

SOLDER PRIMER ROJO (A)
Código - 24712 (A)



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

- 1.1 Product identifier:** SOLDER PRIMER ROJO (A)
Código - 24712 (A)
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
Relevant uses: Anticorrosion primer. For professional use 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.
Bº URIOSTE 64
48530 ORTUUELLA - VIZCAYA - ESPAÑA
Phone.: +34 946 353 143 - Fax: +34 946 641 753
pinturasmarina@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:**
Directive 67/548/EC and Directive 1999/45/EC:
This product was classified in accordance with Directive 67/548/EC and Directive 1999/45/EC, adapting the requirements to Regulation (EC) nº1907/2006 (REACH regulation).
F: R11 - Highly flammable
N: R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
Repr. Cat 3: R63 - Possible risk of harm to the unborn child
Xi: R37/38 - Irritating to respiratory system and skin, R41 - Risk of serious damage to eyes, R43 - May cause sensitisation by skin contact
Xn: R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed, R48/20 - Harmful: danger of serious damage to health by prolonged exposure through inhalation

2.2 Label elements:

Directive 67/548/EC and Directive 1999/45/EC:

In accordance with the legislation, the elements on the label are as follows:



R Phrases:

- R11: Highly flammable
R20/21/22: Harmful by inhalation, in contact with skin and if swallowed
R37/38: Irritating to respiratory system and skin
R41: Risk of serious damage to eyes
R43: May cause sensitisation by skin contact
R48/20: Harmful: danger of serious damage to health by prolonged exposure through inhalation
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R63: Possible risk of harm to the unborn child

S Phrases:

- S16: Keep away from sources of ignition - No smoking
S23: Do not breathe vapour and spray
S24: Avoid contact with skin
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S36/37/39: Wear suitable protective clothing, gloves and eye/face protection
S43: In case of fire, use polyvalent powder ABC
S51: Use only in well-ventilated areas
S61: Avoid release to the environment Refer to special instructions/safety data sheets
S9: Keep container in a well-ventilated place

Supplementary information:

Non-applicable

Substances that contribute to the classification:

- CONTINUED ON NEXT PAGE -

SOLDER PRIMER ROJO (A)
Código - 24712 (A)



SECTION 2: HAZARDS IDENTIFICATION (continue)

Xylene (mixture of isomers); Ethylbenzene; Toluene; Poly(bisphenol A-co-epichlorohydrin) glycidyl end-capped

2.3 Other hazards:

Non-applicable

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical description: Mixture composed of pigments and resins

Components:

In accordance with Annex II of Regulation (EC) n°1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification		Concentration
CAS: 78-83-1 EC: 201-148-0 Index: 603-108-00-1 REACH:01-2119488216-23-XXXX	Isobutanol ATP CLP00		25 - <50 %
	Directive 67/548/EC	Xi: R37/38, R41; R10; R67	
CAS: 1330-20-7 EC: 215-535-7 Index: 601-022-00-9 REACH:01-2119488216-32-XXXX	Xylene (mixture of isomers) ATP CLP00		10 - <25 %
	Directive 67/548/EC	Xi: R38; Xn: R20/21; R10	
CAS: 108-88-3 EC: 203-625-9 Index: 601-021-00-3 REACH:01-2119471310-51-XXXX	Toluene ATP CLP00		10 - <25 %
	Directive 67/548/EC	F: R11; Repr. Cat 3: R63; Xi: R38; Xn: R48/20, R65; R67	
CAS: 78-93-3 EC: 201-159-0 Index: 606-002-00-3 REACH:01-2119457290-43-XXXX	2-butanone ATP CLP00		10 - <25 %
	Directive 67/548/EC	F: R11; Xi: R36; R66; R67	
CAS: 100-41-4 EC: 202-849-4 Index: 601-023-00-4 REACH:01-2119489370-35-XXXX	Ethylbenzene ATP CLP00		1 - <10 %
	Directive 67/548/EC	F: R11; Xn: R20	
CAS: 7779-90-0 EC: 231-944-3 Index: Non-applicable REACH:01-2119485044-40-XXXX	trizinc bis(orthophosphate) ATP CLP00		1 - <10 %
	Directive 67/548/EC	N: R50/53	
CAS: 25036-25-3 EC: Non-applicable Index: Non-applicable REACH:Non-applicable	Poly(bisphenol A-co-epichlorohydrin) glycidyl end-capped Self-classified		1 - <10 %
	Directive 67/548/EC	Xi: R36/38, R43	
CAS: 71-36-3 EC: 200-751-6 Index: 603-004-00-6 REACH:01-2119484630-38-XXXX	1-butanol ATP CLP00		1 - <10 %
	Directive 67/548/EC	Xi: R37/38, R41; Xn: R22; R10; R67	
CAS: 108-95-2 EC: 203-632-7 Index: 604-001-00-2 REACH:01-2119471329-32-XXXX	Phenol ATP CLP00		<0,5 %
	Directive 67/548/EC	C: R34; Mut. Cat. 3: R68; T: R23/24/25; Xn: R48/20/21/22	

To obtain more information on the risk of the substances consult sections 8, 11, 12 and 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the MSDS 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:



SOLDER PRIMER ROJO (A)
Código - 24712 (A)



SECTION 4: FIRST AID MEASURES (continue)

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.

By eye contact:

Rinse eyes thoroughly with luke warm 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, as this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the MSDS of the product.

By consumption:

Do not induce vomiting, but if it does happen keep the head up to avoid inhalation. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

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 (CO₂). IT IS RECOMMENDED NOT to use tap water as an extinguishing agent.

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive subproducts 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 individual respiratory equipment. 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. Destroy any source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflammation, 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 inertizing agent. 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:

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

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

- CONTINUED ON NEXT PAGE -



SOLDER PRIMER ROJO (A)
Código - 24712 (A)



SECTION 7: HANDLING AND STORAGE (continue)

7.1 Precautions for safe handling:

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. Avoid projections and pulverisations. 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 fixed places that comply with the necessary security 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 containers of small amounts. Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

Due to the danger of this product for the environment it is recommended to use it within an area containing contamination control barriers in case of spillage, as well as having absorbent material in close proximity.

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

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 work environment

Identification	Environmental limits		
	IOELV (8h)	IOELV (STEL)	Year
Xylene (mixture of isomers) CAS: 1330-20-7 EC: 215-535-7	50 ppm	221 mg/m ³	2012
	100 ppm	442 mg/m ³	
	Year	2012	
Toluene CAS: 108-88-3 EC: 203-625-9	50 ppm	192 mg/m ³	2012
	100 ppm	384 mg/m ³	
	Year	2012	
2-butanone CAS: 78-93-3 EC: 201-159-0	200 ppm	600 mg/m ³	2012
	300 ppm	900 mg/m ³	
	Year	2012	
Ethylbenzene CAS: 100-41-4 EC: 202-849-4	100 ppm	442 mg/m ³	2012
	200 ppm	884 mg/m ³	
	Year	2012	
Phenol CAS: 108-95-2 EC: 203-632-7	2 ppm	8 mg/m ³	2011
	4 ppm	16 mg/m ³	
	Year	2011	

DNEL (Workers):

- CONTINUED ON NEXT PAGE -



SOLDER PRIMER ROJO (A)
Código - 24712 (A)



SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continue)

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Isobutanol CAS: 78-83-1 EC: 201-148-0	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	Non-applicable	310 mg/m ³
Xylene (mixture of isomers) 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 ³	289 mg/m ³	77 mg/m ³	Non-applicable
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 ³	384 mg/m ³	192 mg/m ³	192 mg/m ³
2-butanone CAS: 78-93-3 EC: 201-159-0	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	1161 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	600 mg/m ³	Non-applicable
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 ³	77 mg/m ³	Non-applicable
trizinc bis(orthophosphate) CAS: 7779-90-0 EC: 231-944-3	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	83 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	5 mg/m ³	Non-applicable
1-butanol CAS: 71-36-3 EC: 200-751-6	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	Non-applicable	310 mg/m ³
Phenol CAS: 108-95-2 EC: 203-632-7	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	1,23 mg/kg	Non-applicable
	Inhalation	Non-applicable	16 mg/m ³	8 mg/m ³	Non-applicable

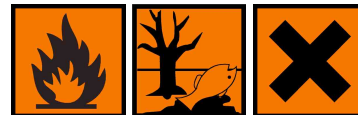
DNEL (Population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Isobutanol CAS: 78-83-1 EC: 201-148-0	Oral	Non-applicable	Non-applicable	25 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	Non-applicable	55 mg/m ³
Xylene (mixture of isomers) 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 ³	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 ³	226 mg/m ³	56,5 mg/m ³	56,5 mg/m ³
2-butanone CAS: 78-93-3 EC: 201-159-0	Oral	Non-applicable	Non-applicable	31 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	412 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	106 mg/m ³	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 ³	Non-applicable
trizinc bis(orthophosphate) CAS: 7779-90-0 EC: 231-944-3	Oral	Non-applicable	Non-applicable	0,83 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	83 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	2,5 mg/m ³	Non-applicable
1-butanol CAS: 71-36-3 EC: 200-751-6	Oral	Non-applicable	Non-applicable	3,125 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	Non-applicable	55 mg/m ³
Phenol CAS: 108-95-2 EC: 203-632-7	Oral	Non-applicable	Non-applicable	0,4 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	0,4 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	1,32 mg/m ³	Non-applicable

PNEC:

- CONTINUED ON NEXT PAGE -

SOLDER PRIMER ROJO (A)
Código - 24712 (A)



SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continue)



Identification				
Isobutanol CAS: 78-83-1 EC: 201-148-0	STP	10 mg/L	Fresh water	0,4 mg/L
	Soil	0,0699 mg/kg	Marine water	0,04 mg/L
	Intermittent	11 mg/L	Sediment (Fresh water)	1,52 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,152 mg/kg
Xylene (mixture of isomers) 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
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
2-butanone CAS: 78-93-3 EC: 201-159-0	STP	709 mg/L	Fresh water	55,8 mg/L
	Soil	22,5 mg/kg	Marine water	55,8 mg/L
	Intermittent	55,8 mg/L	Sediment (Fresh water)	284,74 mg/kg
	Oral	1000 g/kg	Sediment (Marine water)	284,7 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
trizinc bis(orthophosphate) CAS: 7779-90-0 EC: 231-944-3	STP	0,1 mg/L	Fresh water	0,0206 mg/L
	Soil	35,6 mg/kg	Marine water	0,0061 mg/L
	Intermittent	Non-applicable	Sediment (Fresh water)	117,8 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	56,5 mg/kg
1-butanol CAS: 71-36-3 EC: 200-751-6	STP	2476 mg/L	Fresh water	0,082 mg/L
	Soil	0,015 mg/kg	Marine water	0,0082 mg/L
	Intermittent	2,25 mg/L	Sediment (Fresh water)	0,178 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,0178 mg/kg
Phenol CAS: 108-95-2 EC: 203-632-7	STP	2,1 mg/L	Fresh water	0,0077 mg/L
	Soil	0,136 mg/kg	Marine water	0,00077 mg/L
	Intermittent	0,031 mg/L	Sediment (Fresh water)	0,0915 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,00915 mg/kg

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 professional exposure limits. In case of using individual protection equipment they should have the "CE marking" in accordance with Directive 89/686/EC. For more information on Personal Protection Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For additional information see subsection 7.1.

B.- Respiratory protection

LRP Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory respiratory tract protection	Filter mask for gases, vapours and particles		EN 149:2001+A1:2009 EN 405:2001+A1:2009	Replace when an increase in resistance to breathing is observed and/or a smell or taste of the contaminant is detected.

C.- Specific protection for the hands



LRP Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	NON-disposable chemical protective gloves		EN 374-1:2003 EN 374-3:2003/AC:2006 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.

D.- Ocular and facial protection





- CONTINUED ON NEXT PAGE -





SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continue)

LRP Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Face mask		EN 166:2001 EN 167:2001 EN 168:2001 EN 172:1994/A1:2000 EN 172:1994/A2:2001 EN 165:2005	Clean daily and disinfect periodically according to the manufacturer's instructions.

E.- Bodily protection

LRP 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 6529:2001 EN ISO 6530:2005 EN 340:2003 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 13287:2007 EN ISO 20345:2011 EN 13832-1:2006 EN ISO 20344:2011	Replace boots at any sign of deterioration.

F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2002	 Eyewash stations	DIN 12 899 ISO 3864-1:2002

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

Volatil organic compounds:

With regard to Directive 1999/13/EC, this product has the following characteristics:

V.O.C. (Supply):	77,67 % weight
V.O.C. density at 20 °C:	720,41 kg/m ³ (720,41 g/L)
Average carbon number:	5,67
Average molecular weight:	86,03 g/mol

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
Color:	Reddish
Odor:	Characteristic

Volatility:

Boiling point at atmospheric pressure:	109 °C
Vapour pressure at 20 °C:	4129 Pa
Vapour pressure at 50 °C:	15837 Pa (16 kPa)
Evaporation rate at 20 °C:	Non-applicable *

Product description:

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

- CONTINUED ON NEXT PAGE -



SOLDER PRIMER ROJO (A)
Código - 24712 (A)



SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continue)

Density at 20 °C:	928 kg/m ³
Relative density at 20 °C:	0,928
Dynamic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 40 °C:	>7 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 property:	Non-applicable *
Decomposition temperature:	Non-applicable *

Flammability:

Flash Point:	16 °C
Autoignition temperature:	343 °C
Lower flammability limit:	Not available
Upper flammability limit:	Not available

9.2 Other information:

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 if the following technical instructions storage of chemicals. 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 conditions no hazardous reactions are expected to produce a pressure or excessive temperatures.

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	Combustive materials	Combustible materials	Others
Not applicable	Not applicable	Avoid direct impact	Avoid direct impact	Not applicable

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 (CO₂), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

No experimental information is available on the product itself in relation to the toxicological properties. When performing the danger classification on corrosive or irritant effects the recommendations included in section 3.2.5 of Annex VI of Directive 67/548/EC, in paragraphs b) and c) of section 3 of article 6 of Directive 1999/45/EC and in section 3.2.3.3.5. of Annex I of CLP Regulation were taken into account.

- CONTINUED ON NEXT PAGE -



SOLDER PRIMER ROJO (A)
Código - 24712 (A)



SECTION 11: TOXICOLOGICAL INFORMATION (continue)

Dangerous health implications:

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

A.- Ingestion:

The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.

B- Inhalation:

Exposure in high concentrations can cause a breakdown in the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion and in serious cases, loss of concentration.

C- Contact with the skin and the eyes:

Produces serious eye damage after contact.

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

Exposure to this product can have adverse effects on the fetus. For more specific information on the possible health effects see section 2.

E- Sensitizing effects:

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

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

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.

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

Exposure in high concentrations can cause a breakdown in the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion and in serious cases, loss of concentration.

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:

Non-applicable

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
Isobutanol CAS: 78-83-1 EC: 201-148-0	LD50 oral	3350 mg/kg	Rat
	LD50 dermal	2460 mg/kg	Rabbit
	LC50 inhalation	24,6 mg/L (4 h)	Rat
Xylene (mixture of isomers) CAS: 1330-20-7 EC: 215-535-7	LD50 oral	2100 mg/kg	Rat
	LD50 dermal	1100 mg/kg	Rat
	LC50 inhalation	11 mg/L (4 h)	Rat
Toluene CAS: 108-88-3 EC: 203-625-9	LD50 oral	5580 mg/kg	Rat
	LD50 dermal	12124 mg/kg	Rat
	LC50 inhalation	28,1 mg/L (4 h)	Rat
2-butanone CAS: 78-93-3 EC: 201-159-0	LD50 oral	4000 mg/kg	Rat
	LD50 dermal	6400 mg/kg	Rabbit
	LC50 inhalation	23,5 mg/L (4 h)	Rat
Ethylbenzene CAS: 100-41-4 EC: 202-849-4	LD50 oral	3500 mg/kg	Rat
	LD50 dermal	15354 mg/kg	Rabbit
	LC50 inhalation	17,2 mg/L (4 h)	Rat
1-butanol CAS: 71-36-3 EC: 200-751-6	LD50 oral	2292 mg/kg	Rat
	LD50 dermal	3400 mg/kg	Rabbit
	LC50 inhalation	24,66 mg/L (4 h)	Rat
Phenol CAS: 108-95-2 EC: 203-632-7	LD50 oral	100 mg/kg	Rat
	LD50 dermal	630 mg/kg	Rabbit
	LC50 inhalation	Non-applicable	

SECTION 12: ECOLOGICAL INFORMATION

- CONTINUED ON NEXT PAGE -



SOLDER PRIMER ROJO (A)
Código - 24712 (A)



SECTION 12: ECOLOGICAL INFORMATION (continue)

The experimental information related to the ecotoxicological properties of the mixture itself is not available

12.1 Toxicity:

Identification	Acute toxicity		Specie	Genus
	LC50	EC50		
Isobutanol CAS: 78-83-1 EC: 201-148-0	LC50	2030 mg/L (96 h)	Carassius auratus	Fish
	EC50	1439 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	1250 mg/L (48 h)	Scenedesmus subspicatus	Alga
Xylene (mixture of isomers) CAS: 1330-20-7 EC: 215-535-7	LC50	13,5 mg/L (96 h)	Oncorhynchus mykiss	Fish
	EC50	0,6 mg/L (96 h)	Gammarus lacustris	Crustacean
	EC50	10 mg/L (72 h)	Skeletonema costatum	Alga
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	Alga
2-butanone CAS: 78-93-3 EC: 201-159-0	LC50	3220 mg/L (96 h)	Pimephales promelas	Fish
	EC50	5091 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	4300 mg/L (168 h)	Scenedesmus quadricauda	Alga
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	Alga
trizinc bis(orthophosphate) CAS: 7779-90-0 EC: 231-944-3	LC50	0,1 - 1 mg/L (96 h)		Fish
	EC50	0,1 - 1 mg/L (48 h)		Crustacean
	EC50	0,1 - 1 mg/L (72 h)		Alga
1-butanol CAS: 71-36-3 EC: 200-751-6	LC50	1740 mg/L (96 h)	Pimephales promelas	Fish
	EC50	1983 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	500 mg/L (96 h)	Scenedesmus subspicatus	Alga
Phenol CAS: 108-95-2 EC: 203-632-7	LC50	14 mg/L (96 h)	Leuciscus idus	Fish
	EC50	12 mg/L (24 h)	Daphnia magna	Crustacean
	EC50	370 mg/L (96 h)	Chlorella vulgaris	Alga

12.2 Persistence and degradability:

Identification	Degradability		Biodegradability	
	BOD5	Code	Concentration	Period
Isobutanol CAS: 78-83-1 EC: 201-148-0	BOD5	0.4 g O2/g	Concentration	100 mg/L
	Code	2.41 g O2/g	Period	14 days
	BOD5/COD	0.17	% Biodegradable	90 %
Toluene CAS: 108-88-3 EC: 203-625-9	BOD5	2.5 g O2/g	Concentration	100 mg/L
	Code	Non-applicable	Period	14 days
	BOD5/COD	Non-applicable	% Biodegradable	100 %
2-butanone CAS: 78-93-3 EC: 201-159-0	BOD5	2.03 g O2/g	Concentration	Non-applicable
	Code	2.31 g O2/g	Period	20 days
	BOD5/COD	0.88	% Biodegradable	89 %
Ethylbenzene CAS: 100-41-4 EC: 202-849-4	BOD5	Non-applicable	Concentration	100 mg/L
	Code	Non-applicable	Period	14 days
	BOD5/COD	Non-applicable	% Biodegradable	90 %
1-butanol CAS: 71-36-3 EC: 200-751-6	BOD5	1.71 g O2/g	Concentration	Non-applicable
	Code	2.46 g O2/g	Period	19 days
	BOD5/COD	0.69	% Biodegradable	98 %
Phenol CAS: 108-95-2 EC: 203-632-7	BOD5	1.68 g O2/g	Concentration	100 mg/L
	Code	2.33 g O2/g	Period	14 days
	BOD5/COD	0.72	% Biodegradable	85 %

12.3 Bioaccumulative potential:

Identification	Bioaccumulation potential	
	BCF	Pow Log
Isobutanol CAS: 78-83-1 EC: 201-148-0	3	0,76
	Potential	Low

- CONTINUED ON NEXT PAGE -



SOLDER PRIMER ROJO (A)
Código - 24712 (A)



SECTION 12: ECOLOGICAL INFORMATION (continue)

Identification	Bioaccumulation potential	
	BCF	Pow Log
Xylene (mixture of isomers) CAS: 1330-20-7 EC: 215-535-7	9	2,77
	Low	
Toluene CAS: 108-88-3 EC: 203-625-9	13	2,73
	Low	
2-butanone CAS: 78-93-3 EC: 201-159-0	3	0,29
	Low	
Ethylbenzene CAS: 100-41-4 EC: 202-849-4	1	3,15
	Low	
1-butanol CAS: 71-36-3 EC: 200-751-6	1	0,88
	Low	
Phenol CAS: 108-95-2 EC: 203-632-7	17	1,48
	Low	

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
	Koc	Conclusion	Henry	Conclusion
Isobutanol CAS: 78-83-1 EC: 201-148-0	Non-applicable	Non-applicable	Non-applicable	Non-applicable
Xylene (mixture of isomers) CAS: 1330-20-7 EC: 215-535-7	202	Moderate	5,249E+2 Pa·m ³ /mol	Yes
Toluene CAS: 108-88-3 EC: 203-625-9	178	Moderate	6,728E+2 Pa·m ³ /mol	Yes
2-butanone CAS: 78-93-3 EC: 201-159-0	30	Very High	5,765E+0 Pa·m ³ /mol	Yes
Ethylbenzene CAS: 100-41-4 EC: 202-849-4	520	Moderate	7,984E+2 Pa·m ³ /mol	Yes
1-butanol CAS: 71-36-3 EC: 200-751-6	2,44	Very High	5,39E-2 Pa·m ³ /mol	Yes
Phenol CAS: 108-95-2 EC: 203-632-7	Non-applicable	Non-applicable	Non-applicable	Non-applicable

12.5 Results of PBT and vPvB assessment:

Non-applicable

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Directive 2008/98/EC)
08 04 09*	Waste adhesives and sealants containing organic solvents or other dangerous substances	Dangerous

Waste management (disposal and evaluation):

- CONTINUED ON NEXT PAGE -



SOLDER PRIMER ROJO (A)
Código - 24712 (A)



SECTION 13: DISPOSAL CONSIDERATIONS (continue)

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 (2000/532/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) n°1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2000/532/EC: Commission Decision of 3 May 2000

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to ADR 2013 and RID 2013:

	14.1 UN number:	UN1263
	14.2 UN proper shipping name:	PAINT
	14.3 Transport hazard class(es):	3
	Labels:	3
	14.4 Packing group:	II
	14.5 Dangerous for the environment:	Yes
	14.6 Special precautions for user	
Special regulations:	163, 640D, 650	
Tunnel restriction code:	D/E	
Physico-Chemical properties:	see section 9	
Limited quantities:	5 L	
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:	Non-applicable	

Transport of dangerous goods by sea:

With regard to IMDG 2011:

	14.1 UN number:	UN1263
	14.2 UN proper shipping name:	PAINT
	14.3 Transport hazard class(es):	3
	Labels:	3
	14.4 Packing group:	II
	14.5 Dangerous for the environment:	Yes
	14.6 Special precautions for user	
Special regulations:	163, 944	
EmS Codes:	F-E, S-E	
Physico-Chemical properties:	see section 9	
Limited quantities:	5 L	
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:	Non-applicable	

Transport of dangerous goods by air:

With regard to IATA/ICAO 2013:

- CONTINUED ON NEXT PAGE -



SOLDER PRIMER ROJO (A)
Código - 24712 (A)



SECTION 14: TRANSPORT INFORMATION (continue)



14.1 UN number:	UN1263
14.2 UN proper shipping name:	PAINT
14.3 Transport hazard class(es):	3
Labels:	3
14.4 Packing group:	II
14.5 Dangerous for the environment:	Yes
14.6 Special precautions for user	
Physico-Chemical properties:	see section 9
14.7 Transport in bulk according to Annex II of MARPOL 73/78 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) 1907/2006 (REACH): Non-applicable

Regulation (EC) 1005/2009, about substances that deplete the ozone layer: Non-applicable

Active substances for which a decision of non-inclusion onto Annex I (Regulation (EU) No 528/2012): Non-applicable

Regulation (EC) 689/2008, in relation to the import and export of hazardous chemical products: Non-applicable

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

Contains more than 0,1 % of Toluene by weight. The use of this product is prohibited in adhesives or spray paints for sale 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.

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as data used in a risk evaluation of the local circumstances in order to establish the necessary risk prevention measures for the manipulation, use, storage and disposal of this product.

Other legislation:

Non-applicable

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) N° 1907/2006 (Regulation (EC) N° 453/2010)

Modifications related to the previous security card which concerns the ways of managing risks. :

- CONTINUED ON NEXT PAGE -



SOLDER PRIMER ROJO (A)
Código - 24712 (A)



SECTION 16: OTHER INFORMATION (continue)

Composition/information on ingredients:

- Added Content
Poly(bisphenol A-co-epichlorohydrin) glycidyl end-capped (25036-25-3)
- Removed Content
Bisphenol A diglycidyl ether resin (25068-38-6)

Directive 67/548/EC and Directive 1999/45/EC:

- Supplementary information

Transport information:

- UN number

Text of R-phrases considered in section 3:

Directive 67/548/EC and Directive 1999/45/EC:

- R10: Flammable
- R11: Highly flammable
- R20: Harmful by inhalation
- R20/21: Harmful by inhalation and in contact with skin
- R22: Harmful if swallowed
- R23/24/25: Toxic by inhalation, in contact with skin and if swallowed
- R34: Causes burns
- R36: Irritating to eyes
- R36/38: Irritating to eyes and skin
- R37/38: Irritating to respiratory system and skin
- R38: Irritating to skin
- R41: Risk of serious damage to eyes
- R43: May cause sensitisation by skin contact
- R48/20: Harmful: danger of serious damage to health by prolonged exposure through inhalation
- R48/20/21/22: Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed
- R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
- R63: Possible risk of harm to the unborn child
- R65: Harmful: may cause lung damage if swallowed
- R66: Repeated exposure may cause skin dryness or cracking
- R67: Vapours may cause drowsiness and dizziness
- R68: Possible risk of irreversible effects

CLP Regulation (EC) n° 1272/2008:

- Acute Tox. 3: H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled
- Acute Tox. 4: H302 - Harmful if swallowed.
- Acute Tox. 4: H312+H332 - Harmful in contact with skin or if inhaled
- Acute Tox. 4: H332 - Harmful if inhaled.
- Aquatic Acute 1: H400 - Very toxic to aquatic life.
- Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects.
- 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.
- Muta. 2: H341 - Suspected of causing genetic defects
- Repr. 2: H361d - Suspected to damage the foetus.
- 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
- STOT SE 3: H335 - May cause respiratory irritation.
- STOT SE 3: H336 - May cause drowsiness or dizziness.

Advice related to training:

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

Principal bibliographical sources:

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

Abbreviations and acronyms:

- CONTINUED ON NEXT PAGE -



SOLDER PRIMER ROJO (A)
Código - 24712 (A)



SECTION 16: OTHER INFORMATION (continue)

- 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
- CL50: Lethal Concentration 50
- EC50: Effective concentration 50
- Log-POW: Octanol–water partition coefficient
- Koc: Partition coefficient of organic carbon

The information contained in this security 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 security data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -



SOLDER PRIMER (B)
Código - 24712 (B)



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

- 1.1 Product identifier:** SOLDER PRIMER (B)
Código - 24712 (B)
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
Relevant uses: Anticorrosion primer. For professional use 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.
Bº URIOSTE 64
48530 ORTUUELLA - VIZCAYA - ESPAÑA
Phone.: +34 946 353 143 - Fax: +34 946 641 753
pinturasmarina@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:**
Directive 67/548/EC and Directive 1999/45/EC:
This product was classified in accordance with Directive 67/548/EC and Directive 1999/45/EC, adapting the requirements to Regulation (EC) n°1907/2006 (REACH regulation).
Xi: R37/38 - Irritating to respiratory system and skin, R41 - Risk of serious damage to eyes
Xn: R22 - Harmful if swallowed
R10 - Flammable
R67 - Vapours may cause drowsiness and dizziness
- 2.2 Label elements:**
Directive 67/548/EC and Directive 1999/45/EC:
In accordance with the legislation, the elements on the label are as follows:
- Xn**

Harmful
- R Phrases:**
R10: Flammable
R22: Harmful if swallowed
R37/38: Irritating to respiratory system and skin
R41: Risk of serious damage to eyes
R67: Vapours may cause drowsiness and dizziness
- S Phrases:**
S23: Do not breathe vapour and spray
S24: Avoid contact with skin
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S39: Wear eye/face protection
S43: In case of fire, use polyvalent powder ABC
S51: Use only in well-ventilated areas
- Supplementary information:**
Non-applicable
- Substances that contribute to the classification:**
1-butanol
- 2.3 Other hazards:**
Non-applicable

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical description: Mixture composed of pigments and resins

- CONTINUED ON NEXT PAGE -



SOLDER PRIMER (B)
Código - 24712 (B)



SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continue)

Components:

In accordance with Annex II of Regulation (EC) n°1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification	Concentration	
CAS: 71-36-3 EC: 200-751-6 Index: 603-004-00-6 REACH:01-2119484630-38-XXXX	1-butanol ATP CLP00	50 - <75 %	
	Directive 67/548/EC Xi: R37/38, R41; Xn: R22; R10; R67		
	Regulation 1272/2008 Acute Tox. 4: H302; Eye Dam. 1: H318; Flam. Liq. 3: H226; Skin Irrit. 2: H315; STOT SE 3: H335; STOT SE 3: H336 - Danger		
CAS: 7664-38-2 EC: 231-633-2 Index: 015-011-00-6 REACH:01-2119485924-24-XXXX	Phosphoric Acid ATP CLP00	10 - <25 %	
	Directive 67/548/EC C: R34		
	Regulation 1272/2008 Skin Corr. 1B: H314 - Danger		

To obtain more information on the risk of the substances consult sections 8, 11, 12 and 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the MSDS 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.

By eye contact:

Rinse eyes thoroughly with luke warm 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, as this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the MSDS of the product.

By consumption:

Do not induce vomiting, but if it does happen keep the head up to avoid inhalation. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

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 (CO₂). IT IS RECOMMENDED NOT to use tap water as an extinguishing agent.

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive subproducts 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 individual respiratory equipment. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit, ...) in accordance with Directive 89/654/EC.

Additional provisions:

- CONTINUED ON NEXT PAGE -



SOLDER PRIMER (B)
Código - 24712 (B)



SECTION 5: FIREFIGHTING MEASURES (continue)

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Destroy any source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflammation, 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 inertizing agent. 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:

Product not classified as dangerous for the environment, however it is necessary to avoid spillage as the product is classified as dangerous for health and/or its physicochemical properties.

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:

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. Avoid projections and pulverisations. 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

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

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.

- CONTINUED ON NEXT PAGE -



SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the work environment

Identification	Environmental limits	
	Phosphoric Acid CAS: 7664-38-2 EC: 231-633-2	IOELV (8h)
	IOELV (STEL)	2 mg/m ³
	Year	2012

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
1-butanol CAS: 71-36-3 EC: 200-751-6	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	Non-applicable	310 mg/m ³
Phosphoric Acid CAS: 7664-38-2 EC: 231-633-2	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	2 mg/m ³	Non-applicable	1 mg/m ³

DNEL (Population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
1-butanol CAS: 71-36-3 EC: 200-751-6	Oral	Non-applicable	Non-applicable	3,125 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	Non-applicable	55 mg/m ³
Phosphoric Acid CAS: 7664-38-2 EC: 231-633-2	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	Non-applicable	0,73 mg/m ³

PNEC:



Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
1-butanol CAS: 71-36-3 EC: 200-751-6	STP	2476 mg/L	Fresh water	0,082 mg/L	
	Soil	0,015 mg/kg	Marine water	0,0082 mg/L	
	Intermittent	2,25 mg/L	Sediment (Fresh water)	0,178 mg/kg	
	Oral	Non-applicable	Sediment (Marine water)	0,0178 mg/kg	

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 professional exposure limits. In case of using individual protection equipment they should have the "CE marking" in accordance with Directive 89/686/EC. For more information on Personal Protection Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For additional information see subsection 7.1.

B.- Respiratory protection

LRP Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory respiratory tract protection	Filter mask for gases, vapours and particles		EN 149:2001+A1:2009 EN 405:2001+A1:2009	Replace when an increase in resistance to breathing is observed and/or a smell or taste of the contaminant is detected.

C.- Specific protection for the hands

LRP Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Chemical protective gloves		EN 374-1:2003 EN 374-3:2003/AC:2006 EN 420:2003+A1:2009	Replace the gloves at any sign of deterioration.

D.- Ocular and facial protection

- CONTINUED ON NEXT PAGE -



SOLDER PRIMER (B)
Código - 24712 (B)



SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continue)

LRP Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Panoramic glasses against liquid splash	 CE CAT II	EN 166:2001 EN 172:1994/A1:2000 EN 172:1994/A2:2001 EN 165:2005	Clean daily and disinfect periodically according to the manufacturer's instructions.

E.- Bodily protection

LRP Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory complete body protection	Antistatic and fireproof protective clothing	 CE CAT III	EN 1149-1:2006 EN 1149-2:1997 EN 1149-3:2004 EN 168:2001 EN ISO 14116:2008/AC:2009 EN 1149-5:2008	Limited protection against flames.
 Mandatory foot protection	Safety footwear with antistatic and heat resistant properties	 CE CAT III	EN 13287:2007 EN ISO 20345:2011 EN ISO 20344:2011	Replace boots at any sign of deterioration.

F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2002	 Eyewash stations	DIN 12 899 ISO 3864-1:2002

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

Volatil organic compounds:

With regard to Directive 1999/13/EC, this product has the following characteristics:

V.O.C. (Supply): 73,8 % weight
V.O.C. density at 20 °C: 690,06 kg/m³ (690,06 g/L)
Average carbon number: 4
Average molecular weight: 74,1 g/mol

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
Color: Colourless
Odor: Characteristic

Volatility:

Boiling point at atmospheric pressure: 118 °C
Vapour pressure at 20 °C: 945 Pa
Vapour pressure at 50 °C: 5790 Pa (6 kPa)
Evaporation rate at 20 °C: Non-applicable *

Product description:

Density at 20 °C: 935 kg/m³

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

- CONTINUED ON NEXT PAGE -



SOLDER PRIMER (B)
Código - 24712 (B)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continue)

Relative density at 20 °C:	0,935
Dynamic viscosity at 20 °C:	4,88 cP
Kinematic viscosity at 20 °C:	5,21 cSt
Kinematic viscosity at 40 °C:	>7 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 property:	Non-applicable *
Decomposition temperature:	Non-applicable *

Flammability:

Flash Point:	29 °C
Autoignition temperature:	343 °C
Lower flammability limit:	Not available
Upper flammability limit:	Not available

9.2 Other information:

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 if the following technical instructions storage of chemicals. 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 conditions no hazardous reactions are expected to produce a pressure or excessive temperatures.

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	Combustive materials	Combustible materials	Others
Not applicable	Not applicable	Avoid direct impact	Avoid direct impact	Not applicable

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 (CO₂), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

No experimental information is available on the product itself in relation to the toxicological properties. When performing the danger classification on corrosive or irritant effects the recommendations included in section 3.2.5 of Annex VI of Directive 67/548/EC, in paragraphs b) and c) of section 3 of article 6 of Directive 1999/45/EC and in section 3.2.3.3.5. of Annex I of CLP Regulation were taken into account.

Dangerous health implications:

- CONTINUED ON NEXT PAGE -



SOLDER PRIMER (B)
Código - 24712 (B)



SECTION 11: TOXICOLOGICAL INFORMATION (continue)

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

A.- Ingestion:

The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.

B- Inhalation:

Causes irritation in respiratory passages, which is normally reversible and limited to the upper respiratory passages.

C- Contact with the skin and the eyes:

Produces serious eye damage after contact.

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

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.

E- Sensitizing effects:

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

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

Exposure in high concentrations can cause a breakdown in the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion and in serious cases, loss of concentration.

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

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, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
	LD50 oral	LD50 dermal	
1-butanol	2292 mg/kg		Rat
CAS: 71-36-3		3400 mg/kg	Rabbit
EC: 200-751-6		24,66 mg/L (4 h)	Rat
Phosphoric Acid	3500 mg/kg		Rat
CAS: 7664-38-2	2470 mg/kg		Rabbit
EC: 231-633-2		Non-applicable	

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the ecotoxicological properties of the mixture itself is not available

12.1 Toxicity:

Identification	Acute toxicity		Specie	Genus
	LC50	EC50		
1-butanol	1740 mg/L (96 h)		Pimephales promelas	Fish
CAS: 71-36-3	1983 mg/L (48 h)		Daphnia magna	Crustacean
EC: 200-751-6	500 mg/L (96 h)		Scenedesmus subspicatus	Alga
Phosphoric Acid	Non-applicable			
CAS: 7664-38-2	4,6 mg/L (12 h)		Daphnia magna	Crustacean
EC: 231-633-2	Non-applicable			

12.2 Persistence and degradability:

Identification	Degradability		Biodegradability	
	BOD5	Code	Concentration	Period
1-butanol	1.71 g O2/g			Non-applicable
CAS: 71-36-3	2.46 g O2/g			19 days
EC: 200-751-6	BOD5/COD	0.69	% Biodegradable	98 %

12.3 Bioaccumulative potential:

- CONTINUED ON NEXT PAGE -



SOLDER PRIMER (B)
Código - 24712 (B)



SECTION 12: ECOLOGICAL INFORMATION (continue)

Identification	Bioaccumulation potential	
1-butanol	BCF	1
CAS: 71-36-3	Pow Log	0,88
EC: 200-751-6	Potential	Low

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
1-butanol	Koc	2,44	Henry	5,39E-2 Pa·m ³ /mol
CAS: 71-36-3	Conclusion	Very High	Dry soil	Yes
EC: 200-751-6	Surface tension	25670 N/m (25 °C)	Moist soil	Yes

12.5 Results of PBT and vPvB assessment:

Non-applicable

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Directive 2008/98/EC)
08 04 09*	Waste adhesives and sealants containing organic solvents or other dangerous substances	Dangerous

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 (2000/532/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 recommend disposal down the drain. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) n°1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2000/532/EC: Commission Decision of 3 May 2000

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to ADR 2013 and RID 2013:



- 14.1 UN number:** UN1263
- 14.2 UN proper shipping name:** PAINT
- 14.3 Transport hazard class(es):** 3
- Labels: 3
- 14.4 Packing group:** III
- 14.5 Dangerous for the environment:** No
- 14.6 Special precautions for user**
- Special regulations: 163, 640E, 650
- Tunnel restriction code: D/E
- Physico-Chemical properties: see section 9
- Limited quantities: 5 L
- 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** Non-applicable

Transport of dangerous goods by sea:

With regard to IMDG 2011:

- CONTINUED ON NEXT PAGE -



SOLDER PRIMER (B)
Código - 24712 (B)



SECTION 14: TRANSPORT INFORMATION (continue)



14.1 UN number:	UN1263
14.2 UN proper shipping name:	PAINT
14.3 Transport hazard class(es):	3
Labels:	3
14.4 Packing group:	III
14.5 Dangerous for the environment:	No
14.6 Special precautions for user	
Special regulations:	163, 223, 944, 955
EmS Codes:	F-E, S-E
Physico-Chemical properties:	see section 9
Limited quantities:	5 L
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:	Non-applicable

Transport of dangerous goods by air:

With regard to IATA/ICAO 2013:



14.1 UN number:	UN1263
14.2 UN proper shipping name:	PAINT
14.3 Transport hazard class(es):	3
Labels:	3
14.4 Packing group:	III
14.5 Dangerous for the environment:	No
14.6 Special precautions for user	
Physico-Chemical properties:	see section 9
14.7 Transport in bulk according to Annex II of MARPOL 73/78 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) 1907/2006 (REACH): Non-applicable

Regulation (EC) 1005/2009, about substances that deplete the ozone layer: Non-applicable

Active substances for which a decision of non-inclusion onto Annex I (Regulation (EU) No 528/2012): Non-applicable

Regulation (EC) 689/2008, in relation to the import and export of hazardous chemical products: Non-applicable

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

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.

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as data used in a risk evaluation of the local circumstances in order to establish the necessary risk prevention measures for the manipulation, use, storage and disposal of this product.

Other legislation:

Non-applicable

- CONTINUED ON NEXT PAGE -



SOLDER PRIMER (B)
Código - 24712 (B)



SECTION 15: REGULATORY INFORMATION (continue)

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) N° 1907/2006 (Regulation (EC) N° 453/2010)

Modifications related to the previous security card which concerns the ways of managing risks. :

Transport information:

- UN number

Text of R-phrases considered in section 3:

Directive 67/548/EC and Directive 1999/45/EC:

- R10: Flammable
- R22: Harmful if swallowed
- R34: Causes burns
- R37/38: Irritating to respiratory system and skin
- R41: Risk of serious damage to eyes
- R67: Vapours may cause drowsiness and dizziness

CLP Regulation (EC) n° 1272/2008:

- Acute Tox. 4: H302 - Harmful if swallowed.
- Eye Dam. 1: H318 - Causes serious eye damage.
- Flam. Liq. 3: H226 - Flammable liquid and vapour.
- Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.
- Skin Irrit. 2: H315 - Causes skin irritation.
- STOT SE 3: H335 - May cause respiratory irritation.
- STOT SE 3: H336 - May cause drowsiness or dizziness.

Advice related to training:

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

Principal bibliographical sources:

- <http://esis.jrc.ec.europa.eu>
- <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
- CL50: Lethal Concentration 50
- EC50: Effective concentration 50
- Log-POW: Octanol–water partition coefficient
- Koc: Partition coefficient of organic carbon

The information contained in this security 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 security data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -