


BESA-VAL SAT
Solvent based Mixing System Products

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

- 1.1 Product identifier:** BESA-VAL SAT
Solvent based Mixing System Products
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
Relevant uses: Liquid paint. 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:** 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:**
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: R38 - Irritating to skin
Xn: R20/21 - Harmful by inhalation and in contact with skin
R10 - Flammable
CLP Regulation (EC) n° 1272/2008:
Classification of this product has been carried out in accordance with CLP Regulation (EC) n° 1272/2008.
Flam. Liq. 3: Flammable liquids, Category 3, H226
Skin Irrit. 2: Skin irritation, Category 2, H315
Skin Sens. 1A: Sensitisation, skin, Category 1A, H317
- 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
R20/21: Harmful by inhalation and in contact with skin
R38: Irritating to skin
- S Phrases:**
S23: Do not breathe vapour and spray
S24: Avoid contact with skin
S36/37: Wear suitable protective clothing and gloves
S43: In case of fire, use polyvalent powder ABC
S51: Use only in well-ventilated areas
- Supplementary information:**
P99: Contains Butanone oxime, Cobalt bis(2-ethylhexanoate). May cause an allergic reaction
- Substances that contribute to the classification:**
Xylene (mixture of isomers)
- CLP Regulation (EC) n° 1272/2008:**
Warning



- CONTINUED ON NEXT PAGE -

BESA-VAL SAT
Solvent based Mixing System Products

SECTION 2: HAZARDS IDENTIFICATION (continue)

Hazard statements:

Flam. Liq. 3: H226 - 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
P302+P352: IF ON SKIN: Wash with plenty of water
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P370+P378: In case of fire: Use ABC powder extinguisher to extinguish.
P501: Dispose of contents and / or containers in accordance with regulations on hazardous waste or packaging and packaging waste respectively

Supplementary information:

EUH208: Contains Butanone oxime. May produce an allergic reaction

Substances that contribute to the classification

Cobalt bis(2-ethylhexanoate)

2.3 Other hazards:

Non-applicable

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

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	Xylene (mixture of isomers) Directive 67/548/EC Xi: R38; Xn: R20/21; R10 Regulation 1272/2008 Acute Tox. 4: H312+H332; Flam. Liq. 3: H226; Skin Irrit. 2: H315 - Warning	ATP CLP00 25 - <50 %
CAS: 100-41-4 EC: 202-849-4 Index: 601-023-00-4 REACH: 01-2119489370-35-XXXX	Ethylbenzene Directive 67/548/EC F: R11; Xn: R20, R48/20, R65 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: 108-10-1 EC: 203-550-1 Index: 606-004-00-4 REACH: 01-2119473980-30-XXXX	4-methylpentan-2-one Directive 67/548/EC F: R11; Xi: R36/37; Xn: R20; R66 Regulation 1272/2008 Acute Tox. 4: H332; Eye Irrit. 2: H319; Flam. Liq. 2: H225; STOT SE 3: H335 - Danger	ATP CLP00 2,5 - <5 %
CAS: 123-86-4 EC: 204-658-1 Index: 607-025-00-1 REACH: 01-2119485493-29-XXXX	Butyl Acetate Directive 67/548/EC R10; R66; R67 Regulation 1272/2008 Flam. Liq. 3: H226; STOT SE 3: H336 - Warning	ATP CLP00 2,5 - <5 %
CAS: 96-29-7 EC: 202-496-6 Index: 616-014-00-0 REACH: 01-2119539477-28-XXXX	Butanone oxime Directive 67/548/EC Carc. Cat 3: R40; Xi: R41, R43; Xn: R21 Regulation 1272/2008 Acute Tox. 4: H312; Carc. 2: H351; Eye Dam. 1: H318; Skin Sens. 1: H317 - Danger	ATP CLP00 0,5 - <1 %
CAS: 136-52-7 EC: 205-250-6 Index: Non-applicable REACH: 01-2119524678-29-XXXX	Cobalt bis(2-ethylhexanoate) Directive 67/548/EC N: R50/53; Repr. Cat 3: R62; Xi: R43 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	Dipropylene Glycol Methyl Ether Directive 67/548/EC Regulation 1272/2008	Not classified <0,2 %

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

BESA-VAL SAT
Solvent based Mixing System Products

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:

This product does not contain substances classified as dangerous for inhalation, however, in case of symptoms of intoxication remove the person affected from the exposure area and provide with fresh air. Seek medical attention if the symptoms get worse or persist.

By skin contact:

This product is not classified as dangerous 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 MSDS of the product.

By ingestion/aspiration:

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:

Product is non-flammable under normal conditions of storage, manipulation and use. In the case of inflammation as a result of improper manipulation, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems. IT IS NOT RECOMMENDED 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 sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and 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. Personal protection equipment must be used against potential contact with the spilled product (See section 8). Evacuate the area and keep out those who do not have protection.

6.2 Environmental precautions:

Avoid spillage into an aqueous medium as it contains substances potentially dangerous for this. Contain the product absorbed in hermetically sealed containers. In the case of serious spillage into an aqueous medium notify the relevant authority.

6.3 Methods and material for containment and cleaning up:

It is recommended:

- CONTINUED ON NEXT PAGE -

BESA-VAL SAT
Solvent based Mixing System Products

SECTION 6: ACCIDENTAL RELEASE MEASURES (continue)

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

Product is non-flammable under normal conditions of storage, manipulation and use. It is recommended to transfer at slow speeds to avoid the generation of electrostatic charges that can affect flammable products. Consult section 10 for information on 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)	IOELV (STEL)	Year
Dipropylene Glycol Methyl Ether CAS: 34590-94-8 EC: 252-104-2	50 ppm	308 mg/m ³	2014
Xylene (mixture of isomers) CAS: 1330-20-7 EC: 215-535-7	50 ppm	221 mg/m ³	2014
Ethylbenzene CAS: 100-41-4 EC: 202-849-4	100 ppm	442 mg/m ³	2014
4-methylpentan-2-one CAS: 108-10-1 EC: 203-550-1	20 ppm	83 mg/m ³	2014

DNEL (Workers):

- CONTINUED ON NEXT PAGE -

BESA-VAL SAT
Solvent based Mixing System Products

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continue)

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 ³	289 mg/m ³	77 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
4-methylpentan-2-one CAS: 108-10-1 EC: 203-550-1	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	11,8 mg/kg	Non-applicable
	Inhalation	208 mg/m ³	208 mg/m ³	83 mg/m ³	83 mg/m ³
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 ³	960 mg/m ³	480 mg/m ³	480 mg/m ³
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 ³	3,33 mg/m ³
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 ³
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 ³	Non-applicable

DNEL (General population):

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 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
4-methylpentan-2-one CAS: 108-10-1 EC: 203-550-1	Oral	Non-applicable	Non-applicable	4,2 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	4,2 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	14,7 mg/m ³	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 ³	859,7 mg/m ³	102,34 mg/m ³	102,34 mg/m ³
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 ³	2 mg/m ³
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 ³
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 ³	Non-applicable

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

- CONTINUED ON NEXT PAGE -

BESA-VAL SAT
Solvent based Mixing System Products

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continue)

Identification				
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
4-methylpentan-2-one CAS: 108-10-1 EC: 203-550-1	STP	27,5 mg/L	Fresh water	0,6 mg/L
	Soil	1,3 mg/kg	Marine water	0,06 mg/L
	Intermittent	1,5 mg/L	Sediment (Fresh water)	8,27 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,83 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
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
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



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

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	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





Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Panoramic glasses against liquid splash		EN 166:2001 EN 172:1994/A1:2000 EN 172:1994/A2:2001 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



- CONTINUED ON NEXT PAGE -

BESA-VAL SAT
Solvent based Mixing System Products

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continue)

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory complete body protection	Antistatic and fireproof protective clothing	 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	 CAT III	EN 13287:2008 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

Volatile organic compounds:

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

V.O.C. (Supply):	42,52 % weight
V.O.C. density at 20 °C:	501,75 kg/m ³ (501,75 g/L)
Average carbon number:	7,73
Average molecular weight:	107,64 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:	Yellowish
Odor:	Solvent

Volatility:

Boiling point at atmospheric pressure:	136 °C
Vapour pressure at 20 °C:	876 Pa
Vapour pressure at 50 °C:	4587 Pa (5 kPa)
Evaporation rate at 20 °C:	Non-applicable *

Product description:

Density at 20 °C:	1130 - 1230 kg/m ³
Relative density at 20 °C:	1,13 - 1,23
Dynamic viscosity at 20 °C:	948 - 842 cP
Kinematic viscosity at 20 °C:	758 cSt
Kinematic viscosity at 40 °C:	>20,5 cSt
Concentration:	Non-applicable *
pH:	Non-applicable *

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

- CONTINUED ON NEXT PAGE -

BESA-VAL SAT
Solvent based Mixing System Products

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continue)

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 *

Flammability:

Flash Point:	24 °C
Autoignition temperature:	270 °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 specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

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

10.5 Incompatible materials:

Acids	Water	Combustive materials	Combustible materials	Others
Not applicable	Not applicable	Avoid direct impact	Not applicable	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:

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:

- CONTINUED ON NEXT PAGE -

BESA-VAL SAT
Solvent based Mixing System Products

SECTION 11: TOXICOLOGICAL INFORMATION (continue)

- Acute toxicity: Based on available data, the classification criteria are not met, as it does not contain 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 toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for inhalation. For more information see section 3.
 - Corrosivity/Irritability: 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.
- C- Contact with the skin and the eyes:
 - Contact with the skin: Produces skin inflammation.
 - Contact with the eyes: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for skin contact. For more information see section 3.
- 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 sensibilizing 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)-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:
 - 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:

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
Cobalt bis(2-ethylhexanoate) CAS: 136-52-7 EC: 205-250-6	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	Non-applicable	
Dipropylene Glycol Methyl Ether CAS: 34590-94-8 EC: 252-104-2	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	Non-applicable	
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
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
4-methylpentan-2-one CAS: 108-10-1 EC: 203-550-1	LD50 oral	2080 mg/kg	
	LD50 dermal	>2000 mg/kg (ATEi)	
	LC50 inhalation	11 mg/L (4 h) (ATEi)	
Butyl Acetate	LD50 oral	12789 mg/kg	Rat

- CONTINUED ON NEXT PAGE -

BESA-VAL SAT
Solvent based Mixing System Products

SECTION 11: TOXICOLOGICAL INFORMATION (continue)

Identification		Acute toxicity		Genus
CAS: 123-86-4	LD50 dermal	14112 mg/kg		Rabbit
EC: 204-658-1	LC50 inhalation	23,4 mg/L (4 h)		Rat
Butanone oxime	LD50 oral	2100 mg/kg		Rat
CAS: 96-29-7	LD50 dermal	1100 mg/kg		Rat
EC: 202-496-6	LC50 inhalation	Non-applicable		

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	Specie	Genus
Xylene (mixture of isomers)	LC50	13,5 mg/L (96 h)	Oncorhynchus mykiss	Fish
CAS: 1330-20-7	EC50	0,6 mg/L (96 h)	Gammarus lacustris	Crustacean
EC: 215-535-7	EC50	10 mg/L (72 h)	Skeletonema costatum	Algae
Ethylbenzene	LC50	42,3 mg/L (96 h)	Pimephales promelas	Fish
CAS: 100-41-4	EC50	75 mg/L (48 h)	Daphnia magna	Crustacean
EC: 202-849-4	EC50	63 mg/L (3 h)	Chlorella vulgaris	Algae
4-methylpentan-2-one	LC50	900 mg/L (48 h)	Leuciscus idus	Fish
CAS: 108-10-1	EC50	862 mg/L (24 h)	Daphnia magna	Crustacean
EC: 203-550-1	EC50	980 mg/L (48 h)	Scenedesmus subspicatus	Algae
Butyl Acetate	LC50	62 mg/L (96 h)	Leuciscus idus	Fish
CAS: 123-86-4	EC50	73 mg/L (24 h)	Daphnia magna	Crustacean
EC: 204-658-1	EC50	675 mg/L (72 h)	Scenedesmus subspicatus	Algae
Butanone oxime	LC50	843 mg/L (96 h)	Pimephales promelas	Fish
CAS: 96-29-7	EC50	750 mg/L (48 h)	Daphnia magna	Crustacean
EC: 202-496-6	EC50	83 mg/L (72 h)	Scenedesmus subspicatus	Algae
Cobalt bis(2-ethylhexanoate)	LC50	0,1 - 1 mg/L (96 h)		Fish
CAS: 136-52-7	EC50	0,1 - 1 mg/L		Crustacean
EC: 205-250-6	EC50	0,1 - 1 mg/L		Algae
Dipropylene Glycol Methyl Ether	LC50	10000 mg/L (96 h)	Pimephales promelas	Fish
CAS: 34590-94-8	EC50	1919 mg/L (48 h)	Daphnia magna	Crustacean
EC: 252-104-2	EC50	Non-applicable		

12.2 Persistence and degradability:

Identification		Degradability		Biodegradability	
Ethylbenzene	BOD5	Non-applicable	Concentration	100 mg/L	
CAS: 100-41-4	COD	Non-applicable	Period	14 days	
EC: 202-849-4	BOD5/COD	Non-applicable	% Biodegradable	90 %	
4-methylpentan-2-one	BOD5	2.06 g O2/g	Concentration	100 mg/L	
CAS: 108-10-1	COD	2.16 g O2/g	Period	14 days	
EC: 203-550-1	BOD5/COD	0.95	% Biodegradable	84 %	
Butyl Acetate	BOD5	Non-applicable	Concentration	Non-applicable	
CAS: 123-86-4	COD	Non-applicable	Period	5 days	
EC: 204-658-1	BOD5/COD	0.79	% Biodegradable	84 %	
Butanone oxime	BOD5	Non-applicable	Concentration	100 mg/L	
CAS: 96-29-7	COD	Non-applicable	Period	28 days	
EC: 202-496-6	BOD5/COD	Non-applicable	% Biodegradable	24 %	
Dipropylene Glycol Methyl Ether	BOD5	Non-applicable	Concentration	Non-applicable	
CAS: 34590-94-8	COD	0.00202 g O2/g	Period	28 days	
EC: 252-104-2	BOD5/COD	Non-applicable	% Biodegradable	73 %	

12.3 Bioaccumulative potential:

- CONTINUED ON NEXT PAGE -

BESA-VAL SAT
Solvent based Mixing System Products

SECTION 12: ECOLOGICAL INFORMATION (continue)

Identification		Bioaccumulation potential
Xylene (mixture of isomers) CAS: 1330-20-7 EC: 215-535-7	BCF Pow Log Potential	9 2,77 Low
Ethylbenzene CAS: 100-41-4 EC: 202-849-4	BCF Pow Log Potential	1 3,15 Low
4-methylpentan-2-one CAS: 108-10-1 EC: 203-550-1	BCF Pow Log Potential	2 1,31 Low
Butyl Acetate CAS: 123-86-4 EC: 204-658-1	BCF Pow Log Potential	4 1,78 Low
Butanone oxime CAS: 96-29-7 EC: 202-496-6	BCF Pow Log Potential	5 0,59 Low
Dipropylene Glycol Methyl Ether CAS: 34590-94-8 EC: 252-104-2	BCF Pow Log Potential	1 -0,06 Low

12.4 Mobility in soil:

Identification	Absorption/desorption			Volatility
Xylene (mixture of isomers) CAS: 1330-20-7 EC: 215-535-7	Koc Conclusion Surface tension	202 Moderate Non-applicable	Henry Dry soil Moist soil	5,249E+2 Pa·m ³ /mol Yes Yes
Ethylbenzene CAS: 100-41-4 EC: 202-849-4	Koc Conclusion Surface tension	520 Moderate 28590 N/m (25 °C)	Henry Dry soil Moist soil	7,984E+2 Pa·m ³ /mol Yes Yes
4-methylpentan-2-one CAS: 108-10-1 EC: 203-550-1	Koc Conclusion Surface tension	Non-applicable Non-applicable 23500 N/m (25 °C)	Henry Dry soil Moist soil	Non-applicable Non-applicable Non-applicable
Butyl Acetate CAS: 123-86-4 EC: 204-658-1	Koc Conclusion Surface tension	Non-applicable Non-applicable 24780 N/m (25 °C)	Henry Dry soil Moist soil	Non-applicable Non-applicable Non-applicable
Butanone oxime CAS: 96-29-7 EC: 202-496-6	Koc Conclusion Surface tension	3 Very High 25700 N/m (25 °C)	Henry Dry soil Moist soil	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 (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

Waste management (disposal and evaluation):

- CONTINUED ON NEXT PAGE -

BESA-VAL SAT
Solvent based Mixing System Products

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 (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

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to ADR 2015 and RID 2015:



- | | |
|---------------------------------------------------------------------------------------|---------------------|
| 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, 367, 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 37-14:



- | | |
|---------------------------------------------------------------------------------------|--------------------|
| 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 2015:

- CONTINUED ON NEXT PAGE -

BESA-VAL SAT
Solvent based Mixing System Products

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	
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

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: 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 (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):

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:

Nonapplicable

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 -

BESA-VAL SAT
Solvent based Mixing System Products

SECTION 16: OTHER INFORMATION (continue)

COMPOSITION/INFORMATION ON INGREDIENTS:

- Added Content
 - Butyl Acetate (123-86-4)
- Removed Content
 - Hydrocarbons, C10-C13, isoalkanes, cyclics, aromatics < 2%

CLP Regulation (EC) n° 1272/2008:

- Hazard statements
- Precautionary statements

Content of the 3rd section presenting modifications:

- Ethylbenzene (100-41-4): R Phrases, Hazard statements
- Cobalt bis(2-ethylhexanoate) (136-52-7): Hazard statements

Texts of the legislative phrases mentioned in section 2.:

H317: May cause an allergic skin reaction

H315: Causes skin irritation

H226: Flammable liquid and vapour

Texts of the legislative phrases mentioned in section 3.:

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

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
- R21: Harmful in contact with skin
- R36/37: Irritating to eyes and respiratory system
- R38: Irritating to skin
- R40: Limited evidence of a carcinogenic effect
- 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
- R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
- R62: Possible risk of impaired fertility
- R65: Harmful: may cause lung damage if swallowed
- R66: Repeated exposure may cause skin dryness or cracking
- R67: Vapours may cause drowsiness and dizziness

CLP Regulation (EC) n° 1272/2008:

- 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
- Repr. 2: H361 - Suspected of damaging fertility or 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: H335 - May cause respiratory irritation
- STOT SE 3: H336 - May cause drowsiness or dizziness

Classification procedure:

- Skin Sens. 1A: Calculation method
- Skin Irrit. 2: Calculation method
- Flam. Liq. 3: Calculation method (2.6.4.3)

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:

- CONTINUED ON NEXT PAGE -

BESA-VAL SAT
Solvent based Mixing System Products

SECTION 16: OTHER INFORMATION (continue)

<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 -