

## 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

Code: 18I  
Product name: SOLID (A)

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

Intended use: PRIMER FOR MOIST SUBSTRATES.

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

Name: NORD RESINE S.p.A.  
Full address: Via Fornace Vecchia, 79  
District and Country: 31058 Susegana (TV)  
Italia  
Tel. +39 0438-437511  
Fax +39 0438-435155

e-mail address of the competent person responsible for the Safety Data Sheet: annabreda@nordresine.com

Product distribution by: NORD RESINE S.p.A.

#### 1.4. Emergency telephone number

For urgent inquiries refer to: +39 0438 437511

### 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:

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 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: Warning

Hazard statements:

H319	Causes serious eye irritation.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.

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

**EUH205** Contains epoxy constituents. May produce an allergic reaction.

**Precautionary statements:**

- P501** Dispose of contents / container in accordance with federal, state, and local requirements.
- P102** Keep out of reach of children.
- P280** Wear protective gloves / eye protection / face protection.
- P101** If medical advice is needed, have product container or label at hand.
- P261** Avoid breathing dust / fume / gas / mist / vapours / spray.
- P305+P351+P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Contains:** REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)  
Reaction product: Bisphenol-F- (epichlorohydrin); epoxy resin

**VOC (Directive 2004/42/EC) :**

Two - pack performance coatings.

VOC given in g/litre of product in a ready-to-use condition :	39,56
Limit value:	140,00
- Catalysed with :	40,00 % SOLID (B)

### 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)
<b>REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)</b>		
CAS	25068-38-6 $9 \leq x < 20$	<b>Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 2 H411</b>
EC	500-033-5	
INDEX	603-074-00-8	
Reg. no.	01-2119456619-26	
<b>Reaction product: Bisphenol-F- (epichlorohydrin); epoxy resin</b>		
CAS	9003-36-5 $5 \leq x < 9$	<b>Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 2 H411</b>
EC	500-006-8	
INDEX		
Reg. no.	01-2119454392-40	
<b>1-METHOXY-2-PROPANOL</b>		
CAS	107-98-2 $1 \leq x < 5$	<b>Flam. Liq. 3 H226, STOT SE 3 H336</b>
EC	203-539-1	
INDEX	603-064-00-3	
Reg. no.	01-2119457435-35	
<b>BENZYL ALCOHOL</b>		
CAS	100-51-6 $1 \leq x < 5$	<b>Acute Tox. 4 H302, Acute Tox. 4 H332, Eye Irrit. 2 H319</b>
EC	202-859-9	
INDEX	603-057-00-5	
Reg. no.	01-2119492630-38	
<b>Quaternary ammonium compounds, benzyl(hydrogenated tallow alkyl)dimethyl, chlorides</b>		
CAS	61789-72-8 $0 \leq x < 0,25$	<b>Acute Tox. 4 H302, Skin Corr. 1B H314, Eye Dam. 1 H318, Aquatic Acute 1 H400 M=10, Aquatic Chronic 1 H410 M=1</b>
EC	263-081-3	
INDEX		
<b>QUARTZ</b>		
CAS	14808-60-7 $0 \leq x < 1$	<b>STOT RE 2 H373</b>
EC	238-878-4	
INDEX		

**SECTION 3. Composition/information on ingredients** ... / >>**2-BUTOXYETHANOL**

CAS 111-76-2 0 ≤ x &lt; 1

**Acute Tox. 4 H302, Acute Tox. 4 H312, Acute Tox. 4 H332, Eye Irrit. 2 H319,  
Skin Irrit. 2 H315**

EC 203-905-0

INDEX 603-014-00-0

Reg. no. 01-2119475108-36

**AMMONIA**

CAS 1336-21-6 0 ≤ x &lt; 1

**Skin Corr. 1B H314, Eye Dam. 1 H318, STOT SE 3 H335, Aquatic Acute 1 H400 M=1,  
Classification note according to Annex VI to the CLP Regulation: B**

EC 215-647-6

INDEX 007-001-01-2

Reg. no. 01-2119488876-14

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. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.

INGESTION: Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless 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

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

## UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

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

## HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

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.

### SECTION 6. Accidental release measures ... / >>

#### 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:

CZE	Česká Republika	Nařízení vlády č. 246/2018 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	TRGS 900 - Seite 1 von 69 (Fassung 29.03.2019)- Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte
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
GRC	Ελλάδα	ΕΦΗΜΕΡΙΔΑ ΤΗΣ ΚΥΒΕΡΝΗΣΕΩΣ - ΤΕΥΧΟΣ ΠΡΩΤΟ Αρ. Φύλλου 152 - 21 Αυγούστου 2018
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
NLD	Nederland	Regeling van de Staatssecretaris van Sociale Zaken en Werkgelegenheid van 13 juli 2018, 2018-0000118517 tot wijziging van de Arbeidsomstandighedenregeling in verband met de implementatie van Richtlijn 2017/164 in Bijlage XIII
PRT	Portugal	Ministério da Economia e do Emprego Consolida as prescrições mínimas em matéria de protecção dos trabalhadores contra os riscos para a segurança e a saúde devido à exposição a agentes químicos no trabalho - Diário da República, 1.ª série - N.º 111 - 11 de junho de 2018
POL	Polska	ROZPORZĄDZENIE MINISTRA RODZINY, PRACY I POLITYKI SPOŁECZNEJ z dnia 12 czerwca 2018 r
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
SVN	Slovenija	Uradni list Republike Slovenije 20.12.2019 - Uradnem listu RS št. 78/19 -PRAVILNIK o varovanju delavcev pred tveganji zaradi izpostavljenosti kemičnim snovem pri delu
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Third edition, published 2018)
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

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

#### 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	0,996	mg/kg
Normal value for marine water sediment	0,0996	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	0,75 mg/kg/d				
Inhalation							VND	12,25 mg/m3
Skin			VND	3,571 mg/kg/d			VND	8,33 mg/kg

#### 1-METHOXY-2-PROPANOL

##### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	CZE	270	72,09	550	146,85	SKIN
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
TLV	GRC	360	100	1080	300	
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
MV	SVN	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 in marine water	1	mg/l
Normal value for fresh water sediment	52,3	mg/kg
Normal value for marine water sediment	5,2	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	4,56	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				3,3 mg/kg bw/d				
Inhalation				43,9 mg/m3				369 mg/m3
Skin				78 mg/kg bw/d				183 mg/kg bw/d

#### BENZYL ALCOHOL

##### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	CZE	40	8,88	80	17,76	
AGW	DEU	22	5	44	10	SKIN 11
NDS/NDSch	POL	240				
MV	SVN	22	5	44	10	SKIN

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

#### Quaternary ammonium compounds, benzyl(hydrogenated tallow alkyl)dimethyl, chlorides

##### 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					1,64 mg/kg			3,96 mg/kg
Skin					3,4 mg/kg bw/d			5,7 mg/kg bw/d

#### QUARTZ

##### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP		0,05			RESP
VLEP	FRA	0,1				RESP
VLEP	ITA	0,1				RESP
TGG	NLD	0,075				RESP
NDS/NDSch	POL	0,1				RESP
MV	SVN	0,15				RESP
OEL	EU	0,1				RESP
TLV-ACGIH		0,025				

#### 2-BUTOXYETHANOL

##### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	CZE	100	20,4	200	40,8	SKIN
AGW	DEU	49	10	98 (C)	20 (C)	SKIN
MAK	DEU	49	10	98	20	SKIN Hinweis
VLA	ESP	98	20	245	50	SKIN
VLEP	FRA	49	10	246	50	SKIN
TLV	GRC	120	25			
VLEP	ITA	98	20	246	50	SKIN
TGG	NLD	100		246		SKIN
VLE	PRT	98	20	246	50	SKIN
NDS/NDSch	POL	98		200		SKIN
TLV	ROU	98	20	246	50	SKIN
MV	SVN	98	20	246	50	SKIN
WEL	GBR	123	25	246	50	SKIN
OEL	EU	98	20	246	50	SKIN
TLV-ACGIH		97	20			

#### AMMONIA

##### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
OEL	EU	14	20	36	50	
TLV-ACGIH		17	25	24	35	

##### 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

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

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.

#### 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	white	
Odour	characteristic	
Odour threshold	Not available	
pH	Not available	
Melting point / freezing point	0 °C	
Initial boiling point	Not available	
Boiling range	Not available	
Flash point	> 100 °C	
Evaporation Rate	Not available	
Flammability of solids and gases	Not available	
Lower inflammability limit	Not available	
Upper inflammability limit	Not available	
Lower explosive limit	Not available	
Upper explosive limit	Not available	
Vapour pressure	15 mmHg	
Vapour density	Not available	
Relative density	1,09 kg/l	
Solubility	CAN BE DILUTED	
Partition coefficient: n-octanol/water	Not available	
Auto-ignition temperature	Not available	
Decomposition temperature	Not available	
Viscosity	Not available	
Explosive properties	Not available	
Oxidising properties	Not available	

#### 9.2. Other information

VOC (Directive 2004/42/EC) :	5,09 % - 55,50	g/litre
VOC (volatile carbon) :	2,93 % - 31,93	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.

**SECTION 10. Stability and reactivity** ... / >>**BENZYL ALCOHOL**

Decomposes at temperatures above 870°C/1598°F. Possibility of explosion.

**2-BUTOXYETHANOL**

Decomposes under the effect of heat.

**AMMONIA**

Corrodes: aluminium, iron, zinc, copper, copper alloys.

**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**

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

**BENZYL ALCOHOL**

May react dangerously with: hydrobromic acid, iron, oxidising agents, sulphuric acid. Risk of explosion on contact with: phosphorus trichloride.

**2-BUTOXYETHANOL**

May react dangerously with: aluminium, oxidising agents. Forms peroxides with: air.

**AMMONIA**

Risk of explosion on contact with: strong acids, iodine. May react dangerously with: strong bases.

**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.

**BENZYL ALCOHOL**

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

**2-BUTOXYETHANOL**

Avoid exposure to: sources of heat, naked flames.

**10.5. Incompatible materials****1-METHOXY-2-PROPANOL**

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

**BENZYL ALCOHOL**

Incompatible with: sulphuric acid, oxidising substances, aluminium.

**AMMONIA**

Incompatible with: silver, silver salts, lead, lead salts, zinc, zinc salts, hydrochloric acid, nitric acid, oleum, halogens, acrolein, nitromethane, acrylic 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.

**2-BUTOXYETHANOL**

May develop: hydrogen.

**AMMONIA**

May develop: nitric oxide.

**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.



**SECTION 11. Toxicological information** ... / >>

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) of the mixture:	> 20 mg/l
ATE (Oral) of the mixture:	>2000 mg/kg
ATE (Dermal) of the mixture:	Not classified (no significant component)

**AMMONIA**

LD50 (Oral)	350 mg/kg Rat
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**2-BUTOXYETHANOL**

LD50 (Oral)	615 mg/kg Rat
LD50 (Dermal)	405 mg/kg Rabbit
LC50 (Inhalation)	2,2 mg/l/4h Rat

**BENZYL ALCOHOL**

LD50 (Oral)	1230 mg/kg Rat
LD50 (Dermal)	2000 mg/kg Rabbit
LC50 (Inhalation)	> 4,1 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

Quaternary ammonium compounds, benzyl(hydrogenated tallow alkyl)dimethyl, chlorides	
LD50 (Oral)	398 mg/kg 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

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

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

Does not meet the classification criteria for this hazard class

#### ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

### 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

##### AMMONIA

LC50 - for Fish	47 mg/l/96h Channa punctata
EC50 - for Crustacea	20 mg/l/48h Daphnia magna

##### BENZYL ALCOHOL

LC50 - for Fish	10 mg/l/96h Bluegill
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##### REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)

LC50 - for Fish	1,5 mg/l/96h Fish
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##### Quaternary ammonium compounds, benzyl(hydrogenated tallow alkyl)dimethyl, chlorides

LC50 - for Fish	0,1 mg/l/96h Fish
EC50 - for Crustacea	0,059 mg/l/48h Daphnia
EC50 - for Algae / Aquatic Plants	0,11 Algae

#### 12.2. Persistence and degradability

##### AMMONIA

Degradability: information not available

##### 2-BUTOXYETHANOL

Solubility in water	1000 - 10000 mg/l
Rapidly degradable	

##### BENZYL ALCOHOL

Rapidly degradable

##### 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	

#### 12.3. Bioaccumulative potential

##### 2-BUTOXYETHANOL

Partition coefficient: n-octanol/water	0,81
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##### BENZYL ALCOHOL

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

Partition coefficient: n-octanol/water	< 1
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##### REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)

Partition coefficient: n-octanol/water	> 2,918
BCF	31

##### Quaternary ammonium compounds, benzyl(hydrogenated tallow alkyl)dimethyl, chlorides

BCF	6898
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**SECTION 12. Ecological information** ... / >>**12.4. Mobility in soil**

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.

CONTAMINATED PACKAGING

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

**SECTION 14. Transport information**

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

**14.1. UN number**

Not applicable

**14.2. UN proper shipping name**

Not applicable

**14.3. Transport hazard class(es)**

Not applicable

**14.4. Packing group**

Not applicable

**14.5. Environmental hazards**

Not applicable

**14.6. Special precautions for user**

Not applicable

**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**



**SECTION 16. Other information** ... / >>

- 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)

- 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

**SECTION 16. Other information** ... / >>

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.

Changes to previous review:

The following sections were modified:

02 / 03 / 04 / 05 / 08 / 09 / 10 / 11 / 12 / 15 / 16.