

# MATERIAL SAFETY DATA SHEET



## EPOXY PRIMER AC - PART A

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

#### 1.1. Product identifier

Product name **Epoxy Primer AC - Part A**

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

Intended use **Epoxy formulation**

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

Name **Bullet Building Products Ltd**  
Full address **Mangham Road, Rotherham S614RJ**  
District and Country

e-mail address of the competent person responsible for the Safety Data Sheet **sales@bulletbp.co.uk**

#### 1.4. Emergency telephone number

**Tel: 01709 728150**

For urgent inquiries refer to

### 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 2015/830.

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 2	H225	Highly flammable liquid and vapour.
Reproductive toxicity, category 2	H361d	Suspected of damaging the unborn child.
Eye irritation, category 2	H319	Causes serious eye irritation.
Skin irritation, category 2	H315	Causes skin irritation.
Skin sensitization, category 1	H317	May cause an allergic skin reaction.
Hazardous to the aquatic environment, chronic toxicity, category 2	H411	Toxic 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:

**H225** Highly flammable liquid and vapour.  
**H361d** Suspected of damaging the unborn child.

## SECTION 2. Hazards identification ... / >>

**H319** Causes serious eye irritation.  
**H315** Causes skin irritation.  
**H317** May cause an allergic skin reaction.  
**H411** Toxic to aquatic life with long lasting effects.  
**EUH205** Contains epoxy constituents. May produce an allergic reaction.

Precautionary statements:

**P210** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
**P280** Wear protective gloves/ protective clothing / eye protection / face protection.  
**P370+P378** In case of fire: use carbon dioxide, sand, foam or powder to extinguish.  
**P273** Avoid release to the environment.  
**P391** Collect spillage.  
**P261** Avoid breathing dust / fume / gas / mist / vapours / spray.

**Contains:** TOLUENE  
REACTION PRODUCT BISPHENOL F-EPICHLOROHYDRIN  
2,2-BIS-[4-(2,3-EPOXI)PHENYL]PROPANE

VOC (Directive 2004/42/EC) :

Two - pack performance coatings.

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

404,23

Limit value:

500,00

- Catalysed with :

25,00 %

DUROGLASS FF4416 comp. B

- Thinned with :

10,00 %

DILUENTE 21

## 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%.

## SECTION 3. Composition/information on ingredients

### 3.1. Substances

Information not relevant

### 3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification 1272/2008 (CLP)	
<b>2,2-BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE</b>			
CAS	1675-54-3	16,5 ≤ x < 18	Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 2 H411
EC	216-823-5		
INDEX	603-073-00-2		
Reg. no.	01-2119456619-26		
<b>MICA</b>			
CAS	12001-26-2	16,5 ≤ x < 18	STOT RE 2 H373
EC	601-648-2		
INDEX			
<b>ISOPROPANOL</b>			
CAS	67-63-0	5 ≤ x < 9	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336
EC	200-661-7		
INDEX	603-117-00-0		
Reg. no.	01-2119457558-25		
<b>REACTION PRODUCT BISPHENOL F-EPICHLOROHYDRIN</b>			
CAS	9003-36-5	5 ≤ x < 9	Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 2 H411
EC	500-006-8		
INDEX			
Reg. no.	01-2119454392-40		
<b>TOLUENE</b>			
CAS	108-88-3	5 ≤ x < 9	Flam. Liq. 2 H225, Repr. 2 H361d, Asp. Tox. 1 H304, STOT RE 2 H373, Skin Irrit. 2 H315, STOT SE 3 H336, Aquatic Chronic 3 H412
EC	203-625-9		
INDEX	601-021-00-3		
Reg. no.	01-2119471310-51		

## SECTION 3. Composition/information on ingredients ... / >>

### TRIZINC BIS (ORTHOPHOSPHATE)

CAS	7779-90-0 5 ≤ x < 9	Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1
EC	231-944-3	
INDEX	030-011-00-6	
Reg. no.	01-2119485044-40	

### ETHYL ACETATE

CAS	141-78-6 0,7 ≤ x < 0,8	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066
EC	205-500-4	
INDEX	607-022-00-5	
Reg. no.	01-2119475103-46	

### ZINC OXIDE

CAS	1314-13-2 0,15 ≤ x < 0,2	Aquatic Acute 1 H400 M=1, Aquatic Chronic 1 H410 M=1
EC	215-222-5	
INDEX	030-013-00-7	
Reg. no.	01-2119463881-32	

### XYLENE (MIXTURE OF ISOMERS)

CAS	1330-20-7 0 ≤ x < 0,05	Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Aquatic Chronic 3 H412, Classification note/notes according to Annex VI to the CLP Regulation: C
EC	215-535-7	
INDEX	601-022-00-9	
Reg. no.	01-2119488216-32	

EC 215-535-7

INDEX 601-022-00-9

Reg. no. 01-2119488216-32

### 2-METHOXY-1-METHYLETHYL ACETATE

CAS	108-65-6 0 ≤ x < 0,05	Flam. Liq. 3 H226, STOT SE 3 H336
EC	203-603-9	
INDEX	607-195-00-7	
Reg. no.	01-2119475791-29	

### N-BUTYL ACETATE

CAS	123-86-4 0 ≤ x < 0,05	Flam. Liq. 3 H226, STOT SE 3 H336, EUH066
EC	204-658-1	
INDEX	607-025-00-1	
Reg. no.	01-2119485493-29	

### 1-METHOXY-2-PROPANOL

CAS	107-98-2 0 ≤ x < 0,05	Flam. Liq. 3 H226, STOT SE 3 H336
EC	203-539-1	
INDEX	603-064-00-3	
Reg. no.	01-2119457435-35	

### PHOSPHORIC ACID

CAS	7664-38-2	$0 \leq x < 0,05$	<b>Met. Corr. 1 H290, Skin Corr. 1B H314, Eye Dam. 1 H318,</b> <b>Classification note/notes according to Annex VI to the CLP Regulation: B</b>
EC	231-633-2		
INDEX	015-011-00-6		
Reg. no.	01-2119485924-24		
<b>ETHYLBENZENE</b>			
CAS	100-41-4	$0 \leq x < 0,05$	<b>Flam. Liq. 2 H225, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373,</b> <b>Aquatic Chronic 3 H412</b>
EC	202-849-4		
INDEX	601-023-00-4		
Reg. no.	01-2119489370-35		

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

## SECTION 4. First aid measures

### I.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. Get medical advice/attention 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.

### I.2. Most important symptoms and effects, both acute and delayed

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

## SECTION 4. First aid measures ... / >>

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

Information not available

## SECTION 5. Firefighting measures

### 5.1. Extinguishing media

#### SUITABLE EXTINGUISHING EQUIPMENT

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

#### UNSUITABLE EXTINGUISHING EQUIPMENT

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

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

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

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

### 5.3. Advice for firefighters

#### GENERAL INFORMATION

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

#### SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

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

## SECTION 6. Accidental release measures

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

Block the leakage if there is no hazard.

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

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. When performing transfer operations involving large containers, connect to an earthing system and wear antistatic footwear. Vigorous stirring and flow through the tubes and equipment may cause the formation and accumulation of electrostatic charges. In order to avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurised. Do not eat, drink or smoke during use. Avoid leakage of the product into the environment.

# SECTION 7. Handling and storage ... / >>

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

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. 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:

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
ESP	España	Límites de exposición profesional para agentes químicos en España 2019
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
FIN	Suomi	HTP-VÄRDEN 2020. Koncentrationer som befunnits skadliga. SOCIAL - OCH HÄLSOVÄRDSMINISTERIETS PUBLIKATIONER 2020:25
GRC	Ελλάδα	Π.Δ. 26/2020 (ΦΕΚ 50/Α' 6.3.2020) Εναρμόνιση της ελληνικής νομοθεσίας προς τις διατάξεις των οδηγιών 2017/2398/ΕΕ, 2019/130/ΕΕ και 2019/983/ΕΕ «για την τροποποίηση της οδηγίας 2004/37/ΕΚ "σχετικά με την προστασία των εργαζομένων από τους κινδύνους που συνδέονται με την έκθεση σε καρκινογόνους ή μεταλλαξιογόνους παράγοντες κατά την εργασία"»
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
LTU	Lietuva	Lietuvos higienos norma HN 23:2011 „Cheminių medžiagų profesinio poveikio ribiniai dydžiai: Matavimo ir poveikio vertinimo bendrieji reikalavimai" (įsakymo nauja redakcija nuo 2018 08 21 pagal LR SAM ir LR SADM 2018 06 12 įsakymą Nr. V-695/A1-272)
NLD	Nederland	Arbeidsomstandighedenregeling. Lijst van wettelijke grenswaarden op grond van de artikelen 4.3, eerste lid, en 4.16, eerste lid, van het Arbeidsomstandighedenbesluit
POL	Polska	Rozporządzenie Ministra Rodziny, Pracy i Polityki Społecznej z dnia 12 czerwca 2018 r. w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy
ROU	România	Hotararea 157/2020 pentru modificarea Hotărârii Guvernului nr. 1.218/2006 privind stabilirea cerințelor minime de securitate și sănătate în muncă pentru asigurarea protecției lucrătorilor împotriva riscurilor legate de prezența agenților chimici, precum și pentru modificarea și completarea Hotărârii Guvernului nr. 1.093/2006 privind stabilirea cerințelor minime de securitate și sănătate pentru protecția lucrătorilor împotriva riscurilor legate de expunerea la agenți cancerigeni sau mutageni la locul de muncă
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
EU	OEL EU	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 2020

ISOPROPANOL						
Threshold Limit Value						
Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	500	200	1000	400	
MAK	DEU	500	200	1000	400	
VLA	ESP	500	200	1000	400	
VLEP	FRA			980	400	
TLV	GRC	980	400	1225	500	
RD	LTU	350	150	600	250	
TGG	NLD	650				
NDS/NDSch	POL	900		1200		SKIN
TLV	ROU	200	81	500	203	
WEL	GBR	999	400	1250	500	
TLV-ACGIH		492	200	983	400	

## SECTION 8. Exposure controls/personal protection ... / >>

REACTION PRODUCT BISPHENOL F-EPICHLOROHYDRIN		
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	0,294	mg/kg
Normal value for marine water sediment	0,0294	mg/kg
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	0,237	mg/kg

TOLUENE						
Threshold Limit Value						
Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	190	50	760	200	SKIN
MAK	DEU	190	50	760	200	SKIN
VLA	ESP	192	50	384	100	SKIN
VLEP	FRA	76,8	20	384	100	SKIN
HTP	FIN	81	25	380	100	SKIN
TLV	GRC	192	50	384	100	Buller
VLEP	ITA	192	50			SKIN
RD	LTU	192	50	384	100	SKIN
TGG	NLD	150		384		
NDS/NDSch	POL	100		200		SKIN
TLV	ROU	192	50	384	100	SKIN
WEL	GBR	191	50	384	100	SKIN
OEL	EU	192	50	384	100	SKIN
TI V-ACGIH		75.4	20			

TRIZINC BIS (ORTHOPHOSPHATE)						
Threshold Limit Value						
Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
MAK	DEU	2		4		INHAL
MAK	DEU	0.1		0.4		RESP

ETHYL ACETATE						
Threshold Limit Value						
Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	730	200	1460	400	
MAK	DEU	750	200	1500	400	
VLA	ESP	734	200	1468	400	
VLEP	FRA	734	200	1468	400	
HTP	FIN	730	200	1470	400	
TLV	GRC	734	200	1468	400	
RD	LTU	500	150	1100 (C)	300 (C)	
TGG	NLD	734		1468		
NDS/NDSch	POL	734		1468		
TLV	ROU	400	111	500	139	
WEL	GBR	734	200	1468	400	
OEL	EU	734	200	1468	400	
TLV-ACGIH		1441	400			

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

**ZINC OXIDE**
**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
MAK	DEU	2		4		INHAL
MAK	DEU	0,1		0,4		RESP
VLA	ESP	2		10		
VLEP	FRA	5				
HTP	FIN	2		10		
TLV	GRC	5		10		
RD	LTU	5				
NDS/NDSch	POL	5		10		INHAL
TLV	ROU	5		10		Fumuri
TLV-ACGIH		2		10		

**XYLENE (MIXTURE OF ISOMERS)**
**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	440	100	880	200	SKIN
MAK	DEU	440	100	880	200	SKIN
VLA	ESP	221	50	442	100	SKIN
VLEP	FRA	221	50	442	100	SKIN
HTP	FIN	220	50	440	100	SKIN
TLV	GRC	435	100	650	150	
VLEP	ITA	221	50	442	100	SKIN
RD	LTU	221	50	442	100	SKIN
TGG	NLD	210		442		SKIN
NDS/NDSch	POL	100		200		SKIN
TLV	ROU	221	50	442	100	SKIN
WEL	GBR	220	50	441	100	SKIN
OEL	EU	221	50	442	100	SKIN
TLV-ACGIH		434	100	651	150	

**2-METHOXY-1-METHYLETHYL ACETATE**
**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	270	50	270	50	
MAK	DEU	270	50	270	50	
VLA	ESP	275	50	550	100	SKIN
VLEP	FRA	275	50	550	100	SKIN
HTP	FIN	270	50	550	100	SKIN
TLV	GRC	275	50	550	100	
VLEP	ITA	275	50	550	100	SKIN
RD	LTU	250	50	400	75	SKIN
TGG	NLD	550				
NDS/NDSch	POL	260		520		SKIN
TLV	ROU	275	50	550	100	SKIN
WEL	GBR	274	50	548	100	SKIN
OEL	EU	275	50	550	100	SKIN

## SECTION 8. Exposure controls/personal protection ... / >>

### N-BUTYL ACETATE

#### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	300	62	600 (C)	124 (C)	
VLA	ESP	724	150	965	200	
VLEP	FRA	710	150	940	200	
TLV	GRC	710	150	950	200	
RD	LTU	500	100	700	150	
TGG	NLD	150				
NDS/NDSch	POL	240		720		
TLV	ROU	715	150	950	200	
WEL	GBR	724	150	966	200	
OEL	EU	241	50	723	150	
TLV-ACGIH			50		150	

### 1-METHOXY-2-PROPANOL

#### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	370	100	740	200	
MAK	DEU	370	100	740	200	
VLA	ESP	375	100	568	150	SKIN
VLEP	FRA	188	50	375	100	SKIN
HTP	FIN	370	100	560	150	SKIN
TLV	GRC	360	100	1080	300	
VLEP	ITA	375	100	568	150	SKIN
RD	LTU	190	50	300	75	SKIN
TGG	NLD	375		563		SKIN
NDS/NDSch	POL	180		360		SKIN
TLV	ROU	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	

### PHOSPHORIC ACID

#### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	2		4 (C)		INHAL
MAK	DEU	2		4		INHAL
VLA	ESP	1		2		
VLEP	FRA	1	0,2	2	0,5	
HTP	FIN	1		2		
TLV	GRC	1		3		
VLEP	ITA	1		2		
RD	LTU	1		2		
TGG	NLD	1		2		
NDS/NDSch	POL	1		2		
TLV	ROU	1		2		
WEL	GBR	1		2		
OEL	EU	1		2		
TLV-ACGIH		1		3		



## SECTION 8. Exposure controls/personal protection ... / >>

### ETHYLBENZENE

#### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	
AGW	DEU	88	20	176	40	SKIN
MAK	DEU	88	20	176	40	SKIN
VLA	ESP	441	100	884	200	SKIN
VLEP	FRA	88,4	20	442	100	SKIN
HTP	FIN	220	50	880	200	SKIN
TLV	GRC	435	100	545	125	
VLEP	ITA	442	100	884	200	SKIN
RD	LTU	442	100	884	200	SKIN
TGG	NLD	215		430		SKIN
NDS/NDSch	POL	200		400		SKIN
TLV	ROU	442	100	884	200	SKIN
WEL	GBR	441	100	552	125	SKIN
OEL	EU	442	100	884	200	SKIN
TLV-ACGIH		87	20			

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.

## 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	see section 1	
Odour	characteristic	
Odour threshold	Not available	
pH	Not applicable	
Melting point / freezing point	Not available	

## SECTION 9. Physical and chemical properties ... / >>

Initial boiling point	75 °C	
Boiling range	Not available	
Flash point	5 °C	Method: Closed cup
Evaporation Rate	Not available	
Flammability of solids and gases	not applicable	
Lower inflammability limit	Not available	
Upper inflammability limit	Not available	
Lower explosive limit	Not available	
Upper explosive limit	Not available	
Vapour pressure	Not available	
Vapour density	Not available	
Relative density	1,7 g/cm <sup>3</sup>	Temperature: 20°C
Solubility	insoluble in water	
Partition coefficient: n-octanol/water	Not applicable	
Auto-ignition temperature	Not available	
Decomposition temperature	Not available	
Viscosity	100000 mPa*s	Temperature: 20°C
Explosive properties	not expected	
Oxidising properties	not expected	

### 9.2. Other information

Total solids (250°C / 482°F)	83,53 %		
VOC (Directive 2004/42/EC) :	16,32 %	- 277,46	g/litre

## SECTION 10. Stability and reactivity

### 10.1. Reactivity

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

#### TOLUENE

Avoid exposure to: light.

#### ETHYL ACETATE

Decomposes slowly into acetic acid and ethanol under the effect of light, air and 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.

#### N-BUTYL ACETATE

Decomposes on contact with: water.

#### 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.

#### PHOSPHORIC ACID

Decomposes at temperatures above 200°C/392°F.

### 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.

#### TOLUENE

Risk of explosion on contact with: fuming sulphuric acid, nitric acid, silver perchlorate, nitrogen dioxide, non-metal halogenates, acetic acid, organic nitrocompounds. May form explosive mixtures with: air. May react dangerously with: strong oxidising agents, strong acids, sulphur.

#### ETHYL ACETATE

Risk of explosion on contact with: alkaline metals, hydrides, oleum. May react violently with: fluorine, strong oxidising agents, chlorosulphuric acid, potassium tert-butoxide. Forms explosive mixtures with: air.

#### XYLENE (MIXTURE OF ISOMERS)

Stable in normal conditions of use and storage. Reacts violently with: strong oxidants, strong acids, nitric acid, perchlorates. May form explosive mixtures with: air.

#### 2-METHOXY-1-METHYLETHYL ACETATE

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

#### N-BUTYL ACETATE

## SECTION 10. Stability and reactivity ... / >>

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

### 1-METHOXY-2-PROPANOL

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

### PHOSPHORIC ACID

Risk of explosion on contact with: nitromethane. May react dangerously with: alkalis, sodium borohydride.

### ETHYLBENZENE

Reacts violently with: strong oxidants. Attacks various types of plastic materials. May form explosive mixtures with: air.

#### 10.4. Conditions to avoid

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

### ETHYL ACETATE

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

### N-BUTYL ACETATE

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

### 1-METHOXY-2-PROPANOL

Avoid exposure to: air.

#### 10.5. Incompatible materials

### ETHYL ACETATE

Incompatible with: acids, bases, strong oxidants, aluminium, nitrates, chlorosulphuric acid. Incompatible materials: plastic materials.

### 2-METHOXY-1-METHYLETHYL ACETATE

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

### N-BUTYL ACETATE

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

### 1-METHOXY-2-PROPANOL

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

### PHOSPHORIC ACID

Incompatible with: metals, strong alkalis, aldehydes, organic sulphides, peroxides.

#### 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.

### PHOSPHORIC ACID

May develop: phosphoryl oxides.

### ETHYLBENZENE

May develop: methane, styrene, hydrogen, ethane.

## SECTION 11. Toxicological information

#### 11.1. Information on toxicological effects

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

### TOLUENE

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.

### XYLENE (MIXTURE OF ISOMERS)

WORKERS: inhalation; contact with the skin.

POPULATION: ingestion of contaminated food or water; inhalation of ambient air.

### 2-METHOXY-1-METHYLETHYL ACETATE

WORKERS: inhalation; contact with the skin.

### N-BUTYL 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.

## SECTION 11. Toxicological information ... / >>

### ETHYLBENZENE

WORKERS: inhalation; contact with the skin.

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

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

##### TOLUENE

Toxic effect on the central and peripheral nervous system with encephalopathy and polyneuritis; irritating for the skin, conjunctiva, cornea and respiratory apparatus.

##### XYLENE (MIXTURE OF ISOMERS)

Toxic effect on the central nervous system (encephalopathy); irritating for the skin, conjunctiva, cornea and respiratory apparatus.

##### 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).

##### 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.

##### 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.

##### ETHYLBENZENE

As the counterparts of benzene, may have an acute effect on the central nervous system, with depression, narcosis, often preceded by dizziness and associated with headache (Ispešl). Is irritating for skin, conjunctiva and respiratory tract.

#### Interactive effects

##### TOLUENE

Certain drugs and other industrial products can interfere with the metabolism of the toluene.

##### XYLENE (MIXTURE OF ISOMERS)

Intake of alcohol interferes with the metabolism of the substance, inhibiting it. Ethanol consumption (0.8 g/kg) before a 4-hour exposure to xylene vapours (145 and 280 ppm) causes a 50% reduction in the excretion of methyl hippuric acid, whereas the concentration of xylenes in the blood increases approx. 1.5-2 times. At the same time there is an increase in the secondary side effects of the ethanol. The metabolism of the xylenes is increased by phenobarbital and 3-methyl-colantrene type enzyme inducers. Aspirin and xylenes mutually inhibit their conjugation with the glycine, which results in a decrease in urinary excretion of methyl hippuric acid. Other industrial products can interfere with the metabolism of xylenes.

##### 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) of the mixture:

Not classified (no significant component)

ATE (Oral) of the mixture:

Not classified (no significant component)

ATE (Dermal) of the mixture:

Not classified (no significant component)

##### REACTION PRODUCT BISPHENOL F-EPICHLOROHYDRIN

LD50 (Oral)

> 10000 mg/kg Rat

LD50 (Dermal)

> 2000 mg/kg Rat

##### PHOSPHORIC ACID

LD50 (Oral)

1530 mg/kg Rat

LD50 (Dermal)

2740 mg/kg Rabbit

LC50 (Inhalation)

> 0,85 mg/l/1h Rat

## SECTION 11. Toxicological information ... / >>

XYLENE (MIXTURE OF ISOMERS)	
LD50 (Oral)	3523 mg/kg Rat
LD50 (Dermal)	4350 mg/kg Rabbit
LC50 (Inhalation)	26 mg/l/4h Rat
2-METHOXY-1-METHYLETHYL ACETATE	
LD50 (Oral)	8530 mg/kg Rat
LD50 (Dermal)	> 5000 mg/kg Rat
TOLUENE	
LD50 (Oral)	5580 mg/kg Rat
LD50 (Dermal)	12124 mg/kg Rabbit
LC50 (Inhalation)	28,1 mg/l/4h Rat
ETHYLBENZENE	
LD50 (Oral)	3500 mg/kg Rat
LD50 (Dermal)	15354 mg/kg Rabbit
LC50 (Inhalation)	17,2 mg/l/4h Rat
1-METHOXY-2-PROPANOL	
LD50 (Oral)	5300 mg/kg Rat
LD50 (Dermal)	13000 mg/kg Rabbit
LC50 (Inhalation)	54,6 mg/l/4h Rat
ISOPROPANOL	
LD50 (Oral)	4710 mg/kg Rat
LD50 (Dermal)	12800 mg/kg Rat
LC50 (Inhalation)	72,6 mg/l/4h Rat
N-BUTYL ACETATE	
LD50 (Oral)	> 6400 mg/kg Rat
LD50 (Dermal)	> 5000 mg/kg Rabbit
LC50 (Inhalation)	21,1 mg/l/4h Rat
TRIZINC BIS (ORTHOPHOSPHATE)	
LD50 (Oral)	> 5000 mg/kg Rat - Wistar
LC50 (Inhalation)	> 5,7 mg/l Rat

### SKIN CORROSION / IRRITATION

Causes skin irritation

### SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

### 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

#### TOLUENE

Classified in Group 3 (not classifiable as a human carcinogen) by the International Agency for Research on Cancer (IARC) - (IARC, 1999).

The US Environmental Protection Agency (EPA) affirms that "the data is inadequate for an assessment of the carcinogenic potential".

#### XYLENE (MIXTURE OF ISOMERS)

Classified in Group 3 (not classifiable as a human carcinogen) by the International Agency for Research on Cancer (IARC).

The US Environmental Protection Agency (EPA) affirms that "the data is inadequate for an assessment of the carcinogenic potential".

## SECTION 11. Toxicological information ... / >>

### ETHYLBENZENE

Classified in Group 2B (possible human carcinogen) by the International Agency for Research on Cancer (IARC) - (IARC, 2000).  
Classified in Group D (not classifiable as a human carcinogen) by the US Environmental Protection Agency (EPA) - (US EPA file on-line 2014).

#### REPRODUCTIVE TOXICITY

Suspected of damaging the unborn child

#### 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

#### MICA

The substance has this effect only by inhalation. If it is suspended in a liquid matrix the effect does not occur.

#### Route of exposure

##### MICA

Inhalation

#### ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

## SECTION 12. Ecological information

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

### 12.1. Toxicity

#### REACTION PRODUCT BISPHENOL F-EPICHLOROHYDRIN

LC50 - for Fish	2,54 mg/l/96h OECD Guideline 203, <i>Leuciscus idus</i>
EC50 - for Crustacea	2,55 mg/l/48h OECD Guideline 202, <i>Daphnia magna</i>
EC50 - for Algae / Aquatic Plants	> 1,8 mg/l/72h OECD Guideline 201, <i>Selenastrum capricornutum</i>

#### 2,2-BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE

LC50 - for Fish	1,5 mg/l/96h OECD Guideline 203, <i>Oncorhynchus mykiss</i>
EC50 - for Crustacea	1,7 mg/l/48h OECD Guideline 202, <i>Daphnia magna</i>
EC50 - for Algae / Aquatic Plants	9,4 mg/l/72h EPA-660/3-75-009, <i>Scenedesmus capricornutum</i>
Chronic NOEC for Crustacea	0,3 mg/l OECD Guideline 211, <i>Daphnia magna</i> , 21 d

#### XYLENE (MIXTURE OF ISOMERS)

LC50 - for Fish	2,6 mg/l/96h
EC50 - for Crustacea	1,1 mg/l/48h
EC50 - for Algae / Aquatic Plants	1,3 mg/l/72h

#### TOLUENE

LC50 - for Fish	5,5 mg/l/96h
EC50 - for Crustacea	3,78 mg/l/48h
EC50 - for Algae / Aquatic Plants	134 mg/l/72h

#### TRIZINC BIS (ORTHOPHOSPHATE)

LC50 - for Fish	0,78 mg/l/96h <i>Pimephales promelas</i>
EC50 - for Crustacea	0,147 mg/l/48h <i>Ceriodaphnia dubia</i>
EC50 - for Algae / Aquatic Plants	0,136 mg/l/72h <i>Selenastrum capricornutum</i>
Chronic NOEC for Fish	0,44 mg/l 72 d, <i>Oncorhynchus mykiss</i>
Chronic NOEC for Crustacea	0,037 mg/l

#### ZINC OXIDE

LC50 - for Fish	0,169 mg/l/96h <i>Oncorhynchus mykiss</i>
EC50 - for Crustacea	0,147 mg/l/48h <i>Ceriodaphnia dubia</i>
EC50 - for Algae / Aquatic Plants	0,136 mg/l/72h <i>Selenastrum capricornutum</i>
Chronic NOEC for Fish	0,53 mg/l

## SECTION 12. Ecological information ... / >>

Chronic NOEC for Algae / Aquatic Plants 0,024 mg/l

### 12.2. Persistence and degradability

PHOSPHORIC ACID  
Solubility in water > 850000 mg/l  
Degradability: information not available

XYLENE (MIXTURE OF ISOMERS)  
Solubility in water 100 - 1000 mg/l  
Degradability: information not available

2-METHOXY-1-METHYLETHYL ACETATE  
Solubility in water > 10000 mg/l  
Rapidly degradable

TOLUENE  
Solubility in water 100 - 1000 mg/l  
Rapidly degradable

ETHYLBENZENE  
Solubility in water 1000 - 10000 mg/l  
Rapidly degradable

1-METHOXY-2-PROPANOL  
Solubility in water 1000 - 10000 mg/l  
Rapidly degradable

ISOPROPANOL  
Rapidly degradable

ETHYL ACETATE  
Solubility in water > 10000 mg/l  
Rapidly degradable

N-BUTYL ACETATE  
Solubility in water 1000 - 10000 mg/l

TRIZINC BIS (ORTHOPHOSPHATE)  
Solubility in water 2,7 mg/l  
Degradability: information not available

ZINC OXIDE  
Solubility in water 2,9 mg/l  
NOT rapidly degradable

### 12.3. Bioaccumulative potential

2,2-BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE  
Partition coefficient: n-octanol/water 3,2 Log Kow OECD Guideline 117

XYLENE (MIXTURE OF ISOMERS)  
Partition coefficient: n-octanol/water 3,12  
BCF 25,9

2-METHOXY-1-METHYLETHYL ACETATE  
Partition coefficient: n-octanol/water 1,2

TOLUENE  
Partition coefficient: n-octanol/water 2,73  
BCF 90

ETHYLBENZENE  
Partition coefficient: n-octanol/water 3,6

## SECTION 12. Ecological information ... / >>

1-METHOXY-2-PROPANOL	
Partition coefficient: n-octanol/water	< 1
ISOPROPANOL	
Partition coefficient: n-octanol/water	0,05
ETHYL ACETATE	
Partition coefficient: n-octanol/water	0,68
BCF	30
N-BUTYL ACETATE	
Partition coefficient: n-octanol/water	2,3
BCF	15,3
ZINC OXIDE	
BCF	> 175

### 12.4. Mobility in soil

XYLENE (MIXTURE OF ISOMERS)	
Partition coefficient: soil/water	2,73
N-BUTYL ACETATE	
Partition coefficient: soil/water	< 3

### 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. Other adverse effects

Information not available

## SECTION 13. Disposal considerations

### 13.1. Waste treatment methods

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

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

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

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

## SECTION 14. Transport information

### 14.1. UN number

ADR / RID, IMDG, IATA: 1263

### 14.2. UN proper shipping name

ADR / RID:	PAINT RELATED MATERIAL
IMDG:	PAINT RELATED MATERIAL (2,2-BIS-[4-(2,3-EPOXI)PHENYL]PROPANE)
IATA:	PAINT RELATED MATERIAL



## SECTION 14. Transport information ... / >>

### 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: II

### 14.5. Environmental hazards

ADR / RID: Environmentally Hazardous



IMDG: Marine Pollutant



IATA: NO

For Air transport, environmentally hazardous mark is only mandatory for UN 3077 and UN 3082.

### 14.6. Special precautions for user

ADR / RID:	HIN - Kemler: 33 Special provision: 640D	Limited Quantities: 5 L	Tunnel restriction code: (D/E)
IMDG:	EMS: F-E, S-E	Limited Quantities: 5 L	
IATA:	Cargo: Pass.: Special provision:	Maximum quantity: 60 L Maximum quantity: 5 L A3, A72, A192	Packaging instructions: 364 Packaging instructions: 353

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Information not relevant

## SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EC: P5c-E2

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

Product		
Point	3 - 40	
Contained substance		
Point	75	2,2-BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE Reg. no.: 01-2119456619-26
Point	75	TITANIUM DIOXIDE Reg. no.: 01-2119489379-17
Point	48-75	TOLUENE Reg. no.: 01-2119471310-51
Point	75	ISOBUTYL ALCOHOL Reg. no.: 01-2119484609-23
Point	75	ZINC OXIDE Reg. no.: 01-2119463881-32
Point	75	HYDROCARBONS, C9-C11, N-ALKANES, ISOALKANES, CYCLICS, < 2% AROMATICS Reg. no.: 01-2119463258-33
Point	75	FERRIC OXIDE

## SECTION 15. Regulatory information ... / >>

Point	75	Reg. no.: 01-2119457614-35 CARBON BLACK
Point	75	Reg. no.: 01-2119384822-32 XYLENE (MIXTURE OF ISOMERS)
Point	75	Reg. no.: 01-2119488216-32 HYDROCARBONS, C9, AROMATICS
Point	75	Reg. no.: 01-2119455851-35 2-BUTANONE OXIME
		Reg. no.: 01-2119539477-28

Regulation (EC) No. 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 (EC) Reg. 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

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

VOC (Directive 2004/42/EC) :

Two - pack performance coatings.

### 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>Met. Corr. 1</b>	Substance or mixture corrosive to metals, category 1
<b>Repr. 2</b>	Reproductive toxicity, category 2
<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. 1B</b>	Skin corrosion, category 1B
<b>Eye Irrit. 2</b>	Eye irritation, category 2
<b>Skin Irrit. 2</b>	Skin irritation, category 2
<b>STOT SE 3</b>	Specific target organ toxicity - single exposure, category 3
<b>Skin Sens. 1</b>	Skin sensitization, category 1
<b>Aquatic Acute 1</b>	Hazardous to the aquatic environment, acute toxicity, category 1
<b>Aquatic Chronic 1</b>	Hazardous to the aquatic environment, chronic toxicity, category 1
<b>Aquatic Chronic 2</b>	Hazardous to the aquatic environment, chronic toxicity, category 2
<b>Aquatic Chronic 3</b>	Hazardous to the aquatic environment, chronic toxicity, category 3
<b>H225</b>	Highly flammable liquid and vapour.
<b>H226</b>	Flammable liquid and vapour.
<b>H290</b>	May be corrosive to metals.
<b>H361d</b>	Suspected of damaging the unborn child.
<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>H319</b>	Causes serious eye irritation.

## SECTION 16. Other information ... / >>

<b>H315</b>	Causes skin irritation.
<b>H335</b>	May cause respiratory irritation.
<b>H317</b>	May cause an allergic skin reaction.
<b>H336</b>	May cause drowsiness or dizziness.
<b>H400</b>	Very toxic to aquatic life.
<b>H410</b>	Very toxic to aquatic life with long lasting effects.
<b>H411</b>	Toxic to aquatic life with long lasting effects.
<b>H412</b>	Harmful to aquatic life with long lasting effects.
<b>EUH066</b>	Repeated exposure may cause skin dryness or cracking.
<b>EUH205</b>	Contains epoxy constituents. May produce an allergic reaction.

### LEGEND:

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

### GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
  2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
  3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
  4. Regulation (EU) 2015/830 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) 2018/1480 (XIII Atp. CLP)
  16. Regulation (EU) 2019/521 (XII Atp. CLP)
  17. Regulation (EU) 2019/1148
  18. Regulation (EU) 2020/217 (XIV 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