetilbenzene

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

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral			VND	11 mg/kg				11 mg/kg bw/d
Inhalation			VND	32 mg/m3			VND	150 mg/m3
Skin			VND	11 mg/kg			VND	25 mg/kg

**reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate**

**Predicted no-effect concentration - PNEC**

Normal value in fresh water 0,018 mg/l

**PLT UV: 110, 111, 112, 115, 117, 120, 121, 122, 124,130, 131, 132, 133, 134, 136, 140, 141, 142, 150, 151, 165, 165 HD,**

Normal value in marine water	0,0018	mg/l
Normal value for fresh water sediment	2	mg/kg/d
Normal value for marine water sediment	0,2	mg/kg/d
Normal value for water, intermittent release	0,018	mg/l
Normal value of STP microorganisms	100	mg/l
Normal value for the food chain (secondary poisoning)	41,33	mg/kg
Normal value for the terrestrial compartment	10	mg/kg/d

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

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				0,93 mg/kg bw/d				
Inhalation				1,62 mg/m3				6,6 mg/m3
Skin				0,83 mg/kg bw/d				1,67 mg/kg bw/d

**Soybean oil, epoxidized**

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

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		5 mg/kg/d		0,8 mg/kg/d				
Inhalation		17,5 mg/m3		2,8 mg/m3		70 mg/m3		11,9 mg/m3
Skin		5 mg/kg/d		0,8 mg/kg/d	10 mg/kg/d	10 mg/kg/d		1,7 mg/kg/d

**ACRYLIC ACID ESTER**

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,00574	mg/l
Normal value in marine water	0,000574	mg/l
Normal value for fresh water sediment	0,01697	mg/kg
Normal value for marine water sediment	0,001697	mg/kg
Normal value for water, intermittent release	0,0574	mg/l
Normal value of STP microorganisms	10	mg/l
Normal value for the food chain (secondary poisoning)	5,6	mg/Kg food
Normal value for the terrestrial compartment	0,00111	mg/kg

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

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral			VND	1,39 mg/kg/d				
Inhalation			VND	4,87 mg/m3			VND	16,22 mg/m3
Skin			VND	1,15 mg/kg/d			VND	1,92 mg/kg/d

**Bisphenol A diglycidyl-ethyl diacrylate (BADGE-DA)**

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,1	mg/l
Normal value in marine water	0,01	mg/l

**COMEC ITALIA SRL**

Revision nr. 2

Dated 09/09/2022

**PLT UV: 110, 111, 112, 115, 117, 120, 121, 122, 124,130, 131, 132, 133,  
134, 136, 140, 141, 142, 150, 151, 165, 165 HD,**

Printed on 19/10/2022

Page n. 16/39

Replaced revision:1 (Dated: 10/03/2021)

Normal value for fresh water sediment	35,8	mg/kg/d
Normal value for marine water sediment	3,58	mg/kg/d
Normal value for water, intermittent release	1	mg/l
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	7,1	mg/kg/d

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

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation							VND	122,5 mg/m3
Skin							VND	17,5 mg/kg/d

**METHYL METHACRYLATE**

**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	BGR		50		100	
TLV	CZE	50	12	150	36	
AGW	DEU	210	50	420 (C)	100 (C)	
MAK	DEU	210	50	420	100	
TLV	DNK	102	25			SKIN E
VLA	ESP		50		100	
VLEP	FRA	205	50	410	100	
VLEP	ITA		50		100	
TGG	NLD	205		410		
VLE	PRT		50		100	
NDS/NDSCh	POL	100		300		
TLV	ROU	205	50	410	100	
NGV/KGV	SWE	200	50	400	100	
ESD	TUR		50		100	
WEL	GBR	208	50	416	100	
OEL	EU		50		100	
TLV-ACGIH		205	50	410	100	

**1-METHOXY-2-PROPANOL**

**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	BGR	375	100	568	150	SKIN
TLV	CZE	270	72,09	550	146,85	SKIN
AGW	DEU	370	100	740	200	
MAK	DEU	370	100	740	200	
TLV	DNK	185	50			SKIN E
VLA	ESP	375	100	568	150	SKIN



**COMEC ITALIA SRL**

Revision nr. 2

Dated 09/09/2022

**PLT UV: 110, 111, 112, 115, 117, 120, 121, 122, 124,130, 131, 132, 133,  
134, 136, 140, 141, 142, 150, 151, 165, 165 HD,**

Printed on 19/10/2022

Page n. 17/39

Replaced revision:1 (Dated: 10/03/2021)

VLEP	FRA	188	50	375	100	SKIN
VLEP	ITA	375	100	568	150	SKIN
TGG	NLD	375		563		SKIN
VLE	PRT	375	100	568	150	
NDS/NDSch	POL	180		360		SKIN
TLV	ROU	375	100	568	150	SKIN
NGV/KGV	SWE	190	50	568	150	SKIN
ESD	TUR	375	100	568	150	SKIN
WEL	GBR	375	100	560	150	SKIN
OEL	EU	375	100	568	150	SKIN
TLV-ACGIH		184	50	368	100	

<b>Predicted no-effect concentration - PNEC</b>						
Normal value in fresh water				10	mg/l	
Normal value in marine water				1	mg/l	
Normal value for fresh water sediment				41,6	mg/l	
Normal value for marine water sediment				4,17	mg/kg	
Normal value for water, intermittent release				100	mg/l	
Normal value of STP microorganisms				100	mg/l	
Normal value for the terrestrial compartment				2,47	mg/kg	

<b>Health - Derived no-effect level - DNEL / DMEL</b>								
	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral			VND	3,3 mg/kg				3,3 mg/kg bw/d
Inhalation	553,5 mg/m3	VND	VND	43,9 mg/m3	535,5 mg/m3	VND	535,5 mg/m3	369 mg/m3
Skin			VND	18,1 mg/kg			VND	50,6 mg/kg

**2,6-di-tert-butyl-p-cresol**  
**Threshold Limit Value**

Type	Country	TWA/8h	STEL/15min	Remarks / Observations
		mg/m3	ppm	
VLEP	ITA	2		INHAL

<b>Predicted no-effect concentration - PNEC</b>						
Normal value in fresh water				0,000199	mg/l	
Normal value in marine water				0,00002	mg/l	
Normal value for fresh water sediment				0,0996	mg/kg	
Normal value for marine water sediment				0,00996	mg/kg	
Normal value for water, intermittent release				0,00199	mg/l	
Normal value of STP microorganisms				100	mg/l	
Normal value for the food chain (secondary poisoning)				16,7	mg/kg	
Normal value for the terrestrial compartment				0,04769	mg/l	

<b>Health - Derived no-effect level - DNEL / DMEL</b>								
	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic	Acute local	Acute	Chronic local	Chronic

**COMEC ITALIA SRL**

Revision nr. 2

Dated 09/09/2022

**PLT UV: 110, 111, 112, 115, 117, 120, 121, 122, 124,130, 131, 132, 133,  
134, 136, 140, 141, 142, 150, 151, 165, 165 HD,**

Printed on 19/10/2022

Page n. 18/39

Replaced revision:1 (Dated: 10/03/2021)

		systemic	systemic	systemic
Inhalation	VND	1,74 mg/m3	VND	3,5 mg/m3
Skin	VND	5 mg/kg/d	VND	0,5 mg/kg/d

**ACRYLIC ACID**

**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations	
		mg/m3	ppm	mg/m3	ppm		
TLV	BGR	29	10	59	20	STEL: 1'	
TLV	CZE	29	9,686	59	19,706	NPK-P= 1 min	
AGW	DEU	30	10	30 (C)	10 (C)		
MAK	DEU	30	10	30	10		
TLV	DNK			5,9	2	SKIN	E
VLEP	FRA	29	10	59	20		
VLEP	ITA	29	10	59	20	SKIN	STEL: 1 min
TGG	NLD	29		59		TGG: 1 min	
VLE	PRT	29	10	59	20	STEL: 1 min	
NDS/NDSch	POL	10		29,5		SKIN	
TLV	ROU	29	10	59	20	STEL: 1'	
WEL	GBR	29	10	59	20	STEL: 1-minute	
OEL	EU	29	10	59	20	STEL: 1'	
TLV-ACGIH		6	2			SKIN	

**Predicted no-effect concentration - PNEC**

Normal value in fresh water	0,003	mg/l
Normal value in marine water	0,0003	mg/l
Normal value for fresh water sediment	0,0236	mg/kg
Normal value for marine water sediment	0,00236	mg/kg
Normal value for water, intermittent release	0,0013	mg/l
Normal value of STP microorganisms	0,9	mg/l
Normal value for the food chain (secondary poisoning)	0,0023	mg/kg
Normal value for the terrestrial compartment	1	mg/kg

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

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation	3,6 mg/m3	VND			30 mg/m3	VND	30 mg/m3	VND
Skin	1 mg/cm2	VND			1 mg/cm2	VND		

**QUARTZ**

**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations	
		mg/m3	ppm	mg/m3	ppm		
TLV	DNK	0,3					
VLA	ESP		0,05			RESP	

**COMEC ITALIA SRL**

Revision nr. 2

Dated 09/09/2022

**PLT UV: 110, 111, 112, 115, 117, 120, 121, 122, 124,130, 131, 132, 133,  
134, 136, 140, 141, 142, 150, 151, 165, 165 HD,**

Printed on 19/10/2022

Page n. 19/39

Replaced revision:1 (Dated: 10/03/2021)

VLEP	FRA	0,1	RESP
VLEP	ITA	0,1	RESP
TGG	NLD	0,075	RESP
VLE	PRT	0,025	RESP
NDS/NDSCh	POL	0,1	RESP
TLV	ROU	0,1	RESP
NGV/KGV	SWE	0,1	RESP
OEL	EU	0,1	RESP
TLV-ACGIH		0,025	RESP

**4-methoxyphenol**

**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLEP	ITA	5				
TLV-ACGIH		5				

**Predicted no-effect concentration - PNEC**

Normal value in fresh water	0,0136	mg/l
Normal value in marine water	0,00136	mg/l
Normal value for fresh water sediment	0,125	mg/kg/d
Normal value for marine water sediment	0,0125	mg/kg/d
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	0,017	mg/kg/d

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

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation					VND	10 mg/m3	VND	3 mg/m3

**Triphenylphosphite**

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

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation								0,1 mg/m3
Skin								0,014 mg/kg/d

**SODIUM HYDROXIDE**

**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	BGR	2				
TLV	CZE	1		2		
TLV	DNK			2 (C)		
VLA	ESP			2		

**PLT UV: 110, 111, 112, 115, 117, 120, 121, 122, 124,130, 131, 132, 133,  
134, 136, 140, 141, 142, 150, 151, 165, 165 HD,**

VLEP	FRA	2		
NDS/NDSch	POL	0,5	1	
NGV/KGV	SWE	1	2	INHAL
WEL	GBR		2	
TLV-ACGIH			2 (C)	

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified ; LOW = low hazard ; MED = medium hazard ; HIGH = high hazard.

**8.2. Exposure controls**

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

**HAND PROTECTION**

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

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

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

**SKIN PROTECTION**

Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

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

**EYE PROTECTION**

Wear airtight protective goggles (see standard EN 166).

**RESPIRATORY PROTECTION**

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

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

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

**ENVIRONMENTAL EXPOSURE CONTROLS**

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

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

**SECTION 9. Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

Properties	Value	Information
Appearance	liquid	
Colour	various	
Odour	acrylic	
Melting point / freezing point	not available	
Initial boiling point	not available	
Flammability	not available	
Lower explosive limit	not available	
Upper explosive limit	not available	
Flash point	23 ≤ T ≤ 60 °C	
Auto-ignition temperature	not available	
Decomposition temperature	not available	
pH	not available	
Kinematic viscosity	not available	
Solubility	partially soluble in water	
Partition coefficient: n-octanol/water	not available	
Vapour pressure	not available	
Density and/or relative density	not available	
Relative vapour density	not available	
Particle characteristics	not applicable	

**9.2. Other information**

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

VOC (Directive 2010/75/EU) 26,12 %

VOC (volatile carbon) 18,07 %

**SECTION 10. Stability and reactivity**

**10.1. Reactivity**

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

CYCLOHEXANONE

Attacks various types of plastic materials.

May condense under the effect of heat to form resinous compounds.

**PLT UV: 110, 111, 112, 115, 117, 120, 121, 122, 124,130, 131, 132, 133,  
134, 136, 140, 141, 142, 150, 151, 165, 165 HD,**

CALCIUM CARBONATE

Decomposes at temperatures above 800°C/1472°F.

N-BUTYL ACETATE

Decomposes on contact with: water.

2-METHOXY-1-METHYLETHYL ACETATE

Stable in normal conditions of use and storage.

With the air it may slowly develop peroxides that explode with an increase in temperature.

BUTANOL

Attacks various types of plastic materials.

1-METHOXY-2-PROPANOL

Dissolves various plastic materials.Stable in normal conditions of use and storage.

Absorbs and dissolves in water and in organic solvents. With air it may slowly form explosive peroxides.

ACRYLIC ACID

Keep away from: oxidising agents.Maintaining a temperature of less than 13°C/55°F.May polymerise if exposed to: heat.

**10.2. Chemical stability**

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

**10.3. Possibility of hazardous reactions**

The vapours may also form explosive mixtures with the air.

CYCLOHEXANONE

Risk of explosion on contact with: hydrogen peroxide,nitric acid,heat,mineral acids.May react violently with: oxidising agents.Forms explosive mixtures with: air.

N-BUTYL ACETATE

Risk of explosion on contact with: strong oxidising agents.May react dangerously with: alkaline hydroxides,potassium tert-butoxide.Forms explosive mixtures with: air.

2-METHOXY-1-METHYLETHYL ACETATE

**PLT UV: 110, 111, 112, 115, 117, 120, 121, 122, 124,130, 131, 132, 133,  
134, 136, 140, 141, 142, 150, 151, 165, 165 HD,**

May react violently with: oxidising substances, strong acids, alkaline metals.

BUTANOL

Reacts violently developing heat on contact with: aluminium, strong oxidising agents, strong reducing agents, hydrochloric acid. Forms explosive mixtures with: air.

METHYL METHACRYLATE

May polymerise on contact with: ammonia, organic peroxides, persulphates. Risk of explosion on contact with: dibenzoyl peroxide, di-tert-butyl peroxide, propionaldehyde. May react dangerously with: strong oxidising agents. Forms explosive mixtures with: air.

1-METHOXY-2-PROPANOL

May react dangerously with: strong oxidising agents, strong acids.

ACRYLIC ACID

Risk of explosion on contact with: oxidising agents, oxygen, peroxides. May polymerise on contact with: alkaline hydroxides, amines, ammonia, sulphuric acid. Forms explosive mixtures with: hot air.

**10.4. Conditions to avoid**

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

CYCLOHEXANONE

Avoid exposure to: sources of heat, naked flames.

N-BUTYL ACETATE

Avoid exposure to: moisture, sources of heat, naked flames.

BUTANOL

Avoid exposure to: sources of heat, naked flames.

METHYL METHACRYLATE

Avoid exposure to: heat, UV rays. Avoid contact with: oxidising substances, reducing substances, acids, bases.

1-METHOXY-2-PROPANOL

Avoid exposure to: air.

ACRYLIC ACID

Avoid exposure to: light, sources of heat, naked flames. Avoid contact with: oxygen.

**10.5. Incompatible materials**

CALCIUM CARBONATE

**PLT UV: 110, 111, 112, 115, 117, 120, 121, 122, 124,130, 131, 132, 133,  
134, 136, 140, 141, 142, 150, 151, 165, 165 HD,**

Incompatible with: acids.

N-BUTYL ACETATE

Incompatible with: water,nitrates,strong oxidants,acids,alkalis,zinc.

2-METHOXY-1-METHYLETHYL ACETATE

Incompatible with: oxidising substances,strong acids,alkaline metals.

1-METHOXY-2-PROPANOL

Incompatible with: oxidising substances,strong acids,alkaline metals.

ACRYLIC ACID

Incompatible with: peroxides,oxidising substances,strong acids,strong bases,amines,iron salts,oleum,chlorosulphuric acid.

#### 10.6. Hazardous decomposition products

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

CALCIUM CARBONATE

May develop: calcium oxides,carbon oxides.

METHYL METHACRYLATE

When heated to decomposition releases: harsh fumes,zinc alloys.

## SECTION 11. Toxicological information

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

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

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

#### Metabolism, toxicokinetics, mechanism of action and other information

2-METHOXY-1-METHYLETHYL ACETATE

The main route of entry is the skin, whereas the respiratory route is less important due to the low vapour pressure of the product.

#### Information on likely routes of exposure



**PLT UV: 110, 111, 112, 115, 117, 120, 121, 122, 124,130, 131, 132, 133,  
134, 136, 140, 141, 142, 150, 151, 165, 165 HD,**

**N-BUTYL ACETATE**

WORKERS: inhalation; contact with the skin.

**2-METHOXY-1-METHYLETHYL ACETATE**

WORKERS: inhalation; contact with the skin.

**1-METHOXY-2-PROPANOL**

WORKERS: inhalation; contact with the skin.

POPULATION: ingestion of contaminated food or water; inhalation of ambient air; contact with the skin of products containing the substance.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

**N-BUTYL ACETATE**

In humans, the substance's vapours cause irritation of the eyes and nose. In the event of repeated exposure, skin irritation, dermatitis (dryness and cracking of the skin) and keratitis appear.

**2-METHOXY-1-METHYLETHYL ACETATE**

Above 100 ppm causes irritation of the eye, nose and oropharynx mucous membranes. At 1000 ppm, disturbance of equilibrium and severe eye irritation can be noticed. Clinical and biological examinations carried out on exposed volunteers revealed no anomalies. Acetate produces greater skin and eye irritation with direct contact. No chronic effects on humans have been reported (INCR, 2010).

**1-METHOXY-2-PROPANOL**

The main route of entry is the skin, whereas the respiratory route is less important due to the low vapour pressure of the product. Above 100 ppm causes irritation of the eye, nose and oropharynx mucous membranes. At 1000 ppm, disturbance of equilibrium and severe eye irritation can be noticed. Clinical and biological examinations carried out on exposed volunteers revealed no anomalies. Acetate produces greater skin and eye irritation with direct contact. No chronic effects on humans have been reported.

Interactive effects

**N-BUTYL ACETATE**

A case of acute intoxication been reported involving a 33 year old worker while cleaning a tank with a preparation containing xylenes, butyl acetate and ethylene glycol acetate. The person had irritation of the conjunctiva and upper respiratory tract, drowsiness and motor coordination disorders, which disappeared within 5 hours. The symptoms are attributed to poisoning by mixed xylenes and butyl acetate, with a possible synergistic effect responsible for the neurological effects. Cases of vacuolar keratitis are reported in workers exposed to a mixture of butyl acetate and isobutanol vapours, but with uncertainty concerning the responsibility of a particular solvent (INRC, 2011).

ACUTE TOXICITY

ATE (Inhalation - vapours) of the mixture:	> 20 mg/l
ATE (Oral) of the mixture:	>2000 mg/kg
ATE (Dermal) of the mixture:	>2000 mg/kg

**1,6-HEXANEDIOL DIACRYLATE**

LD50 (Dermal):	3600 mg/kg Coniglio / Rabbit
LD50 (Oral):	3650 mg/kg Ratto / Rat

**PLT UV: 110, 111, 112, 115, 117, 120, 121, 122, 124, 130, 131, 132, 133,  
134, 136, 140, 141, 142, 150, 151, 165, 165 HD,**

CYCLOHEXANONE

LD50 (Dermal): 1100 mg/kg 794 - 3160 / Coniglio / Rabbit  
 LD50 (Oral): 1535 mg/kg Ratto / Rat  
 LC50 (Inhalation vapours): 11 mg/l/4h Ratto / Rat (4h)

CALCIUM CARBONATE

LD50 (Dermal): > 2000 mg/kg Ratto / Rat  
 LD50 (Oral): > 2000 mg/kg Rat  
 LC50 (Inhalation mists/powders): > 3 mg/l Ratto / Rat

HYDROCARBONS, C10-C13, n-alkanes, isoalkanes, CYCLIC, <2% AROMATIC

LD50 (Dermal): > 2000 mg/kg bw Rat  
 LD50 (Oral): > 5000 mg/kg bw Rat  
 LC50 (Inhalation vapours): > 5000 mg/m<sup>3</sup> 8h Rat

N-BUTYL ACETATE

LD50 (Dermal): > 14000 mg/kg Rabbit  
 LD50 (Oral): > 10000 mg/kg Rat  
 LC50 (Inhalation vapours): > 21 mg/l/4h Rat

2-Propenoic acid, reaction products with dipentaerythritol

LD50 (Dermal): 2000 mg/kg Coniglio / Rabbit (OECD TG 402)  
 LD50 (Oral): 2000 mg/kg Ratto / Rat (OECD 423)

2-METHOXY-1-METHYLETHYL ACETATE

LD50 (Dermal): > 5000 mg/kg Coniglio / Rabbit  
 LD50 (Oral): 8500 mg/kg Ratto / Rat  
 LC50 (Inhalation vapours): 4345 ppm/6h Ratto / Rat

2,4,6-trimethylbenzoylphenylphosphinic acid ethyl ester

LD50 (Dermal): > 2000 mg/kg Ratto - Rat  
 LD50 (Oral): > 2000 mg/kg Ratto / Rat

Dipropylene glycol diacrylate

LD50 (Dermal): > 2000 mg/kg bw (Rabbit) OECD 402  
 LD50 (Oral): 3530 mg/kg bw (Rat) OECD 401  
 LC50 (Inhalation vapours): 0,41 mg/l air (Rat) OECD 403

2-hydroxy-2-Methylpropiophenone

LD50 (Dermal): 6929 mg/kg Rat  
 LD50 (Oral): 1694 mg/kg Rat

BUTANOL

LD50 (Dermal): 3400 mg/kg Rabbit  
 LD50 (Oral): 2290 mg/kg Rat

**PLT UV: 110, 111, 112, 115, 117, 120, 121, 122, 124,130, 131, 132, 133,  
134, 136, 140, 141, 142, 150, 151, 165, 165 HD,**

STA (Oral): 500 mg/kg estimate from table 3.1.2 of Annex I of the CLP  
(figure used for calculation of the acute toxicity estimate of the mixture)

LC50 (Inhalation vapours): 17,76 mg/l/4h Rat

HYDROM HYDROPHONE SILICATE

LD50 (Dermal): > 5000 mg/kg Rat  
LD50 (Oral): > 3300 mg/kg Ratto / Rat - Nessuna mortalità  
LC50 (Inhalation mists/powders): > 0,139 mg/l/1h Ratto / Rat - Nessuna mortalità - Conc. massima raggiungibile

BENZOPHENONE

LD50 (Dermal): 3535 mg/kg Coniglio / Rabbit  
LD50 (Oral): > 10000 mg/kg Ratto / Rat

(Phenyl) (hydroxycyclohexyl) ketone

LD50 (Dermal): > 5000 mg/kg Ratto/Rat  
LD50 (Oral): > 2500 mg/kg Ratto/Rat  
LC50 (Inhalation mists/powders): > 1 mg/l/4h Ratto/Rat

AROMATIC HYDROCARBONS, C9

LD50 (Dermal): > 3160 mg/kg Ratto / Rat  
LD50 (Oral): 3492 mg/kg Ratto / Rat  
LC50 (Inhalation vapours): > 6193 mg/l/4h Ratto / Rat

ACRYLIC ACID ESTER

LD50 (Dermal): > 2000 mg/kg Coniglio/Rabbit  
LD50 (Oral): > 2000 mg/kg Ratto/Rat

Bisphenol A diglycidyl-ethyl diacrylate (BADGE-DA)

LD50 (Dermal): > 2000 mg/kg Coniglio / Rabbit  
LD50 (Oral): > 2000 mg/kg Ratto / Rat

1-METHOXY-2-PROPANOL

LD50 (Dermal): 13000 mg/kg Rabbit  
LD50 (Oral): 4000 mg/kg Rat  
LC50 (Inhalation vapours): 54,6 mg/l/4h Rat

SKIN CORROSION / IRRITATION

Causes skin irritation

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

**PLT UV: 110, 111, 112, 115, 117, 120, 121, 122, 124,130, 131, 132, 133,  
134, 136, 140, 141, 142, 150, 151, 165, 165 HD,**

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

**11.2. Information on other hazards**

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

## SECTION 12. Ecological information

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

### 12.1. Toxicity

#### Dipropylene glycol diacrylate

LC50 - for Fish	2,2 mg/l/96h LC50 (96h) = 2.2 - 4.64 mg/L Test (static) DIN 38412 part L15
EC50 - for Crustacea	22,3 mg/l/48h (Daphnia) EU method C.2
EC50 - for Algae / Aquatic Plants	16,7 mg/l/72h Desmodesmus subspicatus
EC10 for Algae / Aquatic Plants	2,2 mg/l/72h Desmodesmus subspicatus

#### 2-hydroxy-2-Methylpropiophenone

LC50 - for Fish	160 mg/l/96h Leuciscus ido
EC50 - for Crustacea	> 119 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	1,95 mg/l/72h Piante acquatiche

#### ACRYLIC ACID ESTER

LC50 - for Fish	5,74 mg/l/96h Brachydanio rerio
EC50 - for Crustacea	91,4 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	12,2 mg/l/72h Desmodesmus subspicatus
Chronic NOEC for Fish	1,59 mg/l/96h Zebra fish
Chronic NOEC for Crustacea	25 mg/l/48h Daphnia magna
Chronic NOEC for Algae / Aquatic Plants	0,921 mg/l/72h Desmodesmus subspicatus

#### HYDROCARBONS, C10-C13, n-alkanes, isoalkanes, CYCLIC, <2% AROMATIC

LC50 - for Fish	> 1000 mg/l/96h Oncorhynchus mykiss OECD 203
EC50 - for Crustacea	> 1000 mg/l/48h Daphnia magna

#### AROMATIC HYDROCARBONS, C9

LC50 - for Fish	> 9,2 mg/l/96h Oncorhynchus mykiss
EC50 - for Crustacea	> 3,2 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	> 2,9 mg/l/72h Pseudokirchneriella subcapitata

#### 2,4,6-trimethylbenzoylphenylphosphinic acid ethyl ester

LC50 - for Fish	1,89 mg/l/96h Brachydanio rerio
EC50 - for Crustacea	2,26 mg/l/48h Daphnia magna

#### BENZOPHENONE

LC50 - for Fish	15,3 mg/l/96h ittiotossicità
EC50 - for Crustacea	6,8 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	3,5 mg/l/72h

#### 2-Propenoic acid, reaction products with dipentaerythritol

**PLT UV: 110, 111, 112, 115, 117, 120, 121, 122, 124,130, 131, 132, 133,  
134, 136, 140, 141, 142, 150, 151, 165, 165 HD,**

LC50 - for Fish 13 mg/l/96h *Cyprinus carpio* (OCD TG 203)  
 EC50 - for Crustacea 35 mg/l/48h *Daphnia magna* (OECD TG 202)  
 EC50 - for Algae / Aquatic Plants > 100 mg/l/72h *Pseudokirchneriella subcapitata* (OECD TG 201)

HYDROM HYDROPHONE SILICATE

LC50 - for Fish > 10000 mg/l/96h *Brachydanio rerio*  
 EC50 - for Crustacea > 1000 mg/l/24h 24h - *Daphnia magna*

2-METHOXY-1-METHYLETHYL ACETATE

LC50 - for Fish 134 mg/l/96h *Pesce, Oncorhynchus mykiss* OECD 203  
 EC50 - for Crustacea > 500 mg/l/48h *Daphnia magna*  
 EC50 - for Algae / Aquatic Plants > 1000 mg/l/72h *Selenastrum capricornutum* OECD 201  
 Chronic NOEC for Fish 47,5 mg/l *Oryzias latipes* 14 gg OECD 204  
 Chronic NOEC for Crustacea 100 mg/l *Daphnia magna* 21 gg OECD 202

1,6-HEXANEDIOL DIACRYLATE

LC50 - for Fish 4,6 mg/l/96h Fish, 4.6 - 10 mg/L Test (static) DIN 38412 part  
 EC50 - for Crustacea 2,6 mg/l/48h *Daphnia*, Test 79/831/EEC  
 EC50 - for Algae / Aquatic Plants 1,5 mg/l/72h *Desmodesmus subspicatus*  
 Chronic NOEC for Algae / Aquatic Plants 0,5 mg/l *Desmodesmus subspicatus* 72h, inibitore di crescita

BUTANOL

LC50 - for Fish 1376 mg/l/96h *Pimephales promelas*  
 EC50 - for Crustacea 1328 mg/l/48h *Daphnia magna*  
 EC50 - for Algae / Aquatic Plants 225 mg/l/96h 96h - *Selenastrum capricornutum*

1-METHOXY-2-PROPANOL

LC50 - for Fish > 20800 mg/l/96h *Pimephales promelas*  
 EC50 - for Crustacea > 21100 mg/l/48h *Daphnia magna*, prova statica  
 EC50 - for Algae / Aquatic Plants > 1000 mg/l/72h *Scenedesmus subspicatus*, prova statica

CYCLOHEXANONE

LC50 - for Fish 527 mg/l/96h 527 - 732 / *Pimephales promelas*  
 EC50 - for Crustacea > 100 mg/l/48h *Daphnia magna*  
 EC50 - for Algae / Aquatic Plants > 100 mg/l/72h *Scenedesmus subspicatus*

N-BUTYL ACETATE

LC50 - for Fish 18 mg/l/96h *Pimephales promelas*  
 EC50 - for Crustacea 44 mg/l/48h *Daphnia Magna*  
 EC10 for Algae / Aquatic Plants 674,7 mg/l/72h *Desmodesmus subspicatus*  
 Chronic NOEC for Crustacea 23 mg/l 21d/ *Daphnia magna*

ACRYLIC ACID

LC50 - for Fish 97 mg/l/96h *Mysidopsis bahia*

**PLT UV: 110, 111, 112, 115, 117, 120, 121, 122, 124,130, 131, 132, 133,  
134, 136, 140, 141, 142, 150, 151, 165, 165 HD,**

EC50 - for Crustacea 95 mg/l/48h Daphnia magna  
 EC50 - for Algae / Aquatic Plants 0,13 mg/l/72h Desmodesmus subspicatus  
 EC10 for Algae / Aquatic Plants 0,03 mg/l/72h Desmodesmus subspicatus  
 Chronic NOEC for Crustacea 19 mg/l Daphnia magna

(Phenyl) (hydroxycyclohexyl) ketone

LC50 - for Fish 24 mg/l/96h Brachydanio rerio  
 EC50 - for Crustacea 53,9 mg/l/48h Daphnia magna  
 EC50 - for Algae / Aquatic Plants 14,4 mg/l/72h alghe d'acqua dolce

**12.2. Persistence and degradability**

(Phenyl) (hydroxycyclohexyl) ketone

Readily biodegradable.

Dipropylene glycol diacrylate

Solubility in water 5,2 mg/l

Rapidly degradable

2-hydroxy-2-Methylpropiofenone

Solubility in water 13,3 g/100g

Rapidly degradable

ACRYLIC ACID ESTER

Solubility in water 1200 mg/l

Rapidly degradable

HYDROCARBONS, C10-C13, n-alkanes,  
isoalkanes, CYCLIC, <2% AROMATIC

Rapidly degradable

AROMATIC HYDROCARBONS, C9

Rapidly degradable

2,4,6-trimethylbenzoylphenylphosphinic acid  
ethyl ester

Solubility in water 0,005 g/100 g acqua @20°C

NOT rapidly degradable

BENZOPHENONE

Solubility in water < 0,0137 g/100 g acqua @20°C

Rapidly degradable

2-Propenoic acid, reaction products with  
dipentaerythritol

Solubility in water 80 mg/l @ 25°C

NOT rapidly degradable

CALCIUM CARBONATE

Solubility in water 6 - 20 mg/l

HYDROM HYDROPHONE SILICATE

Solubility in water 0,1 - 100 mg/l

Degradability: information not available

METHYL METHACRYLATE

Solubility in water 15300 mg/l

Rapidly degradable

**PLT UV: 110, 111, 112, 115, 117, 120, 121, 122, 124,130, 131, 132, 133,  
134, 136, 140, 141, 142, 150, 151, 165, 165 HD,**

2-METHOXY-1-METHYLETHYL ACETATE

Solubility in water > 10000 mg/l

Rapidly degradable  
OECD GI 301F 83% 10 d

1,6-HEXANEDIOL DIACRYLATE

Solubility in water 74,8 mg/l @25°C

Rapidly degradable  
BUTANOL

Solubility in water 78 mg/l

Rapidly degradable  
1-METHOXY-2-PROPANOL

Solubility in water 1000 - 10000 mg/l

Rapidly degradable  
CYCLOHEXANONE

Solubility in water 86 mg/l

Rapidly degradable  
N-BUTYL ACETATE

Solubility in water 5,3 mg/l

Rapidly degradable  
ACRYLIC ACID

Rapidly degradable  
(Phenyl) (hydroxycyclohexyl) ketone

Solubility in water 0,044 g/100 g acqua @25°C

Rapidly degradable  
Bisphenol A diglycidyl-ethyl diacrylate  
(BADGE-DA)  
NOT rapidly degradable

**12.3. Bioaccumulative potential**

Dipropylene glycol diacrylate  
N-octanol/water partition coefficient  
(Log Kow) 0:01 to 0:39  
log Pow 0:39.

Dipropylene glycol diacrylate

Partition coefficient: n-octanol/water 0,39 0,01-0,39 poco bioaccumulabile

2-hydroxy-2-Methylpropiophenone

Partition coefficient: n-octanol/water 1,62 @ 20°C

ACRYLIC ACID ESTER

Partition coefficient: n-octanol/water 2,52

2,4,6-trimethylbenzoylphenylphosphinic acid  
ethyl ester

Partition coefficient: n-octanol/water 2,91 valore stimato

BENZOPHENONE

Partition coefficient: n-octanol/water 3,18

BCF < 12



**PLT UV: 110, 111, 112, 115, 117, 120, 121, 122, 124,130, 131, 132, 133, 134, 136, 140, 141, 142, 150, 151, 165, 165 HD,**

HYDROM HYDROPHONE SILICATE	
Partition coefficient: n-octanol/water	0,53
METHYL METHACRYLATE	
Partition coefficient: n-octanol/water	1,38
2-METHOXY-1-METHYLETHYL ACETATE	
Partition coefficient: n-octanol/water	1,2
BCF	100
1,6-HEXANEDIOL DIACRYLATE	
Partition coefficient: n-octanol/water	2,81
BUTANOL	
Partition coefficient: n-octanol/water	1
BCF	3,16
1-METHOXY-2-PROPANOL	
Partition coefficient: n-octanol/water	< 1
CYCLOHEXANONE	
Partition coefficient: n-octanol/water	0,86
N-BUTYL ACETATE	
Partition coefficient: n-octanol/water	2,3
BCF	15,3
ACRYLIC ACID	
Partition coefficient: n-octanol/water	0,46
(Phenyl) (hydroxycyclohexyl) ketone	
BCF	< 12
Bisphenol A diglycidyl-ethyl diacrylate (BADGE-DA)	
Partition coefficient: n-octanol/water	1,6

**12.4. Mobility in soil**

Dipropylene glycol diacrylate	
Partition coefficient: soil/water	1 metodo: calcolato
2-hydroxy-2-Methylpropiophenone	
Partition coefficient: soil/water	1,03

**PLT UV: 110, 111, 112, 115, 117, 120, 121, 122, 124,130, 131, 132, 133,  
134, 136, 140, 141, 142, 150, 151, 165, 165 HD,**

2,4,6-trimethylbenzoylphenylphosphinic acid ethyl ester	Partition coefficient: soil/water	3,37
BENZOPHENONE	Partition coefficient: soil/water	2,7
METHYL METHACRYLATE	Partition coefficient: soil/water	0,94
2-METHOXY-1-METHYLETHYL ACETATE	Partition coefficient: soil/water	1,7
1,6-HEXANEDIOL DIACRYLATE	Partition coefficient: soil/water	2,1
BUTANOL	Partition coefficient: soil/water	0,388
CYCLOHEXANONE	Partition coefficient: soil/water	1,18
N-BUTYL ACETATE	Partition coefficient: soil/water	< 3
ACRYLIC ACID	Partition coefficient: soil/water	1,63 0.78 - 2.14
(Phenyl) (hydroxycyclohexyl) ketone	Partition coefficient: soil/water	1,92 @20°C
Bisphenol A diglycidyl-ethyl diacrylate (BADGE-DA)	Partition coefficient: soil/water	2,6

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

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

**12.6. Endocrine disrupting properties**

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

**12.7. Other adverse effects**

**PLT UV: 110, 111, 112, 115, 117, 120, 121, 122, 124,130, 131, 132, 133, 134, 136, 140, 141, 142, 150, 151, 165, 165 HD,**

Information not available

## SECTION 13. Disposal considerations

### 13.1. Waste treatment methods

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

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

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

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

## SECTION 14. Transport information

### 14.1. UN number or ID number

ADR / RID, IMDG, IATA: 1210

### 14.2. UN proper shipping name

ADR / RID: PRINTING INK or PRINTING INK RELATED MATERIAL

IMDG: PRINTING INK or PRINTING INK RELATED MATERIAL

IATA: PRINTING INK or PRINTING INK RELATED MATERIAL

### 14.3. Transport hazard class(es)

ADR / RID: Class: 3 Label: 3

IMDG: Class: 3 Label: 3

IATA: Class: 3 Label: 3



### 14.4. Packing group

ADR / RID, IMDG, IATA: III

### 14.5. Environmental hazards

ADR / RID: NO

IMDG: NO

IATA: NO

### 14.6. Special precautions for user

**COMEC ITALIA SRL**

Revision nr. 2

Dated 09/09/2022

**PLT UV: 110, 111, 112, 115, 117, 120, 121, 122, 124,130, 131, 132, 133,  
134, 136, 140, 141, 142, 150, 151, 165, 165 HD,**

Printed on 19/10/2022

Page n. 36/39

Replaced revision:1 (Dated: 10/03/2021)

ADR / RID:	HIN - Kemler: 30	Limited Quantities: 5 L	Tunnel restriction code: (D/E)
	Special provision: 163, 367		
IMDG:	EMS: F-E, S-D	Limited Quantities: 5 L	
IATA:	Cargo:	Maximum quantity: 220 L	Packaging instructions: 366
	Pass.:	Maximum quantity: 60 L	Packaging instructions: 355
	Special provision:	A3, A72, A192	

**14.7. Maritime transport in bulk according to IMO instruments**

Information not relevant

**SECTION 15. Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Seveso Category - Directive 2012/18/EU: P5c

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006Product  
Point 3 - 40Contained substance

Point 75

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors

not applicable

Substances in Candidate List (Art. 59 REACH)On the basis of available data, the product does not contain any SVHC in percentage  $\geq$  than 0,1%.Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

**PLT UV: 110, 111, 112, 115, 117, 120, 121, 122, 124,130, 131, 132, 133,  
134, 136, 140, 141, 142, 150, 151, 165, 165 HD,**

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

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

### 15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

## SECTION 16. Other information

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

<b>Flam. Liq. 2</b>	Flammable liquid, category 2
<b>Flam. Liq. 3</b>	Flammable liquid, category 3
<b>Acute Tox. 4</b>	Acute toxicity, category 4
<b>Asp. Tox. 1</b>	Aspiration hazard, category 1
<b>STOT RE 2</b>	Specific target organ toxicity - repeated exposure, category 2
<b>Skin Corr. 1A</b>	Skin corrosion, category 1A
<b>Eye Dam. 1</b>	Serious eye damage, category 1
<b>Eye Irrit. 2</b>	Eye irritation, category 2
<b>Skin Irrit. 2</b>	Skin irritation, category 2
<b>STOT SE 3</b>	Specific target organ toxicity - single exposure, category 3
<b>Skin Sens. 1</b>	Skin sensitization, category 1
<b>Skin Sens. 1A</b>	Skin sensitization, category 1A
<b>Skin Sens. 1B</b>	Skin sensitization, category 1B
<b>Aquatic Acute 1</b>	Hazardous to the aquatic environment, acute toxicity, category 1
<b>Aquatic Chronic 2</b>	Hazardous to the aquatic environment, chronic toxicity, category 2
<b>Aquatic Chronic 3</b>	Hazardous to the aquatic environment, chronic toxicity, category 3
<b>H225</b>	Highly flammable liquid and vapour.
<b>H226</b>	Flammable liquid and vapour.
<b>H302</b>	Harmful if swallowed.
<b>H312</b>	Harmful in contact with skin.
<b>H332</b>	Harmful if inhaled.
<b>H304</b>	May be fatal if swallowed and enters airways.
<b>H373</b>	May cause damage to organs through prolonged or repeated exposure.
<b>H314</b>	Causes severe skin burns and eye damage.
<b>H318</b>	Causes serious eye damage.
<b>H319</b>	Causes serious eye irritation.
<b>H315</b>	Causes skin irritation.

**PLT UV: 110, 111, 112, 115, 117, 120, 121, 122, 124,130, 131, 132, 133,  
134, 136, 140, 141, 142, 150, 151, 165, 165 HD,**

<b>H335</b>	May cause respiratory irritation.
<b>H317</b>	May cause an allergic skin reaction.
<b>H336</b>	May cause drowsiness or dizziness.
<b>H400</b>	Very toxic to aquatic life.
<b>H411</b>	Toxic to aquatic life with long lasting effects.
<b>H412</b>	Harmful to aquatic life with long lasting effects.
<b>EUH066</b>	Repeated exposure may cause skin dryness or cracking.

**LEGEND:**

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

**GENERAL BIBLIOGRAPHY**

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)
14. Regulation (EU) 2018/669 (XI Atp. CLP)
15. Regulation (EU) 2019/521 (XII Atp. CLP)
16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
17. Regulation (EU) 2019/1148
18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)

**PLT UV: 110, 111, 112, 115, 117, 120, 121, 122, 124,130, 131, 132, 133,  
134, 136, 140, 141, 142, 150, 151, 165, 165 HD,**

20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)  
21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)  
22. Delegated Regulation (UE) 2022/692 (XVIII Atp. CLP)

- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

**Note for users:**

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

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

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

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

**CALCULATION METHODS FOR CLASSIFICATION**

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

For information on any exposure scenarios of the substances present in the mixture, contact Sericom Italia srl.

**Changes to previous review:**

The following sections were modified:

01 / 02 / 03 / 08 / 09 / 11 / 12 / 14 / 15 / 16.