

Safety Data Sheet

According to Annex II to REACH - Regulation 2015/830

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

1.1. Product identifier

Product name **Technoseal Universal Primer**

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

Intended use **Two pack epoxy primer**

1.3. Details of the supplier of the safety data sheet

Name **40 APPS**
 Full address **LAMIAS 12 AGIOS STEFANOS**
 District and Country **14565 ATHENS , GREECE**
 Tel. **6987333920**

e-mail address of the competent person responsible for the Safety Data Sheet **gogreen@technoseal.com.gr**

1.4. Emergency telephone number

Poison Center **2107793777**

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 3	H226	Flammable liquid and vapour.
Acute toxicity, category 4	H332	Harmful if inhaled.
Aspiration hazard, category 1	H304	May be fatal if swallowed and enters airways.
Specific target organ toxicity - repeated exposure, category 2	H373	May cause damage to organs through prolonged or repeated exposure.
Serious eye damage, category 1	H318	Causes serious eye damage.
Skin irritation, category 2	H315	Causes skin irritation.
Specific target organ toxicity - single exposure, category 3	H335	May cause respiratory irritation.
Skin sensitization, category 1	H317	May cause an allergic skin reaction.
Specific target organ toxicity - single exposure, category 3	H336	May cause drowsiness or dizziness.
Hazardous to the aquatic environment, acute toxicity, category 1	H400	Very toxic to aquatic life.
Hazardous to the aquatic environment, chronic toxicity, category 1	H410	Very 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**

SECTION 2. Hazards identification ... / >>

Hazard statements:

H226	Flammable liquid and vapour.
H332	Harmful if inhaled.
H304	May be fatal if swallowed and enters airways.
H373	May cause damage to organs through prolonged or repeated exposure.
H318	Causes serious eye damage.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
H410	Very 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.
P331	Do NOT induce vomiting.
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 / doctor /
P370+P378	In case of fire: use to extinguish.

Contains: XYLENE (MIXTURE OF ISOMERS)
 BUTANOL
 REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)
 TALC

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

3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification 1272/2008 (CLP)
REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)		
CAS	25068-38-6 $9 \leq x < 25$	Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 2 H411
EC	500-033-5	
INDEX	603-074-00-8	
Reg. no.	01-2119456619-26-XXXX	
XYLENE (MIXTURE OF ISOMERS)		
CAS	1330-20-7 $10 \leq x < 20$	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, Classification note according to Annex VI to the CLP Regulation: C
EC	215-535-7	
INDEX	601-022-00-9	
Reg. no.	01-2119488216-32-XXXX	
TALC		
CAS	14807-96-6 $9 \leq x < 20$	Acute Tox. 4 H332, STOT SE 3 H335
EC	238-877-9	
INDEX		
TRIZINC BIS (ORTHOPHOSPHATE)		
CAS	7779-90-0 $9 \leq x < 25$	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-XXXX	
1-METHOXY-2-PROPANOL		
CAS	107-98-2 $5 \leq x < 9$	Flam. Liq. 3 H226, STOT SE 3 H336
EC	203-539-1	
INDEX	603-064-00-3	
Reg. no.	01-2119457435-35-XXXX	

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

BUTANOL			
CAS	71-36-3	$5 \leq x < 9$	Flam. Liq. 3 H226, Acute Tox. 4 H302, Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335, STOT SE 3 H336
EC	200-751-6		
INDEX	603-004-00-6		
Reg. no.	01-2119484630-38-XXXX		
IDROCARBURI, C9, AROMATICI			
CAS		$5 \leq x < 9$	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		
INDEX			
Reg. no.	01-2119455851-35-XXXX		
Diatomaceous Earth, Flux Calcined			
CAS	68855-54-9	$1 \leq x < 5$	STOT RE 2 H373
EC	272-489-0		
INDEX			
Reg. no.	01-2119488518-22-0005		
ZINC OXIDE			
CAS	1314-13-2	$2,5 \leq x < 5$	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-xxxx		
ETHYLBENZENE			
CAS	100-41-4	$1 \leq x < 5$	Flam. Liq. 2 H225, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373
EC	202-849-4		
INDEX	601-023-00-4		
Reg. no.	01-2119489370-35-XXX		

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

SECTION 4. First aid measures

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. 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.

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.

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.

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:

ESP	España	LÍMITES DE EXPOSICIÓN PROFESIONAL PARA AGENTES QUÍMICOS EN ESPAÑA 2019 (INSST)
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
ROU	România	HOTĂRÂRE nr. 584 din 2 august 2018 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
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Third edition, published 2018)

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

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

REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,006	mg/l
Normal value in marine water	0,0006	mg/l
Normal value for fresh water sediment	0,0627	mg/kg
Normal value for marine water sediment	0,00627	mg/kg
Normal value of STP microorganisms	10	mg/l

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					0.012 mg/l	VND	VND	0.012 mg/l
Skin					8.33 mg/kg	VND	VND	8.33 mg/kg

XYLENE (MIXTURE OF ISOMERS)

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV-ACGIH		434	100	655	150	

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,327	mg/l
Normal value in marine water	0,327	mg/l
Normal value for fresh water sediment	12,46	mg/kg
Normal value for marine water sediment	12,46	mg/kg
Normal value for water, intermittent release	0,327	mg/l
Normal value of STP microorganisms	6,58	mg/l
Normal value for the terrestrial compartment	2,31	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	1,6 mg/kg	VND	VND	VND	VND		
Inhalation	174 mg/m3	174 mg/m3	VND	14,8 mg/m3	289 mg/m3	289 mg/m3	VND	77 mg/m3
Skin	VND	VND	VND	VND	VND	180 mg/kg	VND	VND

TALC

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	2				RESP
TLV	ROU	2				
WEL	GBR	1				RESP
TLV-ACGIH		2				

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

1-METHOXY-2-PROPANOL

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	375	100	568	150	SKIN
VLEP	FRA	188	50	375	100	SKIN
VLEP	ITA	375	100	568	150	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	

Predicted no-effect concentration - PNEC

Normal value in fresh water	10	mg/l
Normal value for fresh water sediment	41,6	mg/kg
Normal value for marine water sediment	4,17	mg/kg
Normal value of STP microorganisms	100	mg/l
Normal value for the terrestrial compartment	2,47	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers		Chronic local	Chronic systemic	Effects on workers			
	Acute local	Acute systemic			Acute local	Acute systemic	Chronic local	Chronic systemic
Oral			VND	3,3 mg/kg				
Inhalation			VND	43,9 mg/m3	553,5 mg/m3	VND	VND	369 mg/m3
Skin			VND	18,1 mg/kg			VND	50,6 mg/kg

IDROCARBURI, C9, AROMATICI

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV-ACGIH		100	10			

Health - Derived no-effect level - DNEL / DMEL

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

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

BUTANOL

Threshold Limit Value		TWA/8h		STEL/15min		Remarks / Observations	
Type	Country	mg/m3	ppm	mg/m3	ppm		
VLA	ESP	61	20	154	50		
VLEP	FRA			150	50		
TLV	ROU	100	33	200	66		
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/l		
Normal value for marine water sediment				0,0178	mg/l		
Normal value of STP microorganisms				2476	mg/l		
Normal value for the terrestrial compartment				0,015	mg/kg		
Health - Derived no-effect level - DNEL / DMEL							
Route of exposure	Effects on consumers		Chronic local	Chronic systemic	Effects on workers		
	Acute local	Acute systemic			Acute local	Acute systemic	Chronic local
Oral			VND	3125			
Inhalation			55 mg/m3	VND		310 mg/m3	VND

ZINC OXIDE

Threshold Limit Value		TWA/8h		STEL/15min		Remarks / Observations	
Type	Country	mg/m3	ppm	mg/m3	ppm		
VLA	ESP	2		10			
VLEP	FRA	5					
TLV	ROU	5		10		Fumuri	
TLV-ACGIH		2		10			
Predicted no-effect concentration - PNEC							
Normal value in fresh water				20,6	mg/l		
Normal value in marine water				6,1	mg/l		
Normal value for fresh water sediment				117,8	mg/kg		
Normal value for marine water sediment				56,5	mg/kg		
Normal value of STP microorganisms				5,2	mg/l		

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.

Exposure levels must be kept as low as possible to avoid significant build-up in the organism. Manage personal protective equipment so as to guarantee maximum protection (e.g. reduction in replacement times).

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

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

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	red	
Odour	Not available	
Odour threshold	Not available	
pH	Not available	
Melting point / freezing point	Not available	
Initial boiling point	Not available	
Boiling range	Not available	
Flash point	> 23 °C	
Evaporation rate	Not available	
Flammability (solid, gas)	Not available	
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	>1 (aria=1)	
Relative density	1,4± 0,05	
Solubility	insoluble in water	
Partition coefficient: n-octanol/water	Not available	
Auto-ignition temperature	Not available	
Decomposition temperature	Not available	
Viscosity	tixotropica	
Explosive properties	Not available	
Oxidising properties	Not available	

9.2. Other information

Total solids (250°C / 482°F)	65,38 %		
VOC (Directive 2010/75/EC) :	34,47 %	- 482,56	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.

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.

BUTANOL

Attacks various types of plastic materials.

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.

1-METHOXY-2-PROPANOL

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

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

BUTANOL

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

10.4. Conditions to avoid

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

1-METHOXY-2-PROPANOL

Avoid exposure to: air.

BUTANOL

Avoid exposure to: sources of heat, naked flames.

10.5. Incompatible materials

1-METHOXY-2-PROPANOL

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

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.

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 toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

~~Information on likely routes of exposure~~

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

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~~

Information not available

ACUTE TOXICITY

ATE (Inhalation - mists / powders) of the mixture:	Acute Tox. 4
ATE (Inhalation - vapours) of the mixture:	Acute Tox. 4
ATE (Oral) of the mixture:	>2000 mg/kg
ATE (Dermal) of the mixture:	>2000 mg/kg

IDROCARBURI, C9, AROMATICI

LD50 (Oral)	> 3592 mg/kg ratto
LD50 (Dermal)	> 3160 mg/kg coniglio

Diatomaceous Earth, Flux Calcined

LD50 (Oral)	> 2000 mg/kg ratto
LC50 (Inhalation)	> 2,6 mg/l ratto

SECTION 11. Toxicological information ... / >>

XYLENE (MIXTURE OF ISOMERS)	
LD50 (Oral)	> 3523 mg/kg Rat
LD50 (Dermal)	> 12,13 mg/kg Rabbit
LC50 (Inhalation)	> 27,124 mg/l/4h Rat
BUTANOL	
LD50 (Oral)	790 mg/kg Rat
LD50 (Dermal)	3400 mg/kg Rabbit
LC50 (Inhalation)	8000 ppm/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
REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)	
LD50 (Oral)	15000 mg/kg ratto
LD50 (Dermal)	23000 mg/kg ratto
TRIZINC BIS (ORTHOPHOSPHATE)	
LD50 (Oral)	> 5000 mg/kg Rat - Wistar
LC50 (Inhalation)	> 5,7 mg/l Rat
ZINC OXIDE	
LD50 (Oral)	> 5000 mg/kg ratto
LD50 (Dermal)	> 2000 mg/kg ratto
LC50 (Inhalation)	> 5,7 mg/l/4h ratto

SKIN CORROSION / IRRITATION

Causes skin irritation

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

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

May cause respiratory irritation
 May cause drowsiness or dizziness

STOT - REPEATED EXPOSURE

May cause damage to organs

ASPIRATION HAZARD

Toxic for aspiration

SECTION 12. Ecological information

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

12.1. Toxicity

IDROCARBURI, C9, AROMATICI	
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 pseudokirchnerinella subcapitata
XYLENE (MIXTURE OF ISOMERS)	
LC50 - for Fish	2,6 mg/l/96h oncorhynchus mykiss
EC50 - for Algae / Aquatic Plants	2,2 mg/l/72h chlorella vulgaris
Chronic NOEC for Fish	> 1,3 mg/l su 56 giorni
Chronic NOEC for Crustacea	0,96 mg/l sui 7 giorni
BUTANOL	
LC50 - for Fish	1,376 mg/l/96h Pimephales promelas
EC50 - for Crustacea	1,328 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	225 mg/l/72h Pseudokirchnerinella subcapitata
EC10 for Crustacea	2476 mg/l/48h Metodo DIN 38412-8 Durata 17 ore Pseudomona putida Acqua dolce (non salina) Valore sperimentale
Chronic NOEC for Crustacea	4,1 mg/l Metodo OCSE 211 Durata 21 giorni Daphnia magna acqua dolce (non salina) Valore sperimentale
1-METHOXY-2-PROPANOL	
LC50 - for Fish	> 100 mg/l/96h
EC50 - for Crustacea	> 100 mg/l/48h
EC50 - for Algae / Aquatic Plants	> 100 mg/l/72h
REACTION PRODUCT: BISPENOL A-(EPICHLORHYDRIN)	
LC50 - for Fish	2 mg/l/96h Pesci
EC50 - for Crustacea	1,8 mg/l/48h Dafnie
TRIZINC BIS (ORTHOPHOSPHATE)	
LC50 - for Fish	0,78 mg/l/96h Pimephales promelas
EC50 - for Crustacea	0,86 mg/l/48h Daphnia magna
ZINC OXIDE	
LC50 - for Fish	1,1 mg/l/96h Oncorhynchus mykiss
EC50 - for Crustacea	1,7 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	0,14 mg/l/72h Pseudokirchnerella subcapitata
Chronic NOEC for Fish	0,53 mg/l
Chronic NOEC for Algae / Aquatic Plants	0,024 mg/l

12.2. Persistence and degradability

IDROCARBURI, C9, AROMATICI	
Rapidly degradable	
XYLENE (MIXTURE OF ISOMERS)	
Solubility in water	146 mg/l
Degradability: information not available	
ETHYLBENZENE	
Rapidly degradable	
TALC	
Solubility in water	< 0,1 mg/l
BUTANOL	
Solubility in water	1000 - 10000 mg/l
Rapidly degradable	

SECTION 12. Ecological information ... / >>

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

REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)
 Solubility in water 0,1 - 100 mg/l
 NOT rapidly degradable

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

XYLENE (MIXTURE OF ISOMERS)
 Partition coefficient: n-octanol/water 3,2 mg/l
 BCF 25,9 mg/l

BUTANOL
 Partition coefficient: n-octanol/water 1
 BCF 3,16

1-METHOXY-2-PROPANOL
 Partition coefficient: n-octanol/water < 1

REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)
 Partition coefficient: n-octanol/water > 2,918
 BCF 31

ZINC OXIDE
 BCF > 175

12.4. Mobility in soil

XYLENE (MIXTURE OF ISOMERS)
 Partition coefficient: soil/water 2,73 mg/l

BUTANOL
 Partition coefficient: soil/water 0,388

REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)
 Partition coefficient: soil/water 2,65

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 or PAINT RELATED MATERIAL
 IMDG: PAINT or PAINT RELATED MATERIAL (REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN))
 IATA: PAINT or PAINT 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: 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: 30 Special Provision: -	Limited Quantities: 5 L	Tunnel restriction code: (D/E)
IMDG:	EMS: F-E, S-E	Limited Quantities: 5 L	
IATA:	Cargo: Pass.: Special Instructions:	Maximum quantity: 220 L Maximum quantity: 60 L A3, A72, A192	Packaging instructions: 366 Packaging instructions: 355

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-E1

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

Product
 Point 3 - 40
 Contained substance

SECTION 15. Regulatory information ... / >>

Point 75 ZINC OXIDE
 Reg. no.: 01-2119463881-32-xxxx

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.

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:

Flam. Liq. 2	Flammable liquid, category 2
Flam. Liq. 3	Flammable liquid, category 3
Acute Tox. 4	Acute toxicity, category 4
Asp. Tox. 1	Aspiration hazard, category 1
STOT RE 2	Specific target organ toxicity - repeated exposure, category 2
Eye Dam. 1	Serious eye damage, category 1
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Skin Sens. 1	Skin sensitization, category 1
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic toxicity, category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic toxicity, category 2
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H304	May be fatal if swallowed and enters airways.
H373	May cause damage to organs through prolonged or repeated exposure.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH205	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

SECTION 16. Other information ... / >>

- 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
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 14. Regulation (EU) 2018/669 (XI Atp. CLP)
 15. Regulation (EU) 2018/1480 (XIII Atp. CLP)
 16. Regulation (EU) 2019/521 (XII 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.

SECTION 16. Other information ... / >>

Changes to previous review:
The following sections were modified:
02 / 03 / 04 / 08 / 09 / 11 / 12 / 14 / 15.

