


**700201 - ESFERA Outd Clear Topcoat 0201 MT**

**SECTION 1: IDENTIFICATION**

- 1.1 GHS Product identifier:** 700201 - ESFERA Outd Clear Topcoat 0201 MT  
**Other means of identification:**  
 Non-applicable
- 1.2 Recommended use of the chemical and restrictions on use:**  
 Relevant uses: Coating, protection and decoration for exterior substrates.. For industrial user only.  
 Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party:**  
 Valresa Coatings, S.A.  
 Pol. Ind. Reva S-13 Avda. dels Gremis s/n  
 46190 Riba-roja de Turia - Valencia - Spain  
 Phone: +34 961669560 - Fax: +34 961668665  
 safety@valresa.com  
 www.valresa.com
- 1.4 Emergency phone number:**

**SECTION 2: HAZARD(S) IDENTIFICATION**

- 2.1 Classification of the substance or mixture:**  
**29 CFR 1910.1200:**  
 Classification of this product has been carried out in accordance with paragraph (d) of § 1910.1200.  
 Skin Sens. 1: Sensitisation, skin, Category 1, H317
- 2.2 Label elements:**  
**29 CFR 1910.1200:**  
**Warning**
- 
- Hazard statements:**  
 May cause an allergic skin reaction.
- Precautionary statements:**  
 Avoid breathing dust/fume/gas/mist/vapours/spray.  
 Contaminated work clothing should not be allowed out of the workplace.  
 Wear protective gloves/protective clothing/eye protection/protective footwear.  
 IF ON SKIN: Wash with plenty of soap and water.  
 If skin irritation or rash occurs: Get medical advice/attention.  
 Dispose of contents and / or containers in accordance with regulations on hazardous waste or packaging and packaging waste respectively.
- 2.3 Hazards not otherwise classified (HNOC):**  
 Non-applicable

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

- 3.1 Substances:**  
 Non-applicable
- 3.2 Mixtures:**  
**Chemical description:** Aqueous mixture composed of additives, aggregates, coalescents and resins  
**Components:**  
 Remaining components are non-hazardous and/or present at amounts below reportable limits. The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200. Therefore, in accordance with Appendix D to § 1910.1200, the product contains:

- CONTINUED ON NEXT PAGE -

**700201 - ESFERA Outd Clear Topcoat 0201 MT**

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

Identification	Chemical name/Classification	Concentration
CAS: 112-34-5	<b>2-(2-butoxyethoxy)ethanol</b> Eye Irrit. 2A: H319 - Warning	1 - <2,5 %
CAS: 111-76-2	<b>2-butoxyethanol</b> Acute Tox. 4: H302+H332; Eye Irrit. 2A: H319; Flam. Liq. 4: H227; Skin Irrit. 2: H315 - Warning	1 - <2,5 %
CAS: 104810-48-2	<b>Derivado de hidroxifenilbenzotriazol</b> Skin Sens. 1: H317 - Warning	0,25 - <1 %
CAS: 41556-26-7	<b>Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate</b> Flam. Liq. 4: H227; Skin Sens. 1: H317 - Warning	<0,25 %
CAS: 55406-53-6	<b>3-iodo-2-propynyl Butylcarbamate</b> Acute Tox. 4: H302+H332; Eye Dam. 1: H318; Skin Sens. 1: H317; STOT SE 3: H335 - Danger	<0,25 %

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

**SECTION 4: FIRST-AID MEASURES**

**4.1 Description of necessary 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:**

May cause an allergic skin reaction. In case of contact it is recommended to clean the affected area thoroughly with water and neutral soap. In case of changes on the skin (stinging, redness, rashes, blisters,...), seek medical advice with this Safety Data Sheet

**By eye contact:**

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, 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/effects, acute and delayed:**

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

**4.3 Indication of immediate medical attention and special treatment needed, if necessary:**

Non-applicable

**SECTION 5: FIRE-FIGHTING MEASURES**

**5.1 Suitable (and unsuitable) extinguishing media:**

**Suitable extinguishing media:**

Product is non-flammable under normal conditions of storage, manipulation and use, but the product contains flammable substances. 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.

**Unsuitable extinguishing media:**

IT IS RECOMMENDED NOT to use full jet water as an extinguishing agent.

**5.2 Specific hazards arising from the chemical:**

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 Special protective equipment and precautions for fire-fighters:**

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,...)

- CONTINUED ON NEXT PAGE -

**700201 - ESFERA Outd Clear Topcoat 0201 MT**

**SECTION 5: FIRE-FIGHTING MEASURES (continued)**

**Additional provisions:**

As in any fire, prevent human exposure to fire, smoke, fumes or products of combustion. Only properly trained personnel should be involved in firefighting. Evacuate nonessential personnel from the fire area. Destroy any source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflammation. 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:**

**For non-emergency personnel:**

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 spilt product (See section 8). Evacuate the area and keep out those who do not have protection.

**For emergency responders:**

See section 8.

**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 materials for containment and cleaning up:**

It is recommended:

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

**6.4 Reference to other sections:**

See sections 8 and 13.

**SECTION 7: HANDLING AND STORAGE**

**7.1 Precautions for safe handling:**

A.- General precautions for safe use

Comply with the current standards 29 CFR 1910 Occupational Safety and Health Standards. Maintain order, cleanliness and destroy using safe methods (section 6).

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 on general occupational hygiene

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.: 41 °F

B.- General conditions for storage

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

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

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

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

**8.1 Control parameters:**

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

- CONTINUED ON NEXT PAGE -

**700201 - ESFERA Outd Clear Topcoat 0201 MT**

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

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000):

Identification	Occupational exposure limits		
	2-aminoethanol CAS: 141-43-5	8-hour TWA PEL	3 ppm
	Ceiling Values - TWA PEL		
2-aminoethanol CAS: 141-43-5	8-hour TWA PEL	3 ppm	6 mg/m <sup>3</sup>
	Ceiling Values - TWA PEL		
Diiron trioxide CAS: 1309-37-1	8-hour TWA PEL		10 mg/m <sup>3</sup>
	Ceiling Values - TWA PEL		
2-butoxyethanol CAS: 111-76-2	8-hour TWA PEL	50 ppm	240 mg/m <sup>3</sup>
	Ceiling Values - TWA PEL		

US. ACGIH Threshold Limit Values (2022):

Identification	Occupational exposure limits		
	2-aminoethanol CAS: 141-43-5	TLV-TWA	3 ppm
	TLV-STEL	6 ppm	
2-aminoethanol CAS: 141-43-5	TLV-TWA	3 ppm	
	TLV-STEL	6 ppm	
acrylic acid CAS: 79-10-7	TLV-TWA	2 ppm	
	TLV-STEL		
Diiron trioxide CAS: 1309-37-1	TLV-TWA		5 mg/m <sup>3</sup>
	TLV-STEL		
2-butoxyethanol CAS: 111-76-2	TLV-TWA	20 ppm	
	TLV-STEL		

CALIFORNIA- TABLE AC-1 PERMISSIBLE EXPOSURE LIMITS FOR CHEMICAL CONTAMINANTS:

Identification	Occupational exposure limits		
	2-aminoethanol CAS: 141-43-5	PEL	3 ppm
	STEL	6 ppm	15 mg/m <sup>3</sup>
2-aminoethanol CAS: 141-43-5	PEL	3 ppm	8 mg/m <sup>3</sup>
	STEL	6 ppm	15 mg/m <sup>3</sup>
acrylic acid CAS: 79-10-7	PEL	2 ppm	5.9 mg/m <sup>3</sup>
	STEL		
Diiron trioxide CAS: 1309-37-1	PEL		5 mg/m <sup>3</sup>
	STEL		
2-butoxyethanol CAS: 111-76-2	PEL	20 ppm	97 mg/m <sup>3</sup>
	STEL		

**Biological limit values:**

Biological Exposure Indices (BEIs®) - ACGIH

Identification	BEIs®	Determinant	Sampling Time
2-butoxyethanol CAS: 111-76-2	200 mg/g (NULL)	Butoxyacetic acid (BAA) in urine	End of shift

**8.2 Appropriate engineering controls:**

A.- Individual protection measures, such as personal protective equipment

As a preventative measure it is recommended to use basic Personal Protection Equipment. 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, the information on clothing performance must be combined with professional judgment, and a clear understanding of the clothing application, to provide the best protection to the worker. All chemical protective clothing use must be based on a hazard assessment to determine the risks for exposure to chemicals and other hazards. Conduct hazard assessments in accordance with 29 CFR 1910.132.


B.- Respiratory protection

The use of protection equipment will be necessary if a mist forms or if the occupational exposure limits are exceeded.

C.- Specific protection for the hands


**700201 - ESFERA Outd Clear Topcoat 0201 MT**

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

Pictogram	PPE	Remarks
 Mandatory hand protection	Chemical protective gloves (Material: Linear low-density polyethylene (LLDPE), Breakthrough time: > 480 min, Thickness: 0.062 mm)	The Breakthrough Time indicated by the manufacturer must exceed the period during which the product is being used. Do not use protective creams after the product has come into contact with skin. Use gloves in accordance with manufacturer's use limitations and OSHA standard 1910.138 (29CFR)

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



D.- Eye and face protection

Pictogram	PPE	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing. Use this PPE in accordance with manufacturer's use limitations and OSHA standard 1910.133 (29CFR)

E.- Bodily protection

Pictogram	PPE	Remarks
	Work clothing	Replace before any evidence of deterioration.
	Anti-slip work shoes	Replace before any evidence of deterioration.

F.- Additional emergency measures

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

**Environmental exposure controls:**

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

**40 CFR Part 59 (VOC):**

V.O.C.(weight-percent):	3.22 % weight
V.O.C. at 77 °F:	93.67 kg/m <sup>3</sup> (93.67 g/L)

**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 68 °F:	Liquid
Appearance:	Not available
Color:	Not available
Odor:	Not available
Odour threshold:	Non-applicable *

**Volatility:**

Boiling point at atmospheric pressure:	216 °F
Vapour pressure at 77 °F:	3163 Pa

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

- CONTINUED ON NEXT PAGE -

**700201 - ESFERA Outd Clear Topcoat 0201 MT**

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

Vapour pressure at 122 °F:	12299.08 Pa (12.3 kPa)
Evaporation rate at 77 °F:	Non-applicable *
<b>Product description:</b>	
Density at 77 °F:	1048.4 kg/m <sup>3</sup>
Relative density at 77 °F:	1.048
Dynamic viscosity at 77 °F:	Non-applicable *
Kinematic viscosity at 77 °F:	Non-applicable *
Kinematic viscosity at 104 °F:	Non-applicable *
Concentration:	Non-applicable *
pH:	Non-applicable *
Vapour density at 77 °F:	Non-applicable *
Partition coefficient n-octanol/water 77 °F:	Non-applicable *
Solubility in water at 77 °F:	Non-applicable *
Solubility properties:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
<b>Flammability:</b>	
Flash Point:	Non Flammable (>199.4 °F)
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	400 °F
Lower flammability limit:	Non-applicable *
Upper flammability limit:	Non-applicable *
<b>Particle characteristics:</b>	
Median equivalent diameter:	Non-applicable
<b>9.2 Other information:</b>	
<b>Information with regard to physical hazard classes:</b>	
Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *
Corrosive to metals:	Non-applicable *
Heat of combustion:	Non-applicable *
Aerosols-total percentage (by mass) of flammable components:	Non-applicable *
<b>Other safety characteristics:</b>	
Surface tension at 77 °F:	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 indicated 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:

- CONTINUED ON NEXT PAGE -

**700201 - ESFERA Outd Clear Topcoat 0201 MT**

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

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Precaution	Precaution	Not applicable

**10.5 Incompatible materials:**

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

**10.6 Hazardous decomposition products:**

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

**SECTION 11: TOXICOLOGICAL INFORMATION**

**11.1 Information on toxicological effects:**

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

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

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous 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 hazardous for inhalation. For more information see section 3.

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

- Contact with the skin: Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for skin contact. For more information see section 3.
- Contact with the eyes: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. 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, as it does not contain substances classified as hazardous for the effects mentioned. For more information see section 3.  
IARC: acrylic acid (3); Diiron trioxide (3); 2-butoxyethanol (3); Polyethylene wax (3)
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous 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 hazardous with sensitising effects. For more information see section 3.
- Skin: 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 hazardous 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, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

- CONTINUED ON NEXT PAGE -

**700201 - ESFERA Outd Clear Topcoat 0201 MT**

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

H- Aspiration hazard:

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

**Other information:**

Non-applicable

**Specific toxicology information on the substances:**

Identification	Acute toxicity		Genus
	Route	Value	
2-(2-butoxyethoxy)ethanol CAS: 112-34-5	LD50 oral	>5000 mg/kg	
	LD50 dermal	>5000 mg/kg	
	LC50 inhalation	>20 mg/L	
2-butoxyethanol CAS: 111-76-2	LD50 oral	1200 mg/kg	Rat
	LD50 dermal	3000 mg/kg	Rabbit
	LC50 inhalation	11 mg/L (ATEi)	
3-iodo-2-propynyl Butylcarbamate CAS: 55406-53-6	LD50 oral	1100 mg/kg	Rat
	LD50 dermal	2100 mg/kg	Rabbit
	LC50 inhalation	3 mg/L (ATEi)	
Derivado de hidroxifenilbenzotriazol CAS: 104810-48-2	LD50 oral	>5000 mg/kg	
	LD50 dermal	>5000 mg/kg	
	LC50 inhalation	>20 mg/L	
Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate CAS: 41556-26-7	LD50 oral	2615 mg/kg	Rat
	LD50 dermal	>5000 mg/kg	
	LC50 inhalation	>20 mg/L	

**SECTION 12: ECOLOGICAL INFORMATION**

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

**12.1 Ecotoxicity (aquatic and terrestrial, where available):**

**Acute toxicity:**

Identification	Concentration		Species	Genus
	Value	Duration		
2-(2-butoxyethoxy)ethanol CAS: 112-34-5	LC50	1300 mg/L (96 h)	Lepomis macrochirus	Fish
	EC50	2850 mg/L (24 h)	Daphnia magna	Crustacean
	EC50	53 mg/L (192 h)	Microcystis aeruginosa	Algae
2-butoxyethanol CAS: 111-76-2	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

- CONTINUED ON NEXT PAGE -



**700201 - ESFERA Outd Clear Topcoat 0201 MT**

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

Identification	Concentration		Species	Genus
Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate CAS: 41556-26-7	LC50	0.97 mg/L (96 h)	Lepomis macrochirus	Fish
	EC50	20 mg/L (24 h)	Daphnia magna	Crustacean
	EC50	Non-applicable		
3-iodo-2-propynyl Butylcarbamate CAS: 55406-53-6	LC50	0.07 mg/L (96 h)	Oncorhynchus mykiss	Fish
	EC50	0.09 mg/L (96 h)	Mysidopsis bahia	Crustacean
	EC50	0.05 mg/L (72 h)	Scenedesmus subspicatus	Algae

**Chronic toxicity:**

Identification	Concentration		Species	Genus
2-butoxyethanol CAS: 111-76-2	NOEC	100 mg/L	Danio rerio	Fish
	NOEC	100 mg/L	Daphnia magna	Crustacean
3-iodo-2-propynyl Butylcarbamate CAS: 55406-53-6	NOEC	0.0084 mg/L	Pimephales promelas	Fish
	NOEC	0.0499 mg/L	Daphnia magna	Crustacean

**12.2 Persistence and degradability:**

Identification	Degradability		Biodegradability	
2-(2-butoxyethoxy)ethanol CAS: 112-34-5	BOD5	0.25 g O2/g	Concentration	100 mg/L
	COD	2.08 g O2/g	Period	28 days
	BOD5/COD	0.12	% Biodegradable	92 %
2-butoxyethanol CAS: 111-76-2	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 %

**12.3 Bioaccumulative potential:**

Identification	Bioaccumulation potential	
2-(2-butoxyethoxy)ethanol CAS: 112-34-5	BCF	0.46
	Pow Log	0.56
	Potential	Low
2-butoxyethanol CAS: 111-76-2	BCF	3
	Pow Log	0.83
	Potential	Low
3-iodo-2-propynyl Butylcarbamate CAS: 55406-53-6	BCF	36
	Pow Log	2.4
	Potential	Moderate

**12.4 Mobility in soil:**

- CONTINUED ON NEXT PAGE -

**700201 - ESFERA Outd Clear Topcoat 0201 MT**

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

Identification	Absorption/desorption		Volatility	
2-(2-butoxyethoxy)ethanol CAS: 112-34-5	Koc	48	Henry	7.2E-9 Pa·m <sup>3</sup> /mol
	Conclusion	Very High	Dry soil	No
	Surface tension	3.395E-2 N/m (77 °F)	Moist soil	No
2-butoxyethanol CAS: 111-76-2	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 (77 °F)	Moist soil	Yes

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

Non-applicable

**12.6 Other adverse effects:**

Not described

**SECTION 13: DISPOSAL CONSIDERATIONS**

**13.1 Disposal methods:**

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

Consult the authorized waste service manager on the assessment and disposal operations. 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. Waste should not be disposed of to drains. See epigraph 6.2.

**Regulations related to waste management:**

Legislation related to waste management:

40 CFR Part 261- IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

**SECTION 14: TRANSPORT INFORMATION**

This product is not regulated for transport.

**SECTION 15: REGULATORY INFORMATION**

**15.1 Safety, health and environmental regulations specific for the product in question:**

Toxic chemical release reporting under EPCRA section 313 (40 CFR Part 372): 2-(2-butoxyethoxy)ethanol ; 2-butoxyethanol ; 3-iodo-2-propynyl Butylcarbamate  
 California Proposition 65 (the Safe Drinking Water and Toxic Enforcement Act of 1986) - Cancer: Non-applicable  
 The Toxic Substances Control Act (TSCA) : 2-(2-butoxyethoxy)ethanol ; 2-butoxyethanol ; Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate ; 3-iodo-2-propynyl Butylcarbamate  
 Massachusetts RTK - Substance List: 2-(2-butoxyethoxy)ethanol ; 2-butoxyethanol ; 3-iodo-2-propynyl Butylcarbamate  
 New Jersey Worker and Community Right-to-Know Act: 2-(2-butoxyethoxy)ethanol ; 2-butoxyethanol ; 3-iodo-2-propynyl Butylcarbamate  
 New York RTK - Substance list: 2-(2-butoxyethoxy)ethanol ; 2-butoxyethanol  
 Pennsylvania Worker and Community Right-to-Know Law: 2-(2-butoxyethoxy)ethanol ; 2-butoxyethanol  
 CANADA-Domestic Substances List (DSL): 2-(2-butoxyethoxy)ethanol ; 2-butoxyethanol ; Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate ; 3-iodo-2-propynyl Butylcarbamate  
 CANADA-Non-Domestic Substances List (NDSL): Non-applicable  
 NTP (National Toxicology Program): Non-applicable  
 Minnesota - Hazardous substances ERTK: 2-butoxyethanol  
 Rhode Island - Hazardous substances RTK: 2-(2-butoxyethoxy)ethanol ; 2-butoxyethanol  
 OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096): Non-applicable  
 Hazardous Air Pollutants (Clean Air Act): 2-(2-butoxyethoxy)ethanol ; 2-butoxyethanol  
 CALIFORNIA LABOR CODE - The Hazardous Substances List: 2-butoxyethanol  
 California Proposition 65 (the Safe Drinking Water and Toxic Enforcement Act of 1986) - Birth defects or other reproductive harm: Non-applicable  
 Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) - Reportable Quantities: 2-(2-butoxyethoxy) ethanol (1 pounds) ; 2-butoxyethanol (1 pounds)

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

- CONTINUED ON NEXT PAGE -

**700201 - ESFERA Outd Clear Topcoat 0201 MT**

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

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:**

Take into consideration other applicable federal, state, and local laws and local regulations.

**SECTION 16: OTHER INFORMATION**

**Legislation related to safety data sheets:**

This safety data sheet has been designed in accordance with Appendix d to §1910.1200 - Safety data sheets

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

H317: May cause an allergic skin reaction.

**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

**29 CFR 1910.1200:**

Acute Tox. 4: H302+H332 - Harmful if swallowed or if inhaled.

Eye Dam. 1: H318 - Causes serious eye damage.

Eye Irrit. 2A: H319 - Causes serious eye irritation.

Flam. Liq. 4: H227 - Combustible liquid.

Skin Irrit. 2: H315 - Causes skin irritation.

Skin Sens. 1: H317 - May cause an allergic skin reaction.

STOT SE 3: H335 - May cause respiratory irritation.

**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:**

Occupational Safety & Health Administration (OSHA).

**Abbreviations and acronyms:**

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

IARC: International Agency for Research on Cancer

Date of compilation: 2/22/2017

Revised: 7/20/2021

Manufacturer Disclaimer: The information contained in this safety data sheet ("SDS") is based on sources, technical knowledge and current legislation. Furthermore, is based on data believed to be accurate; thus, the company does not assume any liability for its accuracy. The information provided herein cannot be considered a guarantee of the properties of this product and the same is simply a description of the security requirements. The use, occupational methodology and/or conditions for users of this product are not within our awareness or control. It is ultimately the responsibility of the user(s) to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information of this SDS only refers to this product, which should not be used for purposes other than those specified. Finally, the manner in which this product is used and whether there is any infringement of patents is the sole responsibility of the user(s).

END OF SAFETY DATA SHEET