EPOXY PRIMER MULTIFUNCTIONAL

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

1.1 Product identifier: EPOXY PRIMER MULTIFUNCTIONAL

Other means of identification:

UFI: DJAF-S3GM-W00T-STE3

1.2 Relevant identified uses of the substance or mixture and uses advised against:

Relevant uses: Products for ships, boats, ... (construction, repair, ...)

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:

Troton Sp. z o.o.
Ząbrowo 14A
78-120 Gościno - Zachodniopomorskie - Polska
Phone: +48 94 35 123 94 - Fax: +48 94 35 126 22
troton@troton.com.pl
www.troton.pl / www.troton.eu

1.4 Emergency telephone number: (8am-4pm)+48 094 35 123 94; 112

SECTION 2: HAZARDS IDENTIFICATION **

2.1 Classification of the substance or mixture:

CLP Regulation (EC) No 1272/2008:

Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.

Aerosol 1: Pressurised container: May burst if heated., H229
Aerosol 1: Flammable aerosols, Category 1, H222
Eye Irrit. 2: Eye irritation, Category 2, H319
Skin Irrit. 2: Skin irritation, Category 2, H315
Skin Sens. 1: Sensitisation, skin, Category 1, H317

2.2 Label elements:

CLP Regulation (EC) No 1272/2008:

Danger



Hazard statements:

Aerosol 1: H229 - Pressurised container: May burst if heated.
Aerosol 1: H222 - Extremely flammable aerosol.
Eye Irrit. 2: H319 - Causes serious eye irritation.
Skin Irrit. 2: H315 - Causes skin irritation.
Skin Sens. 1: H317 - May cause an allergic skin reaction.

Precautionary statements:

P101: If medical advice is needed, have product container or label at hand.
P102: Keep out of reach of children.
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211: Do not spray on an open flame or other ignition source.
P251: Do not pierce or burn, even after use.
P280: Wear protective gloves/protective clothing/respiratory protection/eye protection/protective footwear.
P410+P412: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F
P501: Dispose of contents/container according to the separated collection system used in your municipality.

Substances that contribute to the classification

reaction product: bisphenol-A-(epichlorhydrin) (700 < MW < 1100)

2.3 Other hazards:

Product fails to meet PBT/vPvB criteria
Endocrine-disrupting properties: The product fails to meet the criteria.

*** Changes with regards to the previous version*

- CONTINUED ON NEXT PAGE -

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Non-applicable

3.2 Mixture:

Chemical description: Mixture composed of chemical products

Components:

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

Identification	Chemical name/Classification		Concentration
CAS: 115-10-6 EC: 204-065-8 Index: 603-019-00-8 REACH: 01-2119472128-37-XXXX	**dimethyl ether(1)**	ATP CLP00	**25 - <50 %**
	Regulation 1272/2008	Flam. Gas 1A: H220; Press. Gas: H280 - Danger 	
CAS: 1330-20-7 EC: 215-535-7 Index: 601-022-00-9 REACH: 01-2119488216-32-XXXX	**Xylene(2)**	ATP CLP00	**10 - <25 %**
	Regulation 1272/2008	Acute Tox. 4: H312+H332; Flam. Liq. 3: H226; Skin Irrit. 2: H315 - Warning 	
CAS: 25068-38-6 EC: 500-033-5 Index: 603-074-00-8 REACH: 01-2119456619-26-XXXX	**reaction product: bisphenol-A-(epichlorhydrin) (700 < MW < 1100)(2)**	Self-classified	**10 - <25 %**
	Regulation 1272/2008	Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Warning 	
CAS: 78-92-2 EC: 201-158-5 Index: 603-004-01-3 REACH: 01-2119475146-36-XXXX	**Butan-2-ol(2)**	ATP CLP00	**10 - <25 %**
	Regulation 1272/2008	Eye Irrit. 2: H319; Flam. Liq. 3: H226; STOT SE 3: H335; STOT SE 3: H336 - Warning 	
CAS: 100-41-4 EC: 202-849-4 Index: 601-023-00-4 REACH: 01-2119489370-35-XXXX	**Ethylbenzene(2)**	ATP ATP06	**2,5 - <5 %**
	Regulation 1272/2008	Acute Tox. 4: H332; Asp. Tox. 1: H304; Flam. Liq. 2: H225; STOT RE 2: H373 - Danger 	
CAS: 71-36-3 EC: 200-751-6 Index: 603-004-00-6 REACH: 01-2119484630-38-XXXX	**butan-1-ol(2)**	Self-classified	**1 - <2,5 %**
	Regulation 1272/2008	Acute Tox. 4: H302; Eye Dam. 1: H318; Flam. Liq. 3: H226; Skin Irrit. 2: H315; STOT SE 3: H335; STOT SE 3: H336 - Danger 	

(1) Substance with a Union workplace exposure limit
(2) Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2020/878

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 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, in case of intoxication symptoms it is recommended 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:

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

By eye contact:

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

By ingestion/aspiration:

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SECTION 4: FIRST AID MEASURES (continued)

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:

Suitable extinguishing media:

If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO_2).

Unsuitable extinguishing media:

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

5.2 Special hazards arising from the substance or mixture:

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

5.3 Advice for firefighters:

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

Additional provisions:

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel:

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

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 ground water.

6.3 Methods and material for containment and cleaning up:

It is recommended:

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

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- Precautions for safe manipulation

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SECTION 7: HANDLING AND STORAGE (continued)

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

Avoid the evaporation of the product as it contains flammable substances, which could form flammable vapour/air mixtures in the presence of sources of ignition. Control sources of ignition (mobile phones, sparks,...) and transfer at slow speeds to avoid the creation of electrostatic charges. 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 ºC

Maximum Temp.: 25 ºC

Maximum time: 15 Months

B.- General conditions for storage

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

7.3 Specific end use(s):

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

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace (European OEL, not country-specific legislation):

Directive (EU) 2000/39, Directive 2004/37/EC,Directive (EU) 2006/15, Directive (EU) 2009/161, Directive (EU) 2017/164, Directive (EU) 2019/1831:

Identification	Occupational exposure limits		
dimethyl ether	IOELV (8h)	1000 ppm	1920 mg/m³
CAS: 115-10-6 EC: 204-065-8	IOELV (STEL)		
Xylene	IOELV (8h)	50 ppm	221 mg/m³
CAS: 1330-20-7 EC: 215-535-7	IOELV (STEL)	100 ppm	442 mg/m³
Ethylbenzene	IOELV (8h)	100 ppm	442 mg/m³
CAS: 100-41-4 EC: 202-849-4	IOELV (STEL)	200 ppm	884 mg/m³

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
dimethyl ether	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 115-10-6	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 204-065-8	Inhalation	Non-applicable	Non-applicable	1894 mg/m³	Non-applicable
Xylene	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 1330-20-7	Dermal	Non-applicable	Non-applicable	212 mg/kg	Non-applicable
EC: 215-535-7	Inhalation	442 mg/m³	442 mg/m³	221 mg/m³	221 mg/m³
reaction product: bisphenol-A-(epichlorhydrin) (700 < MW < 1100)	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 25068-38-6	Dermal	Non-applicable	Non-applicable	0,75 mg/kg	Non-applicable
EC: 500-033-5	Inhalation	Non-applicable	Non-applicable	4,93 mg/m³	Non-applicable
Butan-2-ol	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 78-92-2	Dermal	Non-applicable	Non-applicable	405 mg/kg	Non-applicable
EC: 201-158-5	Inhalation	Non-applicable	Non-applicable	600 mg/m³	Non-applicable

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Ethylbenzene	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 100-41-4	Dermal	Non-applicable	Non-applicable	180 mg/kg	Non-applicable
EC: 202-849-4	Inhalation	Non-applicable	293 mg/m³	77 mg/m³	Non-applicable
butan-1-ol	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 71-36-3	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 200-751-6	Inhalation	Non-applicable	Non-applicable	Non-applicable	310 mg/m³

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
dimethyl ether	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 115-10-6	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 204-065-8	Inhalation	Non-applicable	Non-applicable	471 mg/m³	Non-applicable
Xylene	Oral	Non-applicable	Non-applicable	12,5 mg/kg	Non-applicable
CAS: 1330-20-7	Dermal	Non-applicable	Non-applicable	125 mg/kg	Non-applicable
EC: 215-535-7	Inhalation	260 mg/m³	260 mg/m³	65,3 mg/m³	65,3 mg/m³
reaction product: bisphenol-A-(epichlorhydrin) (700 < MW < 1100)	Oral	Non-applicable	Non-applicable	0,5 mg/kg	Non-applicable
CAS: 25068-38-6	Dermal	Non-applicable	Non-applicable	0,0893 mg/kg	Non-applicable
EC: 500-033-5	Inhalation	Non-applicable	Non-applicable	0,87 mg/m³	Non-applicable
Butan-2-ol	Oral	Non-applicable	Non-applicable	15 mg/kg	Non-applicable
CAS: 78-92-2	Dermal	Non-applicable	Non-applicable	203 mg/kg	Non-applicable
EC: 201-158-5	Inhalation	Non-applicable	Non-applicable	213 mg/m³	Non-applicable
Ethylbenzene	Oral	Non-applicable	Non-applicable	1,6 mg/kg	Non-applicable
CAS: 100-41-4	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 202-849-4	Inhalation	Non-applicable	Non-applicable	15 mg/m³	Non-applicable
butan-1-ol	Oral	Non-applicable	Non-applicable	1,562 mg/kg	Non-applicable
CAS: 71-36-3	Dermal	Non-applicable	Non-applicable	3,125 mg/kg	Non-applicable
EC: 200-751-6	Inhalation	Non-applicable	Non-applicable	55,357 mg/m³	155 mg/m³

PNEC:

Identification				
dimethyl ether	STP	160 mg/L	Fresh water	0,155 mg/L
CAS: 115-10-6	Soil	0,045 mg/kg	Marine water	0,016 mg/L
EC: 204-065-8	Intermittent	1,549 mg/L	Sediment (Fresh water)	0,681 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,069 mg/kg
Xylene	STP	6,58 mg/L	Fresh water	0,327 mg/L
CAS: 1330-20-7	Soil	2,31 mg/kg	Marine water	0,327 mg/L
EC: 215-535-7	Intermittent	0,327 mg/L	Sediment (Fresh water)	12,46 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	12,46 mg/kg
reaction product: bisphenol-A-(epichlorhydrin) (700 < MW < 1100)	STP	10 mg/L	Fresh water	0,006 mg/L
CAS: 25068-38-6	Soil	0,065 mg/kg	Marine water	0,001 mg/L
EC: 500-033-5	Intermittent	0,018 mg/L	Sediment (Fresh water)	0,341 mg/kg
	Oral	0,011 g/kg	Sediment (Marine water)	0,034 mg/kg
Butan-2-ol	STP	761 mg/L	Fresh water	47,1 mg/L
CAS: 78-92-2	Soil	11,58 mg/kg	Marine water	47,1 mg/L
EC: 201-158-5	Intermittent	47,1 mg/L	Sediment (Fresh water)	196,19 mg/kg
	Oral	1 g/kg	Sediment (Marine water)	196,19 mg/kg
Ethylbenzene	STP	9,6 mg/L	Fresh water	0,1 mg/L
CAS: 100-41-4	Soil	2,68 mg/kg	Marine water	0,01 mg/L
EC: 202-849-4	Intermittent	0,1 mg/L	Sediment (Fresh water)	13,7 mg/kg
	Oral	0,02 g/kg	Sediment (Marine water)	1,37 mg/kg

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification				
butan-1-ol	STP	2476 mg/L	Fresh water	0,082 mg/L
CAS: 71-36-3	Soil	0,017 mg/kg	Marine water	0,008 mg/L
EC: 200-751-6	Intermittent	2,25 mg/L	Sediment (Fresh water)	0,324 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,032 mg/kg

8.2 Exposure controls:

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

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Regulation (EU) 2016/425. For more information on Personal Protective 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	CE CAT III	EN 149:2001+A1:2009 EN 405:2002+A1:2010 EN ISO 136:1998	Replace when an increase in resistence 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	CE CAT I		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 420:2004+A1:2010 and EN ISO 374-1:2016+A1:2018

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.- Ocular and facial protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.	CE CAT II	EN 166:2002 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer´s instructions. Use if there is a risk of splashing.

E.- Body protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory complete body protection	Antistatic and fireproof protective clothing	CE CAT III	EN 1149-1:2006 EN 1149-2:1997 EN 1149-3:2004 EN 168:2002 EN ISO 14116:2015 EN 1149-5:2018	Limited protection against flames.
 Mandatory foot protection	Safety footwear with antistatic and heat resistant properties	CE CAT III	EN ISO 13287:2013 EN ISO 20345:2011	Replace boots at any sign of deterioration.

F.- Additional emergency measures

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

Environmental exposure controls:

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

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

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 ºC:	Aerosol
Appearance:	Volatile
Colour:	White
Odour:	Characteristic
Odour threshold:	Non-applicable *

Volatility:

Boiling point at atmospheric pressure:	-25 ºC (Propellant)
Vapour pressure at 20 ºC:	340 Pa
Vapour pressure at 50 ºC:	<300000 Pa (300 kPa)
Evaporation rate at 20 ºC:	Non-applicable *

Product description:

Density at 20 ºC:	Non-applicable *
Relative density at 20 ºC:	Non-applicable *
Dynamic viscosity at 20 ºC:	Non-applicable *
Kinematic viscosity at 20 ºC:	Non-applicable *
Kinematic viscosity at 40 ºC:	Non-applicable *
Concentration:	Non-applicable *
pH:	Non-applicable *
Vapour density at 20 ºC:	Non-applicable *
Partition coefficient n-octanol/water 20 ºC:	Non-applicable *
Solubility in water at 20 ºC:	Non-applicable *
Solubility properties:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Recipient pressure:	Non-applicable *

Flammability:

Flash Point:	Non-applicable
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	235 ºC (Propellant)
Lower flammability limit:	1,1 % Volume
Upper flammability limit:	18,6 % Volume

Particle characteristics:

Median equivalent diameter:	Non-applicable

9.2 Other information:

Information with regard to physical hazard classes:

Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *

*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)

Corrosive to metals:	Non-applicable *
Heat of combustion:	Non-applicable *
Aerosols-total percentage (by mass) of flammable components:	Non-applicable *

Other safety characteristics:

Surface tension at 20 ºC:	Non-applicable *
Refraction index:	Non-applicable *

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

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

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

10.2 Chemical stability:

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

10.3 Possibility of hazardous reactions:

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

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

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

10.5 Incompatible materials:

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

10.6 Hazardous decomposition products:

Contains substances which require external energy for spontaneous decomposition. Form explosive peroxides when distilled, evaporated or otherwise concentrated.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008:

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

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

Dangerous health implications:

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

A- Ingestion (acute effect):

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

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

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

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.
  IARC: Xylene (3); Ethylbenzene (2B)
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Reproductive toxicity: 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.

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

H- Aspiration hazard:

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

Other information:

Non-applicable

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
dimethyl ether	LD50 oral	>2000 mg/kg	
CAS: 115-10-6	LD50 dermal	>2000 mg/kg	
EC: 204-065-8	LC50 inhalation	308,5 mg/L (4 h)	Rat
Xylene	LD50 oral	3523 mg/kg	Rat
CAS: 1330-20-7	LD50 dermal	1100 mg/kg (ATEi)	
EC: 215-535-7	LC50 inhalation	11 mg/L (ATEi)	
reaction product: bisphenol-A-(epichlorhydrin) (700 < MW < 1100)	LD50 oral	>2000 mg/kg	
CAS: 25068-38-6	LD50 dermal	>2000 mg/kg	
EC: 500-033-5	LC50 inhalation	>5 mg/L	
Ethylbenzene	LD50 oral	3500 mg/kg	Rat
CAS: 100-41-4	LD50 dermal	15354 mg/kg	Rabbit
EC: 202-849-4	LC50 inhalation	17,2 mg/L (4 h)	Rat
butan-1-ol	LD50 oral	500 mg/kg (ATEi)	
CAS: 71-36-3	LD50 dermal	3400 mg/kg	Rabbit
EC: 200-751-6	LC50 inhalation	24,66 mg/L (4 h)	Rat
Butan-2-ol	LD50 oral	>2000 mg/kg	
CAS: 78-92-2	LD50 dermal	>2000 mg/kg	
EC: 201-158-5	LC50 inhalation	>20 mg/L	

11.2 Information on other hazards:

Endocrine disrupting properties

Endocrine-disrupting properties: The product fails to meet the criteria.

Other information

Non-applicable

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SECTION 12: ECOLOGICAL INFORMATION

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

12.1 Toxicity:

Acute toxicity:

Identification	Concentration		Species	Genus
Butan-2-ol	LC50	3670 mg/L (96 h)	Pimephales promelas	Fish
CAS: 78-92-2	EC50	3750 mg/L (24 h)	Daphnia magna	Crustacean
EC: 201-158-5	EC50	95 mg/L (168 h)	Scenedesmus quadricauda	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
butan-1-ol	LC50	1740 mg/L (96 h)	Pimephales promelas	Fish
CAS: 71-36-3	EC50	1983 mg/L (48 h)	Daphnia magna	Crustacean
EC: 200-751-6	EC50	500 mg/L (96 h)	Scenedesmus subspicatus	Algae

Chronic toxicity:

Identification	Concentration		Species	Genus
Xylene	NOEC	1,3 mg/L	Oncorhynchus mykiss	Fish
CAS: 1330-20-7 EC: 215-535-7	NOEC	1,17 mg/L	Ceriodaphnia dubia	Crustacean
reaction product: bisphenol-A-(epichlorhydrin) (700 < MW < 1100)	NOEC	Non-applicable		
CAS: 25068-38-6 EC: 500-033-5	NOEC	0,3 mg/L	Daphnia magna	Crustacean
Ethylbenzene	NOEC	Non-applicable		
CAS: 100-41-4 EC: 202-849-4	NOEC	0,96 mg/L	Ceriodaphnia dubia	Crustacean
butan-1-ol	NOEC	Non-applicable		
CAS: 71-36-3 EC: 200-751-6	NOEC	4,1 mg/L	Daphnia magna	Crustacean

12.2 Persistence and degradability:

Identification	Degradability		Biodegradability	
Xylene	BOD5	Non-applicable	Concentration	Non-applicable
CAS: 1330-20-7	COD	Non-applicable	Period	28 days
EC: 215-535-7	BOD5/COD	Non-applicable	% Biodegradable	88 %
reaction product: bisphenol-A-(epichlorhydrin) (700 < MW < 1100)	BOD5	Non-applicable	Concentration	100 mg/L
CAS: 25068-38-6	COD	Non-applicable	Period	28 days
EC: 500-033-5	BOD5/COD	Non-applicable	% Biodegradable	0 %
Butan-2-ol	BOD5	0 g O2/g	Concentration	100 mg/L
CAS: 78-92-2	COD	0 g O2/g	Period	14 days
EC: 201-158-5	BOD5/COD	0,75	% Biodegradable	73,5 %

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SECTION 12: ECOLOGICAL INFORMATION (continued)

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 %
butan-1-ol	BOD5	1,71 g O2/g	Concentration	Non-applicable
CAS: 71-36-3	COD	2,46 g O2/g	Period	19 days
EC: 200-751-6	BOD5/COD	0,7	% Biodegradable	98 %

12.3 Bioaccumulative potential:

Identification	Bioaccumulation potential	
Xylene	BCF	9
CAS: 1330-20-7	Pow Log	2.77
EC: 215-535-7	Potential	Low
reaction product: bisphenol-A-(epichlorhydrin) (700 < MW < 1100)	BCF	4
CAS: 25068-38-6	Pow Log	2.8
EC: 500-033-5	Potential	Low
Butan-2-ol	BCF	3
CAS: 78-92-2	Pow Log	0.61
EC: 201-158-5	Potential	Low
Ethylbenzene	BCF	1
CAS: 100-41-4	Pow Log	3.15
EC: 202-849-4	Potential	Low
butan-1-ol	BCF	1
CAS: 71-36-3	Pow Log	0.88
EC: 200-751-6	Potential	Low

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
dimethyl ether	Koc	Non-applicable	Henry	Non-applicable
CAS: 115-10-6	Conclusion	Non-applicable	Dry soil	Non-applicable
EC: 204-065-8	Surface tension	1,136E-2 N/m (25 ºC)	Moist soil	Non-applicable
Xylene	Koc	202	Henry	524,86 Pa·m³/mol
CAS: 1330-20-7	Conclusion	Moderate	Dry soil	Yes
EC: 215-535-7	Surface tension	Non-applicable	Moist soil	Yes
Butan-2-ol	Koc	Non-applicable	Henry	Non-applicable
CAS: 78-92-2	Conclusion	Non-applicable	Dry soil	Non-applicable
EC: 201-158-5	Surface tension	2,433E-2 N/m (25 ºC)	Moist soil	Non-applicable

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Absorption/desorption		Volatility	
Ethylbenzene	Koc	520	Henry	798,44 Pa·m³/mol
CAS: 100-41-4	Conclusion	Moderate	Dry soil	Yes
EC: 202-849-4	Surface tension	2,859E-2 N/m (25 ºC)	Moist soil	Yes
butan-1-ol	Koc	2.44	Henry	5,39E-2 Pa·m³/mol
CAS: 71-36-3	Conclusion	Very High	Dry soil	Yes
EC: 200-751-6	Surface tension	2,567E-2 N/m (25 ºC)	Moist soil	Yes

12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

12.6 Endocrine disrupting properties:

Endocrine-disrupting properties: The product fails to meet the criteria.

12.7 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
16 05 04*	gases in pressure containers (including halons) containing hazardous substances	Dangerous

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

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

Waste management (disposal and evaluation):

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

Regulations related to waste management:

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

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

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to ADR 2021 and RID 2021:



14.1 UN number or ID number: UN1950

14.2 UN proper shipping name: AEROSOLS

14.3 Transport hazard class(es): 2

Labels: 2.2

14.4 Packing group: N/A

14.5 Environmental hazards: No

14.6 Special precautions for user

Special regulations: 190, 327, 344, 625

Tunnel restriction code: E

Physico-Chemical properties: see section 9

Limited quantities: 1 L

14.7 Maritime transport in bulk according to IMO instruments: Non-applicable

Transport of dangerous goods by sea:

With regard to IMDG 39-18:

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SECTION 14: TRANSPORT INFORMATION (continued)



14.1 UN number or ID number: UN1950
14.2 UN proper shipping name: AEROSOLS
14.3 Transport hazard class(es): 2
Labels: 2.2
14.4 Packing group: N/A
14.5 Marine pollutant: No
14.6 Special precautions for user
Special regulations: 63, 959, 190, 277, 327, 344
EmS Codes: F-D, S-U
Physico-Chemical properties: see section 9
Limited quantities: 1 L
Segregation group: Non-applicable
14.7 Maritime transport in bulk according to IMO instruments: Non-applicable

Transport of dangerous goods by air:

With regard to IATA/ICAO 2021:



14.1 UN number or ID number: UN1950
14.2 UN proper shipping name: AEROSOLS
14.3 Transport hazard class(es): 2
Labels: 2.2
14.4 Packing group: N/A
14.5 Environmental hazards: No
14.6 Special precautions for user
Physico-Chemical properties: see section 9
14.7 Maritime transport in bulk according to IMO instruments: Non-applicable

SECTION 15: REGULATORY INFORMATION

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

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable

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

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: Non-applicable

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Seveso III:

Section	Description	Lower-tier requirements	Upper-tier requirements
P3a	FLAMMABLE AEROSOLS	150	500

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

Shall not be used in:
—ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
—tricks and jokes,
—games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

Specific provisions in terms of protecting people or the environment:

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

Other legislation:

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SECTION 15: REGULATORY INFORMATION (continued)

The product could be affected by sectorial legislation

Council Directive 75/324/EEC of 20 May 1975 on the approximation of the laws of the Member States relating to aerosol dispensers
Commission Directive 94/1/EC of 6 January 1994 adapting some technicalities of Council Directive 75/324/EEC on the approximation of the laws of the relating Member States to aerosol dispensers
Commission Directive 2008/47/EC of 8 April 2008 amending, for the purposes of adapting to technical progress, Council Directive 75/324/EEC on the approximation of the laws of the Member States relating to aerosol dispensers
Commission Directive 2013/10/EU of 19 March 2013 amending Council Directive 75/324/EEC on the approximation of the laws of the Member States relating to aerosol dispensers in order to adapt its labelling provisions to Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures
COMMISSION DIRECTIVE (EU) 2016/2037 of 21 November 2016 amending Council Directive 75/324/EEC as regards the maximum allowable pressure of aerosol dispensers and to adapt its labelling provisions to Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures

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:

The SDS shall be supplied in an official language of the country where the product is placed on the market. This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (COMMISSION REGULATION (EU) 2020/878).

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

COMMISSION REGULATION (EU) 2020/878
Substances that contribute to the classification (SECTION 2):
· Removed substances
Butan-2-ol (78-92-2)
butan-1-ol (71-36-3)
CLP Regulation (EC) No 1272/2008 (SECTION 2, SECTION 16):
· Hazard statements
· Precautionary statements

Texts of the legislative phrases mentioned in section 2:

H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H229: Pressurised container: May burst if heated.
H222: Extremely flammable aerosol.
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) No 1272/2008:

Acute Tox. 4: H302 - Harmful if swallowed.
Acute Tox. 4: H312+H332 - Harmful in contact with skin or if inhaled.
Acute Tox. 4: H332 - Harmful if inhaled.
Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways.
Eye Dam. 1: H318 - Causes serious eye damage.
Eye Irrit. 2: H319 - Causes serious eye irritation.
Flam. Gas 1A: H220 - Extremely flammable gas.
Flam. Liq. 2: H225 - Highly flammable liquid and vapour.
Flam. Liq. 3: H226 - Flammable liquid and vapour.
Press. Gas: H280 - Contains gas under pressure, may explode if heated.
Skin Irrit. 2: H315 - Causes skin irritation.
Skin Sens. 1: H317 - May cause an allergic skin reaction.
STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure.
STOT SE 3: H335 - May cause respiratory irritation.
STOT SE 3: H336 - May cause drowsiness or dizziness.

Classification procedure:

*** Changes with regards to the previous version*

- CONTINUED ON NEXT PAGE -

SECTION 16: OTHER INFORMATION ** (continued)

Skin Irrit. 2: Calculation method
Skin Sens. 1: Calculation method
Aerosol 1: Calculation method
Aerosol 1: Calculation method
Eye Irrit. 2: Calculation method

Advice related to training:

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

Principal bibliographical sources:

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

Abbreviations and acronyms:

ADR: European agreement concerning the international carriage of dangerous goods by road
IMDG: International maritime dangerous goods code
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
COD: Chemical Oxygen Demand
BOD5: 5day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
LC50: Lethal Concentration 50
EC50: Effective concentration 50
LogPOW: Octanolwater partition coefficient
Koc: Partition coefficient of organic carbon
UFI: unique formula identifier
IARC: International Agency for Research on Cancer

*** Changes with regards to the previous version*

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 -