



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

- 1.1 Product identifier:** ENDURECEDOR FOSFATO DE ZINC DYNAPOK EPOXI 2-C (COMPONENTE B) - Código - 22700
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**  
Relevant uses: Anticorrosion primer. For professional user/industrial user only.  
Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Details of the supplier of the safety data sheet:**  
INDUSTRIAS JUNO, S.A.  
Barrio Urioste, 64  
48530 ORTUUELLA - Vizcaya - España  
Phone.: +34 946 353 143 - Fax: +34 946 641 511  
pinturamarina@juno.es  
www.juno.es
- 1.4 Emergency telephone number:** +34 946 353 143 ( 8:00 -15:00 )

**SECTION 2: HAZARDS IDENTIFICATION**

- 2.1 Classification of the substance or mixture:**  
**CLP Regulation (EC) No 1272/2008:**  
Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.  
Eye Dam. 1: Serious eye damage, Category 1, H318  
Flam. Liq. 3: Flammable liquids, Category 3, H226  
Repr. 2: Reproductive toxicity, Category 2, H361d  
Skin Corr. 1B: Skin corrosion, Category 1B, H314  
Skin Sens. 1: Sensitisation, skin, Category 1, H317  
STOT RE 2: Specific target organ toxicity, repeated exposure, Category 2, H373  
STOT SE 3: Specific toxicity causing drowsiness and dizziness, single exposure, Category 3, H336

**2.2 Label elements:**

**CLP Regulation (EC) No 1272/2008:**

Danger



**Hazard statements:**

Flam. Liq. 3: H226 - Flammable liquid and vapour  
Repr. 2: H361d - Suspected of damaging the unborn child.  
Skin Corr. 1B: H314 - Causes severe skin burns and eye damage  
Skin Sens. 1: H317 - May cause an allergic skin reaction  
STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure  
STOT SE 3: H336 - May cause drowsiness or dizziness

**Precautionary statements:**

P101: If medical advice is needed, have product container or label at hand  
P102: Keep out of reach of children  
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  
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting  
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P501: Dispose of contents/container according to the separated collection system used in your municipality

**Substances that contribute to the classification**

1-methoxy-2-propanol (CAS: 107-98-2); Epichlorohydrin/Bisphenol-A epoxy resin (700 < MW < 1100) (CAS: 25036-25-3); Toluene (CAS: 108-88-3); 2,2'-iminodi(ethylamine) (CAS: 111-40-0)

**Acute Toxicity Estimate (ATE mix):**

74,01 % (oral), 74,01 % (dermal), 79,14 % (inhalation) of the mixture consists of ingredient(s) of unknown toxicity

**2.3 Other hazards:**

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**SECTION 2: HAZARDS IDENTIFICATION (continued)**

Product fails to meet PBT/vPvB criteria

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS \*\***

**3.1 Substance:**

Non-applicable

**3.2 Mixture:**

**Chemical description:** Mixture composed of pigments and resins

**Components:**

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification		Concentration
CAS: 107-98-2 EC: 203-539-1 Index: 603-064-00-3 REACH: 01-2119457435-35-XXXX	<b>1-methoxy-2-propanol</b> <input type="checkbox"/> <sup>1</sup> <input type="checkbox"/>	ATP ATP01 Regulation 1272/2008 Flam. Liq. 3: H226; STOT SE 3: H336 - Warning	<b>45 - &lt;60 %</b>
CAS: 25036-25-3 EC: Non-applicable Index: Non-applicable REACH: Non-applicable	<b>Epichlorohydrin/Bisphenol-A epoxy resin (700 &lt; MW &lt; 1100)</b> <input type="checkbox"/> <sup>1</sup> <input type="checkbox"/>	Self-classified Regulation 1272/2008 Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Warning	<b>10 - &lt;25 %</b>
CAS: 108-88-3 EC: 203-625-9 Index: 601-021-00-3 REACH: 01-2119471310-51-XXXX	<b>Toluene</b> <input type="checkbox"/> <sup>4</sup> <input type="checkbox"/>	ATP CLP00 Regulation 1272/2008 Asp. Tox. 1: H304; Flam. Liq. 2: H225; Repr. 2: H361d; Skin Irrit. 2: H315; STOT RE 2: H373; STOT SE 3: H336 - Danger	<b>10 - &lt;25 %</b>
CAS: 1330-20-7 EC: 215-535-7 Index: 601-023-00-9 REACH: 01-2119488216-32-XXXX	<b>Xylene</b> <input type="checkbox"/> <sup>1</sup> <input type="checkbox"/>	Self-classified Regulation 1272/2008 Acute Tox. 4: H312+H332; Asp. Tox. 1: H304; Eye Irrit. 2: H319; Flam. Liq. 3: H226; Skin Irrit. 2: H315; STOT RE 2: H373; STOT SE 3: H335 - Danger	<b>1 - &lt;10 %</b>
CAS: 111-40-0 EC: 203-865-4 Index: 612-058-00-X REACH: 01-2119473793-27-XXXX	<b>2,2'-iminodi(ethylamine)</b> <input type="checkbox"/> <sup>1</sup> <input type="checkbox"/>	ATP CLP00 Regulation 1272/2008 Acute Tox. 4: H302+H312; Skin Corr. 1B: H314; Skin Sens. 1: H317 - Danger	<b>1 - &lt;10 %</b>
CAS: 100-41-4 EC: 202-849-4 Index: 601-023-00-4 REACH: 01-2119489370-35-XXXX	<b>Ethylbenzene</b> <input type="checkbox"/> <sup>2</sup> <input type="checkbox"/>	ATP ATP06 Regulation 1272/2008 Acute Tox. 4: H332; Asp. Tox. 1: H304; Flam. Liq. 2: H225; STOT RE 2: H373 - Danger	<b>0,1 - &lt;1 %</b>
CAS: 1589-47-5 EC: 216-455-5 Index: 603-106-00-0 REACH: Non-applicable	<b>2-methoxypropanol</b> <input type="checkbox"/> <sup>1</sup> <input type="checkbox"/>	ATP CLP00 Regulation 1272/2008 Eye Dam. 1: H318; Flam. Liq. 3: H226; Repr. 1B: H360D; Skin Irrit. 2: H315; STOT SE 3: H335 - Danger	<b>0,1 - &lt;1 %</b>

<sup>1</sup> Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2015/830  
 <sup>2</sup> Substance with a Union workplace exposure limit

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

\*\* Changes with regards to the previous version

**SECTION 4: FIRST AID MEASURES**

**4.1 Description of first aid measures:**

Request medical assistance immediately, showing the SDS of this product.

**By inhalation:**

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

**By skin contact:**

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

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**SECTION 4: FIRST AID MEASURES (continued)**

**By eye contact:**

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

**By ingestion/aspiration:**

Request immediate medical assistance, showing the SDS of this product. Do not induce vomiting, because its expulsion from the stomach can be hazardous to the mucus of the main digestive tract, and also risk damage to the respiratory system through inhalation. Rinse out the mouth and throat, as they may have been affected during ingestion. In the case of loss of consciousness do not administer anything orally unless supervised by a doctor. Keep the person affected at rest.

**4.2 Most important symptoms and effects, both acute and delayed:**

Acute and delayed effects are indicated in sections 2 and 11.

**4.3 Indication of any immediate medical attention and special treatment needed:**

Non-applicable

**SECTION 5: FIREFIGHTING MEASURES**

**5.1 Extinguishing media:**

If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO<sub>2</sub>). IT IS RECOMMENDED NOT to use full jet water as an extinguishing agent.

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

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

**5.3 Advice for firefighters:**

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

**Additional provisions:**

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**6.1 Personal precautions, protective equipment and emergency procedures:**

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Destroy any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

**6.2 Environmental precautions:**

This product is not classified as hazardous to the environment. Keep product away from drains, surface and underground water.

**6.3 Methods and material for containment and cleaning up:**

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

**6.4 Reference to other sections:**

See sections 8 and 13.

**SECTION 7: HANDLING AND STORAGE**

**7.1 Precautions for safe handling:**

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**SECTION 7: HANDLING AND STORAGE (continued)**

**A.- Precautions for safe manipulation**

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

**B.- Technical recommendations for the prevention of fires and explosions**

Transfer in well ventilated areas, preferably through localized extraction. Fully control sources of ignition (mobile phones, sparks,...) and ventilate during cleaning operations. Avoid the existence of dangerous atmospheres inside containers, applying inertization systems where possible. Transfer at a slow speed to avoid the creation of electrostatic charges. Against the possibility of electrostatic charges: ensure a perfect equipotential connection, always use groundings, do not wear work clothes made of acrylic fibres, preferably wearing cotton clothing and conductive footwear. Comply with the essential security requirements for equipment and systems defined in Directive 94/9/EC (ATEX 100) and with the minimum requirements for protecting the security and health of workers under the selection criteria of Directive 1999/92/EC (ATEX 137). Consult section 10 for conditions and materials that should be avoided.

**C.- Technical recommendations to prevent ergonomic and toxicological risks**

**PREGNANT WOMEN SHOULD NOT BE EXPOSED TO THIS PRODUCT.** Transfer in designated areas that comply with the necessary safety conditions (emergency showers and eyewash stations in close proximity), using personal protection equipment, especially on the hands and face (See section 8). Limit manual transfers to small amounts only. Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

**D.- Technical recommendations to prevent environmental risks**

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

**7.2 Conditions for safe storage, including any incompatibilities:**

**A.- Technical measures for storage**

- Minimum Temp.: 5 °C
- Maximum Temp.: 30 °C
- Maximum time: 24 Months

**B.- General conditions for storage**

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

**7.3 Specific end use(s):**

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1 Control parameters:**

Substances whose occupational exposure limits have to be monitored in the workplace

Identification	Environmental limits		
	IOELV (8h)	100 ppm	375 mg/m <sup>3</sup>
1-methoxy-2-propanol CAS: 107-98-2 EC: 203-539-1	IOELV (STEL)	150 ppm	563 mg/m <sup>3</sup>
Toluene CAS: 108-88-3 EC: 203-625-9	IOELV (8h)	50 ppm	192 mg/m <sup>3</sup>
	IOELV (STEL)	100 ppm	384 mg/m <sup>3</sup>
Xylene CAS: 1330-20-7 EC: 215-535-7	IOELV (8h)	50 ppm	221 mg/m <sup>3</sup>
	IOELV (STEL)	100 ppm	442 mg/m <sup>3</sup>
Ethylbenzene CAS: 100-41-4 EC: 202-849-4	IOELV (8h)	100 ppm	442 mg/m <sup>3</sup>
	IOELV (STEL)	200 ppm	884 mg/m <sup>3</sup>

**DNEL (Workers):**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
		1-methoxy-2-propanol CAS: 107-98-2 EC: 203-539-1	Oral	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	50,6 mg/kg	Non-applicable
	Inhalation	Non-applicable	553,5 mg/m <sup>3</sup>	369 mg/m <sup>3</sup>	Non-applicable

**ENDURECEDOR FOSFATO DE ZINC DYNAPOK  
EPOXI 2-C (COMPONENTE B) - Código - 22700**



**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Toluene CAS: 108-88-3 EC: 203-625-9	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	384 mg/kg	Non-applicable
	Inhalation	384 mg/m <sup>3</sup>	384 mg/m <sup>3</sup>	192 mg/m <sup>3</sup>	192 mg/m <sup>3</sup>
Xylene CAS: 1330-20-7 EC: 215-535-7	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	180 mg/kg	Non-applicable
	Inhalation	289 mg/m <sup>3</sup>	289 mg/m <sup>3</sup>	77 mg/m <sup>3</sup>	Non-applicable
2,2'-iminodi(ethylamine) CAS: 111-40-0 EC: 203-865-4	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	11,4 mg/kg	Non-applicable
	Inhalation	92,1 mg/m <sup>3</sup>	2,6 mg/m <sup>3</sup>	15,4 mg/m <sup>3</sup>	0,87 mg/m <sup>3</sup>
Ethylbenzene CAS: 100-41-4 EC: 202-849-4	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	180 mg/kg	Non-applicable
	Inhalation	Non-applicable	293 mg/m <sup>3</sup>	77 mg/m <sup>3</sup>	Non-applicable

**DNEL (General population):**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
1-methoxy-2-propanol CAS: 107-98-2 EC: 203-539-1	Oral	Non-applicable	Non-applicable	3,3 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	18,1 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	43,9 mg/m <sup>3</sup>	Non-applicable
Toluene CAS: 108-88-3 EC: 203-625-9	Oral	Non-applicable	Non-applicable	8,13 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	226 mg/kg	Non-applicable
	Inhalation	226 mg/m <sup>3</sup>	226 mg/m <sup>3</sup>	56,5 mg/m <sup>3</sup>	56,5 mg/m <sup>3</sup>
Xylene CAS: 1330-20-7 EC: 215-535-7	Oral	Non-applicable	Non-applicable	1,6 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	108 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	14,8 mg/m <sup>3</sup>	Non-applicable
2,2'-iminodi(ethylamine) CAS: 111-40-0 EC: 203-865-4	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	4,88 mg/kg	Non-applicable	4,88 mg/kg	Non-applicable
	Inhalation	27,5 mg/m <sup>3</sup>	Non-applicable	4,6 mg/m <sup>3</sup>	Non-applicable
Ethylbenzene CAS: 100-41-4 EC: 202-849-4	Oral	Non-applicable	Non-applicable	1,6 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	15 mg/m <sup>3</sup>	Non-applicable

**PNEC:**

Identification					
		STP	Soil	Intermittent	Oral
1-methoxy-2-propanol CAS: 107-98-2 EC: 203-539-1	STP	100 mg/L	Fresh water	10 mg/L	
	Soil	5,49 mg/kg	Marine water	1 mg/L	
	Intermittent	100 mg/L	Sediment (Fresh water)	52,3 mg/kg	
	Oral	Non-applicable	Sediment (Marine water)	5,2 mg/kg	
Toluene CAS: 108-88-3 EC: 203-625-9	STP	13,61 mg/L	Fresh water	0,68 mg/L	
	Soil	2,89 mg/kg	Marine water	0,68 mg/L	
	Intermittent	0,68 mg/L	Sediment (Fresh water)	16,39 mg/kg	
	Oral	Non-applicable	Sediment (Marine water)	16,39 mg/kg	
Xylene CAS: 1330-20-7 EC: 215-535-7	STP	6,58 mg/L	Fresh water	0,327 mg/L	
	Soil	2,31 mg/kg	Marine water	0,327 mg/L	
	Intermittent	0,327 mg/L	Sediment (Fresh water)	12,46 mg/kg	
	Oral	Non-applicable	Sediment (Marine water)	12,46 mg/kg	
2,2'-iminodi(ethylamine) CAS: 111-40-0 EC: 203-865-4	STP	6 mg/L	Fresh water	0,56 mg/L	
	Soil	214 mg/kg	Marine water	0,056 mg/L	
	Intermittent	0,32 mg/L	Sediment (Fresh water)	1072 mg/kg	
	Oral	Non-applicable	Sediment (Marine water)	107,2 mg/kg	
Ethylbenzene CAS: 100-41-4 EC: 202-849-4	STP	9,6 mg/L	Fresh water	0,1 mg/L	
	Soil	2,68 mg/kg	Marine water	0,01 mg/L	
	Intermittent	0,1 mg/L	Sediment (Fresh water)	13,7 mg/kg	
	Oral	20 g/kg	Sediment (Marine water)	1,37 mg/kg	

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**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**



**8.2 Exposure controls:**

**A.- General security and hygiene measures in the work place**



In accordance with the order of importance to control professional exposure (Directive 98/24/EC) it is recommended to use localized extraction in the work area as a collective protection measure to avoid exceeding the occupational exposure limits. In case of using personal protective equipment it should have CE marking in accordance with Directive 89/686/EC. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For additional information see subsection 7.1.

All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

**B.- Respiratory protection**



Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory respiratory tract protection	Filter mask for gases and vapours		EN 405:2001+A1:2009	Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment.

**C.- Specific protection for the hands**





Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	NON-disposable chemical protective gloves		EN ISO 374-1:2016 EN 16523-1:2015 EN 420:2003+A1:2009	The Breakthrough Time indicated by the manufacturer must exceed the period during which the product is being used. Do not use protective creams after the product has come into contact with skin.

"As the product is a mixture of several substances, the resistance of the glove material can not be predicted in advance with total reliability and has therefore to be checked prior to the application"

**D.- Ocular and facial protection**

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Face shield		EN 166:2001 EN 167:2001 EN 168:2001 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

**E.- Body protection**

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory complete body protection	Disposable clothing for protection against chemical risks, with antistatic and fireproof properties		EN 1149-1,2,3 EN 13034:2005+A1:2009 EN ISO 13982-1:2004/A1:2010 EN ISO 6529:2013 EN ISO 6530:2005 EN ISO 13688:2013 EN 464:1994	For professional use only. Clean periodically according to the manufacturer's instructions.
 Mandatory foot protection	Safety footwear for protection against chemical risk, with antistatic and heat resistant properties		EN ISO 13287:2012 EN ISO 20345:2011 EN 13832-1:2019	Replace boots at any sign of deterioration.

**F.- Additional emergency measures**

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

**Environmental exposure controls:**

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

**Volatile organic compounds:**

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**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**

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

V.O.C. (Supply):	75,89 % weight
V.O.C. density at 20 °C:	728,6 kg/m <sup>3</sup> (728,6 g/L)
Average carbon number:	4,93
Average molecular weight:	93,03 g/mol

With regard to Directive 2004/42/EC, this product which is ready to use has the following characteristics:

V.O.C. density at 20 °C:	728,6 kg/m <sup>3</sup> (728,6 g/L)
EU limit for the product (Cat. A.J):	500 g/L (2010)
Components:	Non-applicable

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

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

For complete information see the product datasheet.

**Appearance:**

Physical state at 20 °C:	Liquid
Appearance:	Viscous
Colour:	Colourless
Odour:	Characteristic
Odour threshold:	Non-applicable *

**Volatility:**

Boiling point at atmospheric pressure:	127 °C
Vapour pressure at 20 °C:	1293 Pa
Vapour pressure at 50 °C:	6201,15 Pa (6,2 kPa)
Evaporation rate at 20 °C:	Non-applicable *

**Product description:**

Density at 20 °C:	960,1 kg/m <sup>3</sup>
Relative density at 20 °C:	0,96
Dynamic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 40 °C:	>20,5 cSt
Concentration:	Non-applicable *
pH:	Non-applicable *
Vapour density at 20 °C:	Non-applicable *
Partition coefficient n-octanol/water 20 °C:	Non-applicable *
Solubility in water at 20 °C:	Non-applicable *
Solubility properties:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *

**Flammability:**

Flash Point:	26 °C
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	270 °C

\*Not relevant due to the nature of the product, not providing information property of its hazards.

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**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)**

Lower flammability limit:	Not available
Upper flammability limit:	Not available
<b>Explosive:</b>	
Lower explosive limit:	Non-applicable *
Upper explosive limit:	Non-applicable *
<b>9.2 Other information:</b>	
Surface tension at 20 °C:	Non-applicable *
Refraction index:	Non-applicable *

\*Not relevant due to the nature of the product, not providing information property of its hazards.

**SECTION 10: STABILITY AND REACTIVITY**

**10.1 Reactivity:**

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

**10.2 Chemical stability:**

Chemically stable under the conditions of storage, handling and use.

**10.3 Possibility of hazardous reactions:**

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

**10.4 Conditions to avoid:**

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Risk of combustion	Avoid direct impact	Not applicable

**10.5 Incompatible materials:**

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

**10.6 Hazardous decomposition products:**

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO<sub>2</sub>), carbon monoxide and other organic compounds.

**SECTION 11: TOXICOLOGICAL INFORMATION \*\***

**11.1 Information on toxicological effects:**

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

Contains glycols. It is recommended not to breathe the vapours for prolonged periods of time due to the possibility of effects that are hazardous to the health .

**Dangerous health implications:**

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: Corrosive product, if it is swallowed causes burns destroying the tissues. For more information about secondary effects from skin contact see section 2.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Prolonged inhalation of the product is corrosive to mucous membranes and the upper respiratory tract

\*\* Changes with regards to the previous version





**SECTION 11: TOXICOLOGICAL INFORMATION \*\* (continued)**

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Above all, skin contact may occur as fabrics of all thicknesses can be destroyed, resulting in burns. For more information on the secondary effects see section 2.

- Contact with the eyes: Produces serious eye damage after contact.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.

IARC: Toluene (3); Xylene (3); Ethylbenzene (2B)

- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

- Reproductive toxicity: Suspected of damaging the unborn child.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects. For more information see section 3.

- Cutaneous: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.

F- Specific target organ toxicity (STOT) - single exposure:

Exposure in high concentration can interfere with the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.

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

- Specific target organ toxicity (STOT)-repeated exposure: Exposure in high concentration can interfere with the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.

- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met. However, it does contain substances classified as dangerous for this effect. For more information see section 3.

**Other information:**

**Specific toxicology information on the substances:**

Identification	Acute toxicity		Genus
	LD50 oral	LD50 dermal	
Toluene CAS: 108-88-3 EC: 203-625-9	5580 mg/kg	12124 mg/kg	Rat
	LC50 inhalation	28,1 mg/L (4 h)	Rat
Xylene CAS: 1330-20-7 EC: 215-535-7	2100 mg/kg	1100 mg/kg (ATEi)	Rat
	LC50 inhalation	11 mg/L (4 h) (ATEi)	
2,2'-iminodi(ethylamine) CAS: 111-40-0 EC: 203-865-4	500 mg/kg (ATEi)	1100 mg/kg	
	LC50 inhalation	Non-applicable	
Ethylbenzene CAS: 100-41-4 EC: 202-849-4	3500 mg/kg	15354 mg/kg	Rat
	LC50 inhalation	17,2 mg/L (4 h)	Rat

**Acute Toxicity Estimate (ATE mix):**

ATE mix		Ingredient(s) of unknown toxicity
Oral	2532,89 mg/kg (Calculation method)	74,01 %
Dermal	2282,43 mg/kg (Calculation method)	74,01 %
Inhalation	31,03 mg/L (4 h) (Calculation method)	79,14 %

\*\* Changes with regards to the previous version

**SECTION 12: ECOLOGICAL INFORMATION \*\***

\*\* Changes with regards to the previous version

- CONTINUED ON NEXT PAGE -



**SECTION 12: ECOLOGICAL INFORMATION \*\* (continued)**

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

**12.1 Toxicity:**

Identification	Acute toxicity		Species	Genus
1-methoxy-2-propanol CAS: 107-98-2 EC: 203-539-1	LC50	20800 mg/L (96 h)	Pimephales promelas	Fish
	EC50	23300 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	1000 mg/L (168 h)	Selenastrum capricornutum	Algae
Toluene CAS: 108-88-3 EC: 203-625-9	LC50	13 mg/L (96 h)	Carassius auratus	Fish
	EC50	11.5 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	125 mg/L (48 h)	Scenedesmus subspicatus	Algae
Xylene CAS: 1330-20-7 EC: 215-535-7	LC50	13.5 mg/L (96 h)	Oncorhynchus mykiss	Fish
	EC50	3.4 mg/L (48 h)	Ceriodaphnia dubia	Crustacean
	EC50	10 mg/L (72 h)	Skeletonema costatum	Algae
Ethylbenzene CAS: 100-41-4 EC: 202-849-4	LC50	42.3 mg/L (96 h)	Pimephales promelas	Fish
	EC50	75 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	63 mg/L (3 h)	Chlorella vulgaris	Algae

**12.2 Persistence and degradability:**

Identification	Degradability		Biodegradability	
1-methoxy-2-propanol CAS: 107-98-2 EC: 203-539-1	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	90 %
Toluene CAS: 108-88-3 EC: 203-625-9	BOD5	2.5 g O2/g	Concentration	100 mg/L
	COD	Non-applicable	Period	14 days
	BOD5/COD	Non-applicable	% Biodegradable	100 %
Xylene CAS: 1330-20-7 EC: 215-535-7	BOD5	Non-applicable	Concentration	Non-applicable
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	88 %
Ethylbenzene CAS: 100-41-4 EC: 202-849-4	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	14 days
	BOD5/COD	Non-applicable	% Biodegradable	90 %

**12.3 Bioaccumulative potential:**

Identification	Bioaccumulation potential	
1-methoxy-2-propanol CAS: 107-98-2 EC: 203-539-1	BCF	3
	Pow Log	-0.44
	Potential	Low
Toluene CAS: 108-88-3 EC: 203-625-9	BCF	13
	Pow Log	2.73
	Potential	Low
Xylene CAS: 1330-20-7 EC: 215-535-7	BCF	9
	Pow Log	2.77
	Potential	Low
Ethylbenzene CAS: 100-41-4 EC: 202-849-4	BCF	1
	Pow Log	3.15
	Potential	Low

**12.4 Mobility in soil:**

Identification	Absorption/desorption		Volatility	
Toluene CAS: 108-88-3 EC: 203-625-9	Koc	178	Henry	672,8 Pa·m <sup>3</sup> /mol
	Conclusion	Moderate	Dry soil	Yes
	Surface tension	2,793E-2 N/m (25 °C)	Moist soil	Yes
Xylene CAS: 1330-20-7 EC: 215-535-7	Koc	202	Henry	524,86 Pa·m <sup>3</sup> /mol
	Conclusion	Moderate	Dry soil	Yes
	Surface tension	Non-applicable	Moist soil	Yes

\*\* Changes with regards to the previous version



**SECTION 12: ECOLOGICAL INFORMATION \*\* (continued)**

Identification	Absorption/desorption		Volatility	
	Koc	Non-applicable	Henry	Non-applicable
2,2'-iminodi(ethylamine)	Conclusion	Non-applicable	Dry soil	Non-applicable
CAS: 111-40-0	Surface tension	4,164E-2 N/m (25 °C)	Moist soil	Non-applicable
EC: 203-865-4	Koc	520	Henry	798,44 Pa·m <sup>3</sup> /mol
Ethylbenzene	Conclusion	Moderate	Dry soil	Yes
CAS: 100-41-4	Surface tension	2,859E-2 N/m (25 °C)	Moist soil	Yes
EC: 202-849-4				

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

Product fails to meet PBT/vPvB criteria

**12.6 Other adverse effects:**

Not described

\*\* Changes with regards to the previous version

**SECTION 13: DISPOSAL CONSIDERATIONS**

**13.1 Waste treatment methods:**

Code	Description	Waste class (Regulation (EU) No 1357/2014)
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances	Dangerous

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

HP3 Flammable, HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity, HP10 Toxic for reproduction, HP13 Sensitising, HP8 Corrosive

**Waste management (disposal and evaluation):**

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See paragraph 6.2.

**Regulations related to waste management:**

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

**SECTION 14: TRANSPORT INFORMATION**

**Transport of dangerous goods by land:**

With regard to ADR 2019 and RID 2019:



- 14.1 UN number:** UN2920
- 14.2 UN proper shipping name:** CORROSIVE LIQUID, FLAMMABLE, N.O.S. (2,2'-iminodi(ethylamine); 1-methoxy-2-propanol)
- 14.3 Transport hazard class(es):** 8
- Labels:** 8, 3
- 14.4 Packing group:** II
- 14.5 Environmental hazards:** No
- 14.6 Special precautions for user**
- Special regulations: 274
- Tunnel restriction code: D/E
- Physico-Chemical properties: see section 9
- Limited quantities: 1 L
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:** Non-applicable

**Transport of dangerous goods by sea:**

With regard to IMDG 38-16:

- CONTINUED ON NEXT PAGE -

**ENDURECEDOR FOSFATO DE ZINC DYNAPOK  
EPOXI 2-C (COMPONENTE B) - Código - 22700**



**SECTION 14: TRANSPORT INFORMATION (continued)**



- 14.1 UN number:** UN2920
- 14.2 UN proper shipping name:** CORROSIVE LIQUID, FLAMMABLE, N.O.S. (2,2'-iminodi(ethylamine); 1-methoxy-2-propanol)
- 14.3 Transport hazard class(es):** 8  
**Labels:** 8, 3
- 14.4 Packing group:** II
- 14.5 Environmental hazards:** No
- 14.6 Special precautions for user**  
Special regulations: 274  
EmS Codes: F-E, S-C  
Physico-Chemical properties: see section 9  
Limited quantities: 1 L  
Segregation group: Non-applicable
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:** Non-applicable

**Transport of dangerous goods by air:**

With regard to IATA/ICAO 2019:



- 14.1 UN number:** UN2920
- 14.2 UN proper shipping name:** CORROSIVE LIQUID, FLAMMABLE, N.O.S. (2,2'-iminodi(ethylamine); 1-methoxy-2-propanol)
- 14.3 Transport hazard class(es):** 8  
**Labels:** 8, 3
- 14.4 Packing group:** II
- 14.5 Environmental hazards:** No
- 14.6 Special precautions for user**  
Physico-Chemical properties: see section 9
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:** Non-applicable

**SECTION 15: REGULATORY INFORMATION**

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:**

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable  
Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable  
Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable  
Article 95, REGULATION (EU) No 528/2012: Non-applicable  
REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

**Seveso III:**

Section	Description	Lower-tier requirements	Upper-tier requirements
P5c		5000	50000

**Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc ....):**



**SECTION 15: REGULATORY INFORMATION (continued)**

Contains more than 0.1 % of Toluene by weight. Shall not be placed on the market, or used, as a substance or in mixtures in a concentration equal to or greater than 0,1 % by weight where the substance or mixture is used in adhesives or spray paints intended for supply to the general public.

Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following:

- metallic glitter intended mainly for decoration,
- artificial snow and frost,
- "whoopee" cushions,
- silly string aerosols,
- imitation excrement,
- horns for parties,
- decorative flakes and foams,
- artificial cobwebs,
- stink bombs.

Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with:

'For professional users only'.

Shall not be used in:

- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
- tricks and jokes,
- games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

**Specific provisions in terms of protecting people or the environment:**

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

**Other legislation:**

The product could be affected by sectorial legislation

**15.2 Chemical safety assessment:**

The supplier has not carried out evaluation of chemical safety.

**SECTION 16: OTHER INFORMATION**

**Legislation related to safety data sheets:**

This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (Regulation (EC) No 2015/830)

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

COMPOSITION/INFORMATION ON INGREDIENTS (SECTION 3, SECTION 11, SECTION 12):

- New declared substances
- Ethylbenzene (100-41-4)

**Texts of the legislative phrases mentioned in section 2:**

- H314: Causes severe skin burns and eye damage
- H336: May cause drowsiness or dizziness
- H373: May cause damage to organs through prolonged or repeated exposure
- H361d: Suspected of damaging the unborn child.
- H318: Causes serious eye damage
- H317: May cause an allergic skin reaction
- H226: Flammable liquid and vapour

**Texts of the legislative phrases mentioned in section 3:**

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

**CLP Regulation (EC) No 1272/2008:**



**SECTION 16: OTHER INFORMATION (continued)**

Acute Tox. 4: H302+H312 - Harmful if swallowed or in contact with skin  
 Acute Tox. 4: H312+H332 - Harmful in contact with skin or if inhaled  
 Acute Tox. 4: H332 - Harmful if inhaled  
 Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways  
 Eye Dam. 1: H318 - Causes serious eye damage  
 Eye Irrit. 2: H319 - Causes serious eye irritation  
 Flam. Liq. 2: H225 - Highly flammable liquid and vapour  
 Flam. Liq. 3: H226 - Flammable liquid and vapour  
 Repr. 1B: H360D - May damage the unborn child.  
 Repr. 2: H361d - Suspected of damaging the unborn child.  
 Skin Corr. 1B: H314 - Causes severe skin burns and eye damage  
 Skin Irrit. 2: H315 - Causes skin irritation  
 Skin Sens. 1: H317 - May cause an allergic skin reaction  
 STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure  
 STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure (Oral)  
 STOT SE 3: H335 - May cause respiratory irritation  
 STOT SE 3: H336 - May cause drowsiness or dizziness

**Classification procedure:**

Skin Corr. 1B: Calculation method  
 STOT SE 3: Calculation method  
 STOT RE 2: Calculation method  
 Repr. 2: Calculation method  
 Eye Dam. 1: Calculation method  
 Skin Sens. 1: Calculation method  
 Flam. Liq. 3: Calculation method (2.6.4.3)

**Advice related to training:**

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

**Principal bibliographical sources:**

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

**Abbreviations and acronyms:**

ADR: European agreement concerning the international carriage of dangerous goods by road  
 IMDG: International maritime dangerous goods code  
 IATA: International Air Transport Association  
 ICAO: International Civil Aviation Organisation  
 COD: Chemical Oxygen Demand  
 BOD5: 5-day biochemical oxygen demand  
 BCF: Bioconcentration factor  
 LD50: Lethal Dose 50  
 LC50: Lethal Concentration 50  
 EC50: Effective concentration 50  
 Log-POW: Octanol-water partition coefficient  
 Koc: Partition coefficient of organic carbon

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -