



**MARTELE**  
**Solvent based Mixing System Products**

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

- 1.1 Product identifier:** MARTELE  
Solvent based Mixing System Products
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**  
Relevant uses: Liquid paint. For 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:**  
BERNARDO ECENARRO, S.A.  
Ugarte Industrialdea, 147  
20720 Azkoitia - Gipuzkoa - Spain  
Phone.: +34 943 74 28 00 -  
Fax: +34 943 74 06 03  
msds@besa.es  
http://www.besa.es
- 1.4 Emergency telephone number:** +34 943742800 (8:00-13:00) (14:30-17:30)

**SECTION 2: HAZARDS IDENTIFICATION**

- 2.1 Classification of the substance or mixture:**  
**CLP Regulation (EC) n° 1272/2008:**  
Classification of this product has been carried out in accordance with CLP Regulation (EC) n° 1272/2008.  
Eye Irrit. 2: Eye irritation, Category 2, H319  
Flam. Liq. 2: Flammable liquids, Category 2, H225  
Skin Irrit. 2: Skin irritation, Category 2, H315  
Skin Sens. 1A: Sensitisation, skin, Category 1A, H317
- 2.2 Label elements:**  
**CLP Regulation (EC) n° 1272/2008:**  
**Danger**
-  
- Hazard statements:**  
Eye Irrit. 2: H319 - Causes serious eye irritation  
Flam. Liq. 2: H225 - Highly flammable liquid and vapour  
Skin Irrit. 2: H315 - Causes skin irritation  
Skin Sens. 1A: H317 - May cause an allergic skin reaction
- Precautionary statements:**  
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking  
P280: Wear protective gloves/protective clothing/eye protection/face protection  
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/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  
P370+P378: In case of fire: Use ABC powder extinguisher to extinguish.  
P501: Dispose of the contents/containers in accordance with the current legislation on waste treatment
- Supplementary information:**  
EUH208: Contains Butanone oxime. May produce an allergic reaction
- Substances that contribute to the classification**  
Resin acids and Rosin acids, maleated, esters with glycerol; Cobalt bis(2-ethylhexanoate)
- 2.3 Other hazards:**  
Non-applicable

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

- 3.1 Substance:**

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**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)**

Non-applicable

**3.2 Mixture:**

**Chemical description:** Mixture composed of additives, aggregates, pigments, plasticizers and resins in solvents

**Components:**

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

Identification	Chemical name/Classification	Concentration
CAS: 1330-20-7 EC: 215-535-7 Index: 601-022-00-9 REACH: 01-2119488216-32-XXXX	<b>Xylene (mixture of isomers)</b> Regulation 1272/2008 Acute Tox. 4: H312+H332; Flam. Liq. 3: H226; Skin Irrit. 2: H315 - Warning	ATP CLP00 25 - <50 %
CAS: 94581-16-5 EC: 305-515-7 Index: Non-applicable REACH: Non-applicable	<b>Resin acids and Rosin acids, maleated, esters with glycerol</b> Regulation 1272/2008 Eye Irrit. 2: H319; Skin Sens. 1: H317 - Warning	Self-classified 10 - <25 %
CAS: 100-41-4 EC: 202-849-4 Index: 601-023-00-4 REACH: 01-2119489370-35-XXXX	<b>Ethylbenzene</b> Regulation 1272/2008 Acute Tox. 4: H332; Asp. Tox. 1: H304; Flam. Liq. 2: H225; STOT RE 2: H373 - Danger	ATP ATP06 5 - <10 %
CAS: 108-88-3 EC: 203-625-9 Index: 601-021-00-3 REACH: 01-2119471310-51-XXXX	<b>Toluene</b> 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	ATP CLP00 1 - <2,5 %
CAS: 67-63-0 EC: 200-661-7 Index: 603-117-00-0 REACH: 01-2119457558-25-XXXX	<b>Propan-2-ol</b> Regulation 1272/2008 Eye Irrit. 2: H319; Flam. Liq. 2: H225; STOT SE 3: H336 - Danger	ATP CLP00 1 - <2,5 %
CAS: 7429-90-5 EC: 231-072-3 Index: 013-002-00-1 REACH: 01-2119529243-45-XXXX	<b>Aluminium powder (stabilised)</b> Regulation 1272/2008 Flam. Sol. 1: H228; Water-react. 2: H261 - Danger	ATP ATP01 1 - <2,5 %
CAS: 110-19-0 EC: 203-745-1 Index: 607-026-00-7 REACH: 01-2119488971-22-XXXX	<b>Isobutyl Acetate</b> Regulation 1272/2008 Flam. Liq. 2: H225 - Danger	ATP CLP00 0,25 - <0,5 %
CAS: 96-29-7 EC: 202-496-6 Index: 616-014-00-0 REACH: 01-2119539477-28-XXXX	<b>Butanone oxime</b> Regulation 1272/2008 Acute Tox. 4: H312; Carc. 2: H351; Eye Dam. 1: H318; Skin Sens. 1: H317 - Danger	ATP CLP00 0,2 - <0,25 %
CAS: 22464-99-9 EC: 245-018-1 Index: Non-applicable REACH: 01-2119979088-21-XXXX	<b>2-ethylhexanoic acid, zirconium salt</b> Regulation 1272/2008 Repr. 2: H361d - Warning	Self-classified <0,2 %
CAS: 136-52-7 EC: 205-250-6 Index: Non-applicable REACH: 01-2119524678-29-XXXX	<b>Cobalt bis(2-ethylhexanoate)</b> Regulation 1272/2008 Aquatic Acute 1: H400; Aquatic Chronic 3: H412; Eye Irrit. 2: H319; Repr. 2: H361; Skin Sens. 1A: H317 - Warning	Self-classified <0,2 %
CAS: 34590-94-8 EC: 252-104-2 Index: Non-applicable REACH: 01-2119450011-60-XXXX	<b>Dipropylene Glycol Methyl Ether</b> Regulation 1272/2008	Not classified <0,2 %
CAS: 111-76-2 EC: 203-905-0 Index: 603-014-00-0 REACH: 01-2119475108-36-XXXX	<b>2-butoxyethanol</b> Regulation 1272/2008 Acute Tox. 4: H302+H312+H332; Eye Irrit. 2: H319; Skin Irrit. 2: H315 - Warning	ATP CLP00 <0,2 %
CAS: 108-65-6 EC: 203-603-9 Index: 607-195-00-7 REACH: 01-2119475791-29-XXXX	<b>2-methoxy-1-methylethyl acetate</b> Regulation 1272/2008 Flam. Liq. 3: H226 - Warning	ATP ATP01 <0,2 %
CAS: 123-86-4 EC: 204-658-1 Index: 607-025-00-1 REACH: 01-2119485493-29-XXXX	<b>Butyl Acetate</b> Regulation 1272/2008 Flam. Liq. 3: H226; STOT SE 3: H336 - Warning	ATP CLP00 <0,2 %

To obtain more information on the risk of the substances consult sections 8, 11, 12, 15 and 16.

**Other information:**

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**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)**

Identification	Specific concentration limit
Aluminium powder (stabilised) CAS: 7429-90-5 EC: 231-072-3	% (w/w) >=50: Flam. Sol. 1 - H228 % (w/w) >=40: Water-react. 2 - H261

**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 SDS of this product.

**By inhalation:**

This product is not classified as hazardous through inhalation, however, it is recommended in case of intoxication symptoms to remove the person affected from the area of exposure, provide clean air and keep at rest. Request medical attention if symptoms persist.

**By skin contact:**

This product is not classified as hazardous when in contact with the skin. However, in case of skin contact it is recommended to remove contaminated clothes and shoes, rinse the skin or shower the person affected if necessary thoroughly with cold water and neutral soap. In case of serious reaction consult a doctor.

**By eye contact:**

Rinse eyes thoroughly with water for at least 15 minutes. 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 SDS of the product.

**By ingestion/aspiration:**

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. 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 (CO<sub>2</sub>). IT IS RECOMMENDED NOT to use tap water as an extinguishing agent.

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

Contains substances that react with water producing extremely flammable gases.

**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 inertization 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.

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**SECTION 6: ACCIDENTAL RELEASE MEASURES (continued)**

**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:**

DO NOT USE WATER TO CLEAN.

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. 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. 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 work environment

Identification	Environmental limits		
	IOELV (8h)	50 ppm	221 mg/m <sup>3</sup>
Xylene (mixture of isomers) CAS: 1330-20-7 EC: 215-535-7	IOELV (STEL)	100 ppm	442 mg/m <sup>3</sup>
	Year	2015	
	IOELV (8h)	100 ppm	442 mg/m <sup>3</sup>
Ethylbenzene CAS: 100-41-4 EC: 202-849-4	IOELV (STEL)	200 ppm	884 mg/m <sup>3</sup>
	Year	2015	
	IOELV (8h)	20 ppm	98 mg/m <sup>3</sup>
2-butoxyethanol CAS: 111-76-2	IOELV (STEL)	50 ppm	246 mg/m <sup>3</sup>

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

Identification		Environmental limits	
EC: 203-905-0	Year	2015	
2-methoxy-1-methylethyl acetate	IOELV (8h)	50 ppm	275 mg/m <sup>3</sup>
CAS: 108-65-6	IOELV (STEL)	100 ppm	550 mg/m <sup>3</sup>
EC: 203-603-9	Year	2015	
Dipropylene Glycol Methyl Ether	IOELV (8h)	50 ppm	308 mg/m <sup>3</sup>
CAS: 34590-94-8	IOELV (STEL)		
EC: 252-104-2	Year	2015	
Toluene	IOELV (8h)	50 ppm	192 mg/m <sup>3</sup>
CAS: 108-88-3	IOELV (STEL)	100 ppm	384 mg/m <sup>3</sup>
EC: 203-625-9	Year	2015	

**DNEL (Workers):**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
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 <sup>3</sup>	289 mg/m <sup>3</sup>	77 mg/m <sup>3</sup>	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 <sup>3</sup>	77 mg/m <sup>3</sup>	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 <sup>3</sup>	384 mg/m <sup>3</sup>	192 mg/m <sup>3</sup>	192 mg/m <sup>3</sup>
Propan-2-ol CAS: 67-63-0 EC: 200-661-7	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	888 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	500 mg/m <sup>3</sup>	Non-applicable
Aluminium powder (stabilised) CAS: 7429-90-5 EC: 231-072-3	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	3.72 mg/m <sup>3</sup>
Isobutyl Acetate CAS: 110-19-0 EC: 203-745-1	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	960 mg/m <sup>3</sup>	960 mg/m <sup>3</sup>	480 mg/m <sup>3</sup>	480 mg/m <sup>3</sup>
Butanone oxime CAS: 96-29-7 EC: 202-496-6	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	2.5 mg/kg	Non-applicable	1.3 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	9 mg/m <sup>3</sup>	3.33 mg/m <sup>3</sup>
2-ethylhexanoic acid, zirconium salt CAS: 22464-99-9 EC: 245-018-1	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	15.75 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	5 mg/m <sup>3</sup>	Non-applicable
Cobalt bis(2-ethylhexanoate) CAS: 136-52-7 EC: 205-250-6	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	0.2351 mg/m <sup>3</sup>
Dipropylene Glycol Methyl Ether CAS: 34590-94-8 EC: 252-104-2	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	65 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	310 mg/m <sup>3</sup>	Non-applicable
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	89 mg/kg	Non-applicable	75 mg/kg	Non-applicable
	Inhalation	663 mg/m <sup>3</sup>	246 mg/m <sup>3</sup>	98 mg/m <sup>3</sup>	Non-applicable
2-methoxy-1-methylethyl acetate CAS: 108-65-6 EC: 203-603-9	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	153.5 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	275 mg/m <sup>3</sup>	Non-applicable
Butyl Acetate CAS: 123-86-4 EC: 204-658-1	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	960 mg/m <sup>3</sup>	960 mg/m <sup>3</sup>	480 mg/m <sup>3</sup>	480 mg/m <sup>3</sup>

**DNEL (General population):**

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

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
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 <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
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>
Propan-2-ol CAS: 67-63-0 EC: 200-661-7	Oral	Non-applicable	Non-applicable	26 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	319 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	89 mg/m <sup>3</sup>	Non-applicable
Aluminium powder (stabilised) CAS: 7429-90-5 EC: 231-072-3	Oral	Non-applicable	Non-applicable	3.95 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	Non-applicable	Non-applicable
Isobutyl Acetate CAS: 110-19-0 EC: 203-745-1	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	859.7 mg/m <sup>3</sup>	859.7 mg/m <sup>3</sup>	102.34 mg/m <sup>3</sup>	102.34 mg/m <sup>3</sup>
Butanone oxime CAS: 96-29-7 EC: 202-496-6	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	1.5 mg/kg	Non-applicable	0.78 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	2.7 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>
2-ethylhexanoic acid, zirconium salt CAS: 22464-99-9 EC: 245-018-1	Oral	Non-applicable	Non-applicable	7.9 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	7.9 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	2.5 mg/m <sup>3</sup>	Non-applicable
Cobalt bis(2-ethylhexanoate) CAS: 136-52-7 EC: 205-250-6	Oral	Non-applicable	Non-applicable	0.0558 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	Non-applicable	0.037 mg/m <sup>3</sup>
Dipropylene Glycol Methyl Ether CAS: 34590-94-8 EC: 252-104-2	Oral	Non-applicable	Non-applicable	1.67 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	15 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	37.2 mg/m <sup>3</sup>	Non-applicable
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	Oral	13.4 mg/kg	Non-applicable	3.2 mg/kg	Non-applicable
	Dermal	44.5 mg/kg	Non-applicable	38 mg/kg	Non-applicable
	Inhalation	426 mg/m <sup>3</sup>	123 mg/m <sup>3</sup>	49 mg/m <sup>3</sup>	Non-applicable
2-methoxy-1-methylethyl acetate CAS: 108-65-6 EC: 203-603-9	Oral	Non-applicable	Non-applicable	1.67 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	54.8 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	33 mg/m <sup>3</sup>	Non-applicable
Butyl Acetate CAS: 123-86-4 EC: 204-658-1	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	859.7 mg/m <sup>3</sup>	859.7 mg/m <sup>3</sup>	102.34 mg/m <sup>3</sup>	102.34 mg/m <sup>3</sup>

**PNEC:**

Identification				
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
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)**

Identification				
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
Propan-2-ol CAS: 67-63-0 EC: 200-661-7	STP	2251 mg/L	Fresh water	140.9 mg/L
	Soil	28 mg/kg	Marine water	140.9 mg/L
	Intermittent	140.9 mg/L	Sediment (Fresh water)	552 mg/kg
	Oral	160 g/kg	Sediment (Marine water)	552 mg/kg
Aluminium powder (stabilised) CAS: 7429-90-5 EC: 231-072-3	STP	20 mg/L	Fresh water	Non-applicable
	Soil	Non-applicable	Marine water	Non-applicable
	Intermittent	Non-applicable	Sediment (Fresh water)	Non-applicable
	Oral	Non-applicable	Sediment (Marine water)	Non-applicable
Isobutyl Acetate CAS: 110-19-0 EC: 203-745-1	STP	200 mg/L	Fresh water	0.17 mg/L
	Soil	0.0755 mg/kg	Marine water	0.017 mg/L
	Intermittent	0.34 mg/L	Sediment (Fresh water)	0.877 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0.0877 mg/kg
Butanone oxime CAS: 96-29-7 EC: 202-496-6	STP	177 mg/L	Fresh water	0.256 mg/L
	Soil	Non-applicable	Marine water	Non-applicable
	Intermittent	0.118 mg/L	Sediment (Fresh water)	Non-applicable
	Oral	Non-applicable	Sediment (Marine water)	Non-applicable
2-ethylhexanoic acid, zirconium salt CAS: 22464-99-9 EC: 245-018-1	STP	71.7 mg/L	Fresh water	0.36 mg/L
	Soil	1.06 mg/kg	Marine water	0.036 mg/L
	Intermittent	0.493 mg/L	Sediment (Fresh water)	6.37 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0.637 mg/kg
Cobalt bis(2-ethylhexanoate) CAS: 136-52-7 EC: 205-250-6	STP	0.37 mg/L	Fresh water	0.00051 mg/L
	Soil	7.9 mg/kg	Marine water	0.00236 mg/L
	Intermittent	Non-applicable	Sediment (Fresh water)	9.5 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	9.5 mg/kg
Dipropylene Glycol Methyl Ether CAS: 34590-94-8 EC: 252-104-2	STP	4168 mg/L	Fresh water	19 mg/L
	Soil	2.74 mg/kg	Marine water	1.9 mg/L
	Intermittent	190 mg/L	Sediment (Fresh water)	70.2 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	7.02 mg/kg
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	STP	463 mg/L	Fresh water	8.8 mg/L
	Soil	3.13 mg/kg	Marine water	0.88 mg/L
	Intermittent	9.1 mg/L	Sediment (Fresh water)	34.6 mg/kg
	Oral	20 g/kg	Sediment (Marine water)	Non-applicable
2-methoxy-1-methylethyl acetate CAS: 108-65-6 EC: 203-603-9	STP	100 mg/L	Fresh water	0.635 mg/L
	Soil	0.29 mg/kg	Marine water	0.0635 mg/L
	Intermittent	6.35 mg/L	Sediment (Fresh water)	3.29 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0.329 mg/kg
Butyl Acetate CAS: 123-86-4 EC: 204-658-1	STP	35.6 mg/L	Fresh water	0.18 mg/L
	Soil	0.0903 mg/kg	Marine water	0.018 mg/L
	Intermittent	0.36 mg/L	Sediment (Fresh water)	0.981 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0.0981 mg/kg

**8.2 Exposure controls:**

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

As a preventative measure it is recommended to use basic Personal Protection Equipment, with the corresponding <<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 more 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**



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

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

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Protective gloves against minor risks			Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN 420 and EN 374.

D.- Ocular and facial protection



Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Panoramic glasses against liquid splash		EN 166:2001 EN ISO 4007:2012	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

E.- Bodily protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory complete body protection	Antistatic and fireproof protective clothing		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		EN 13287:2008 EN ISO 20345:2011	Replace boots at any sign of deterioration.

F.- Additional emergency measures

It is not necessary to take 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

**Volatile organic compounds:**

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

V.O.C. (Supply):	45 % weight
V.O.C. density at 20 °C:	461.25 kg/m <sup>3</sup> (461.25 g/L)
Average carbon number:	7.79
Average molecular weight:	105.16 g/mol

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

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

\*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)**

For complete information see the product datasheet.

**Appearance:**

Physical state at 20 °C:	Liquid
Appearance:	Viscous
Color:	Tintometric system
Odor:	Aromatic

**Volatility:**

Boiling point at atmospheric pressure:	133 °C
Vapour pressure at 20 °C:	1231 Pa
Vapour pressure at 50 °C:	6223 Pa (6 kPa)
Evaporation rate at 20 °C:	Non-applicable *

**Product description:**

Density at 20 °C:	1000 - 1050 kg/m <sup>3</sup>
Relative density at 20 °C:	1 - 1.05
Dynamic viscosity at 20 °C:	312 - 362 cP
Kinematic viscosity at 20 °C:	329 cSt
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:	Immiscible
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *

**Flammability:**

Flash Point:	21 - 23 °C
Autoignition temperature:	200 °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 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:**

- CONTINUED ON NEXT PAGE -

**MARTELE**  
**Solvent based Mixing System Products**

**SECTION 10: STABILITY AND REACTIVITY (continued)**

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	Precaution

**10.5 Incompatible materials:**

Acids	Water	Combustive materials	Combustible materials	Others
Avoid strong acids	Precaution	Avoid direct impact	Not applicable	Avoid alkalis or strong bases. Can react violently

**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. With possibility of effects that are hazardous to the health, it is recommended not to breathe the vapours for long periods of time.

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

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: 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.

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

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

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

- Carcinogenicity: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous with carcinogenic effects. For more information see section 3.
- 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: 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.

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:

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:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, however, it does contain substances which are classified as dangerous due to repetitive exposure. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, however, it does contain substances which are classified as dangerous due to repetitive exposure. For more information see section 3.

H- Aspiration hazard:

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**MARTELE**  
**Solvent based Mixing System Products**

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

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
Xylene (mixture of isomers) CAS: 1330-20-7 EC: 215-535-7	LD50 oral	2100 mg/kg	Rat
	LD50 dermal	1100 mg/kg (ATEi)	Rat
	LC50 inhalation	11 mg/L (4 h) (ATEi)	
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
Propan-2-ol CAS: 67-63-0 EC: 200-661-7	LD50 oral	5280 mg/kg	Rat
	LD50 dermal	12800 mg/kg	Rat
	LC50 inhalation	72.6 mg/L (4 h)	Rat
Aluminium powder (stabilised) CAS: 7429-90-5 EC: 231-072-3	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>5 mg/L (4 h)	
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
Resin acids and Rosin acids, maleated, esters with glycerol CAS: 94581-16-5 EC: 305-515-7	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>5 mg/L (4 h)	
Isobutyl Acetate CAS: 110-19-0 EC: 203-745-1	LD50 oral	13413 mg/kg	Rat
	LD50 dermal	17400 mg/kg	Rabbit
	LC50 inhalation	>20 mg/L	
Butanone oxime CAS: 96-29-7 EC: 202-496-6	LD50 oral	2100 mg/kg	Rat
	LD50 dermal	1100 mg/kg	Rat
	LC50 inhalation	>20 mg/L	
2-ethylhexanoic acid, zirconium salt CAS: 22464-99-9 EC: 245-018-1	LD50 oral	2043 mg/kg	Rat
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>5 mg/L	
Cobalt bis(2-ethylhexanoate) CAS: 136-52-7 EC: 205-250-6	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>5 mg/L	
Dipropylene Glycol Methyl Ether CAS: 34590-94-8 EC: 252-104-2	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	>20 mg/L	
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	LD50 oral	500 mg/kg	Rat
	LD50 dermal	1100 mg/kg	Rat
	LC50 inhalation	11 mg/L (4 h)	Rat
2-methoxy-1-methylethyl acetate CAS: 108-65-6 EC: 203-603-9	LD50 oral	8532 mg/kg	Rat
	LD50 dermal	5100 mg/kg	Rat
	LC50 inhalation	30 mg/L (4 h)	Rat
Butyl Acetate CAS: 123-86-4 EC: 204-658-1	LD50 oral	12789 mg/kg	Rat
	LD50 dermal	14112 mg/kg	Rabbit
	LC50 inhalation	23.4 mg/L (4 h)	Rat

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

	ATE mix	Ingredient(s) of unknown toxicity
Oral	>2000 mg/kg (Calculation method)	Non-applicable
Dermal	3381.74 mg/kg (Calculation method)	0 %
Inhalation	30.36 mg/L (4 h) (Calculation method)	0 %

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**MARTELE**  
**Solvent based Mixing System Products**

**SECTION 12: ECOLOGICAL INFORMATION**

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

**12.1 Toxicity:**

Identification		Acute toxicity	Species	Genus
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	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
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
Propan-2-ol CAS: 67-63-0 EC: 200-661-7	LC50	9640 mg/L (96 h)	Pimephales promelas	Fish
	EC50	13299 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	1000 mg/L (72 h)	Scenedesmus subspicatus	Algae
Isobutyl Acetate CAS: 110-19-0 EC: 203-745-1	LC50	120 mg/L (48 h)	Leuciscus idus	Fish
	EC50	168 mg/L (24 h)	Daphnia magna	Crustacean
	EC50	80 mg/L (8 h)	Scenedesmus quadricauda	Algae
Butanone oxime CAS: 96-29-7 EC: 202-496-6	LC50	843 mg/L (96 h)	Pimephales promelas	Fish
	EC50	750 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	83 mg/L (72 h)	Scenedesmus subspicatus	Algae
2-ethylhexanoic acid, zirconium salt CAS: 22464-99-9 EC: 245-018-1	LC50	270 mg/L (96 h)	N/A	Fish
	EC50	Non-applicable		
	EC50	Non-applicable		
Cobalt bis(2-ethylhexanoate) CAS: 136-52-7 EC: 205-250-6	LC50	0.1 - 1 mg/L (96 h)		Fish
	EC50	0.1 - 1 mg/L		Crustacean
	EC50	0.1 - 1 mg/L		Algae
Dipropylene Glycol Methyl Ether CAS: 34590-94-8 EC: 252-104-2	LC50	10000 mg/L (96 h)	Pimephales promelas	Fish
	EC50	1919 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	Non-applicable		
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	LC50	1490 mg/L (96 h)	Lepomis macrochirus	Fish
	EC50	1815 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	911 mg/L (72 h)	Pseudokirchneriella subcapitata	Algae
2-methoxy-1-methylethyl acetate CAS: 108-65-6 EC: 203-603-9	LC50	161 mg/L (96 h)	Pimephales promelas	Fish
	EC50	481 mg/L (48 h)	Daphnia sp.	Crustacean
	EC50	Non-applicable		
Butyl Acetate CAS: 123-86-4 EC: 204-658-1	LC50	62 mg/L (96 h)	Leuciscus idus	Fish
	EC50	73 mg/L (24 h)	Daphnia magna	Crustacean
	EC50	675 mg/L (72 h)	Scenedesmus subspicatus	Algae

**12.2 Persistence and degradability:**

Identification		Degradability		Biodegradability	
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 %	
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 %	
Propan-2-ol CAS: 67-63-0 EC: 200-661-7	BOD5	1.19 g O2/g	Concentration	100 mg/L	
	COD	2.23 g O2/g	Period	14 days	
	BOD5/COD	0.53	% Biodegradable	86 %	
Isobutyl Acetate CAS: 110-19-0 EC: 203-745-1	BOD5	Non-applicable	Concentration	Non-applicable	
	COD	Non-applicable	Period	20 days	
	BOD5/COD	Non-applicable	% Biodegradable	81 %	

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**MARTELE**  
**Solvent based Mixing System Products**

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

Identification	Degradability		Biodegradability	
Butanone oxime CAS: 96-29-7 EC: 202-496-6	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	24 %
2-ethylhexanoic acid, zirconium salt CAS: 22464-99-9 EC: 245-018-1	BOD5	Non-applicable	Concentration	20 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	99 %
Dipropylene Glycol Methyl Ether CAS: 34590-94-8 EC: 252-104-2	BOD5	Non-applicable	Concentration	Non-applicable
	COD	0.00202 g O2/g	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	73 %
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	BOD5	0.71 g O2/g	Concentration	100 mg/L
	COD	2.2 g O2/g	Period	14 days
	BOD5/COD	0.32	% Biodegradable	96 %
2-methoxy-1-methylethyl acetate CAS: 108-65-6 EC: 203-603-9	BOD5	Non-applicable	Concentration	785 mg/L
	COD	Non-applicable	Period	8 days
	BOD5/COD	Non-applicable	% Biodegradable	100 %
Butyl Acetate CAS: 123-86-4 EC: 204-658-1	BOD5	Non-applicable	Concentration	Non-applicable
	COD	Non-applicable	Period	5 days
	BOD5/COD	0.79	% Biodegradable	84 %

**12.3 Bioaccumulative potential:**

Identification	Bioaccumulation potential	
Xylene (mixture of isomers) 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
Toluene CAS: 108-88-3 EC: 203-625-9	BCF	13
	Pow Log	2.73
	Potential	Low
Propan-2-ol CAS: 67-63-0 EC: 200-661-7	BCF	3
	Pow Log	0.05
	Potential	Low
Isobutyl Acetate CAS: 110-19-0 EC: 203-745-1	BCF	10
	Pow Log	1.78
	Potential	Low
Butanone oxime CAS: 96-29-7 EC: 202-496-6	BCF	5
	Pow Log	0.59
	Potential	Low
2-ethylhexanoic acid, zirconium salt CAS: 22464-99-9 EC: 245-018-1	BCF	
	Pow Log	2.96
	Potential	
Dipropylene Glycol Methyl Ether CAS: 34590-94-8 EC: 252-104-2	BCF	1
	Pow Log	-0.06
	Potential	Low
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	BCF	3
	Pow Log	0.83
	Potential	Low
2-methoxy-1-methylethyl acetate CAS: 108-65-6 EC: 203-603-9	BCF	1
	Pow Log	0.43
	Potential	Low
Butyl Acetate CAS: 123-86-4 EC: 204-658-1	BCF	4
	Pow Log	1.78
	Potential	Low

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

**12.4 Mobility in soil:**

Identification	Absorption/desorption			Volatility
Xylene (mixture of isomers) CAS: 1330-20-7 EC: 215-535-7	Koc	202	Henry	5.249E+2 Pa·m <sup>3</sup> /mol
	Conclusion	Moderate	Dry soil	Yes
	Surface tension	Non-applicable	Moist soil	Yes
Ethylbenzene CAS: 100-41-4 EC: 202-849-4	Koc	520	Henry	7.984E+2 Pa·m <sup>3</sup> /mol
	Conclusion	Moderate	Dry soil	Yes
	Surface tension	2.859E-2 N/m (25 °C)	Moist soil	Yes
Toluene CAS: 108-88-3 EC: 203-625-9	Koc	178	Henry	6.728E+2 Pa·m <sup>3</sup> /mol
	Conclusion	Moderate	Dry soil	Yes
	Surface tension	2.793E-2 N/m (25 °C)	Moist soil	Yes
Propan-2-ol CAS: 67-63-0 EC: 200-661-7	Koc	1.5	Henry	8.207E-1 Pa·m <sup>3</sup> /mol
	Conclusion	Very High	Dry soil	Yes
	Surface tension	2.24E-2 N/m (25 °C)	Moist soil	Yes
Isobutyl Acetate CAS: 110-19-0 EC: 203-745-1	Koc	Non-applicable	Henry	Non-applicable
	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	2.297E-2 N/m (25 °C)	Moist soil	Non-applicable
Butanone oxime CAS: 96-29-7 EC: 202-496-6	Koc	3	Henry	Non-applicable
	Conclusion	Very High	Dry soil	Non-applicable
	Surface tension	2.57E-2 N/m (25 °C)	Moist soil	Non-applicable
2-ethylhexanoic acid, zirconium salt CAS: 22464-99-9 EC: 245-018-1	Koc	Non-applicable	Henry	2.94E-1 Pa·m <sup>3</sup> /mol
	Conclusion	Non-applicable	Dry soil	Yes
	Surface tension	Non-applicable	Moist soil	Yes
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	Koc	8	Henry	1.621E-1 Pa·m <sup>3</sup> /mol
	Conclusion	Very High	Dry soil	No
	Surface tension	2.729E-2 N/m (25 °C)	Moist soil	Yes
Butyl Acetate CAS: 123-86-4 EC: 204-658-1	Koc	Non-applicable	Henry	Non-applicable
	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	2.478E-2 N/m (25 °C)	Moist soil	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 (Regulation (EU) No 1357/2014)
08 01 11*	Waste paint and varnish containing organic solvents or other dangerous substances	Dangerous

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

HP3 Flammable, HP4 Irritant — skin irritation and eye damage, HP6 Acute Toxicity, HP13 Sensitising

**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) n°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

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**MARTELE**  
**Solvent based Mixing System Products**

**SECTION 14: TRANSPORT INFORMATION**

**Transport of dangerous goods by land:**

With regard to ADR 2015 and RID 2015:



- |   |                |
|---|----------------|
| <b>14.1 UN number:</b>  | UN1263         |
| <b>14.2 UN proper shipping name:</b>  | PAINT          |
| <b>14.3 Transport hazard class(es):</b>   | 3              |
| Labels:   | 3              |
| <b>14.4 Packing group:</b>  | III            |
| <b>14.5 Dangerous for the environment:</b>                                      | No             |
| <b>14.6 Special precautions for user</b>  |                |
| Special regulations:  | 163, 367, 650  |
| Tunnel restriction code:  | D/E            |
| Physico-Chemical properties:  | see section 9  |
| Limited quantities:   | 5 L            |
| <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:</b> | Non-applicable |

**Transport of dangerous goods by sea:**

With regard to IMDG 37-14:



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

**Transport of dangerous goods by air:**

With regard to IATA/ICAO 2015:



- |   |                |
|---|----------------|
| <b>14.1 UN number:</b>  | UN1263         |
| <b>14.2 UN proper shipping name:</b>  | PAINT          |
| <b>14.3 Transport hazard class(es):</b>   | 3              |
| Labels:   | 3              |
| <b>14.4 Packing group:</b>  | III            |
| <b>14.5 Dangerous for the environment:</b>                                      | No             |
| <b>14.6 Special precautions for user</b>  |                |
| Physico-Chemical properties:  | see section 9  |
| <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:</b> | 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  
Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

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

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

Article 95, REGULATION (EU) No 528/2012: Propan-2-ol (Product-type 1, 2, 4)

REGULATION (EU) No 649/2012, 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, etc ....):**

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:**

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) N° 1907/2006 (Regulation (EU) N° 453/2010, Regulation (EC) N° 2015/830)

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

COMPOSITION/INFORMATION ON INGREDIENTS:

- Removed Content
- Methanol (67-56-1)

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

H315: Causes skin irritation  
H317: May cause an allergic skin reaction  
H225: Highly flammable liquid and vapour  
H319: Causes serious eye irritation

**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) n° 1272/2008:**

- CONTINUED ON NEXT PAGE -



**MARTELE**  
**Solvent based Mixing System Products**

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

Acute Tox. 4: H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled  
Acute Tox. 4: H312 - Harmful in contact with skin  
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 3: H412 - Harmful to aquatic life with long lasting effects  
Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways  
Carc. 2: H351 - Suspected of causing cancer  
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  
Flam. Sol. 1: H228 - Flammable solid  
Repr. 2: H361 - Suspected of damaging fertility or the unborn child  
Repr. 2: H361d - Suspected of damaging the unborn child.  
Skin Irrit. 2: H315 - Causes skin irritation  
Skin Sens. 1: H317 - May cause an allergic skin reaction  
Skin Sens. 1A: 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  
Water-react. 2: H261 - In contact with water releases flammable gases

**Classification procedure:**

Skin Irrit. 2: Calculation method  
Skin Sens. 1A: Calculation method  
Flam. Liq. 2: Calculation method (2.6.4.3)  
Eye Irrit. 2: Calculation method

**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 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 -