ŚRODEK DO KONSERWACJI PODWOZIA SPRAY - UNDERBODY COATING - SPRAY

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

1.1 Product identifier: ŚRODEK DO KONSERWACJI PODWOZIA SPRAY - UNDERBODY COATING - SPRAY

Other means of identification:

UFI: 4JS2-40PJ-Q00T-MEY0

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

Relevant uses: Underbody protection in aerosol.

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:

BOLL Wojciech Dalewski Spółka Jawna
ul. Chemiczna 3
65-713 Zielona Góra - Polska
Phone: 68 451 99 99 - Fax: 68 451 99 00
huszcza@boll.pl
https://www.boll.pl

1.4 Emergency telephone number:

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: Flammable aerosols, Category 1, H222
Aerosol 1: Pressurised container: May burst if heated., H229
Aquatic Chronic 2: Hazardous to the aquatic environment, long-term hazard, Category 2, H411
Eye Irrit. 2: Eye irritation, Category 2, H319
STOT SE 3: Respiratory tract toxicity, single exposure, Category 3, H335
STOT SE 3: Specific toxicity causing drowsiness and dizziness, single exposure, Category 3, H336

2.2 Label elements:

CLP Regulation (EC) No 1272/2008:

Danger

Hazard statements:

Aerosol 1: H222 - Extremely flammable aerosol.
Aerosol 1: H229 - Pressurised container: May burst if heated.
Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects.
Eye Irrit. 2: H319 - Causes serious eye irritation.
STOT SE 3: H335 - May cause respiratory irritation.
STOT SE 3: H336 - May cause drowsiness or dizziness.

Precautionary statements:

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SECTION 2: HAZARDS IDENTIFICATION (continued)

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.
P260: Do not breathe dust/fume/gas/mist/vapours/spray.
P271: Use only outdoors or in a well-ventilated area.
P273: Avoid release to the environment.
P280: Wear protective gloves/eye protection.
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312: Call a POISON CENTER/doctor if you feel unwell.
P403: Store in a well-ventilated place.
P410+P412: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F
P501: Dispose of contents/ container in accordance with local/regional/national/international regulation.

Supplementary information:

EUH066: Repeated exposure may cause skin dryness or cracking.

Substances that contribute to the classification

Hydrocarbons, C9, aromatics; Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane; Butanone; Hydrocarbons, C9-C11,n-alkanes, iso-alkanes, cyclics, <2% aromatics

UFI: 4JS2-40PJ-Q00T-MEY0

Additional labeling:

Buildup of explosive mixtures possible without sufficient ventilation.

2.3 Other hazards:

Product does not meet PBT/vPvB criteria
Endocrine-disrupting properties: The product does not meet the criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Non-applicable

3.2 Mixture:

Chemical description: active ingredient mixture with a propellant. Propellant: propane-butane.

Components:

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

Identification	Chemical name/Classification		Concentration
CAS: 128601-23-0 EC: 918-668-5 Index: Non-applicable REACH: 01-2119455851-35-XXXX	**Hydrocarbons, C9, aromatics**[1]	Self-classified	**10 - <25 %**
	Regulation 1272/2008	Aquatic Chronic 2: H411; Asp. Tox. 1: H304; Flam. Liq. 3: H226; STOT SE 3: H335; STOT SE 3: H336; EUH066 - Danger 	
CAS: 8052-42-4 EC: 232-490-9 Index: Non-applicable REACH: 01-2119480172-44-XXXX	**Asphalt**[2]	Not classified	**10 - <25 %**
	Regulation 1272/2008		
CAS: 74-98-6 EC: 200-827-9 Index: 601-003-00-5 REACH: 01-2119486944-21-XXXX	**Propane**[2]	ATP CLP00	**10 - <25 %**
	Regulation 1272/2008	Flam. Gas 1A: H220; Press. Gas: H280 - Danger 	
CAS: Non-applicable EC: 919-857-5 Index: Non-applicable REACH: 01-2119463258-33-XXXX	**Hydrocarbons, C9-C11,n-alkanes, iso-alkanes, cyclics, <2% aromatics**[1]	Self-classified	**10 - <25 %**
	Regulation 1272/2008	Asp. Tox. 1: H304; Flam. Liq. 3: H226; STOT SE 3: H336; EUH066 - Danger 	

[1] Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2020/878
[2] Voluntarily-listed substance failing to meet any of the criteria set out in Regulation (EU) No. 2020/878

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

Identification	Chemical name/Classification		Concentration
CAS: 78-93-3 EC: 201-159-0 Index: 606-002-00-3 REACH: 01-2119457290-43-XXXX	**Butanone[1]**	ATP CLP00	**2,5 - <10 %**
	Regulation 1272/2008	Eye Irrit. 2: H319; Flam. Liq. 2: H225; STOT SE 3: H336; EUH066 - Danger 	
CAS: Non-applicable EC: 921-024-6 Index: Non-applicable REACH: 01-2119475514-35-XXXX	**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane[1]**	Self-classified	**2,5 - <10 %**
	Regulation 1272/2008	Aquatic Chronic 2: H411; Asp. Tox. 1: H304; Flam. Liq. 2: H225; Skin Irrit. 2: H315; STOT SE 3: H336 - Danger 	
CAS: 106-97-8 EC: 203-448-7 Index: 601-004-00-0 REACH: 01-2119474691-32-XXXX	**Butane[2]**	ATP CLP00	**2,5 - <10 %**
	Regulation 1272/2008	Flam. Gas 1A: H220; Press. Gas: H280 - Danger 	
CAS: 75-28-5 EC: 200-857-2 Index: 601-004-00-0 REACH: 01-2119485395-27-XXXX	**Isobutane[2]**	ATP CLP00	**1 - <2,5 %**
	Regulation 1272/2008	Flam. Gas 1A: H220; Press. Gas (Liq.): H280 - Danger 	
CAS: 64-17-5 EC: 200-578-6 Index: 603-002-00-5 REACH: 01-2119457610-43-XXXX	**ethanol[2]**	Self-classified	**0,1 - <1 %**
	Regulation 1272/2008	Eye Irrit. 2: H319; Flam. Liq. 2: H225 - Danger 	

[1] Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2020/878
[2] Voluntarily-listed substance failing to meet any of the criteria set out in Regulation (EU) No. 2020/878

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

Other information:

Identification	Specific concentration limit
ethanol CAS: 64-17-5 EC: 200-578-6	% (w/w) >=50: Eye Irrit. 2 - H319

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:

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

By skin contact:

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

By eye contact:

Rinse eyes thoroughly with 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:

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:

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SECTION 4: FIRST AID MEASURES (continued)

Not available

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Suitable extinguishing media:

Foam extinguisher (AB), Dry Chemical Powder (ABC) Fire Extinguisher, Carbon dioxide extinguisher (BC)

Unsuitable extinguishing media:

Water jet

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. Remove 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:

Wear protective equipment. Keep unprotected persons away. See section 8.

6.2 Environmental precautions:

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

6.3 Methods and material for containment and cleaning up:

It is recommended:

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

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- General precautions for safe use

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

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SECTION 7: HANDLING AND STORAGE (continued)

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 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

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

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Minimum Temp.: 5 ºC

Maximum Temp.: 20 ºC

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 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		
Butanone	IOELV (8h)	200 ppm	600 mg/m³
CAS: 78-93-3 EC: 201-159-0	IOELV (STEL)	300 ppm	900 mg/m³

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Hydrocarbons, C9, aromatics	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 128601-23-0	Dermal	Not relevant	Not relevant	25 mg/kg	Not relevant
EC: 918-668-5	Inhalation	Not relevant	Not relevant	150 mg/m³	Not relevant
Asphalt	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 8052-42-4	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
EC: 232-490-9	Inhalation	Not relevant	Not relevant	Not relevant	2,88 mg/m³
Butanone	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 78-93-3	Dermal	Not relevant	Not relevant	1161 mg/kg	Not relevant
EC: 201-159-0	Inhalation	Not relevant	Not relevant	600 mg/m³	Not relevant
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: Non-applicable	Dermal	Not relevant	Not relevant	773 mg/kg	Not relevant
EC: 921-024-6	Inhalation	Not relevant	Not relevant	2035 mg/m³	Not relevant
ethanol	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 64-17-5	Dermal	Not relevant	Not relevant	343 mg/kg	Not relevant
EC: 200-578-6	Inhalation	Not relevant	Not relevant	950 mg/m³	Not relevant

DNEL (General population):

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Hydrocarbons, C9, aromatics	Oral	Not relevant	Not relevant	11 mg/kg	Not relevant
CAS: 128601-23-0	Dermal	Not relevant	Not relevant	11 mg/kg	Not relevant
EC: 918-668-5	Inhalation	Not relevant	Not relevant	32 mg/m³	Not relevant
Asphalt	Oral	Not relevant	Not relevant	Not relevant	Not relevant
CAS: 8052-42-4	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
EC: 232-490-9	Inhalation	Not relevant	Not relevant	Not relevant	0,61 mg/m³
Butanone	Oral	Not relevant	Not relevant	31 mg/kg	Not relevant
CAS: 78-93-3	Dermal	Not relevant	Not relevant	412 mg/kg	Not relevant
EC: 201-159-0	Inhalation	Not relevant	Not relevant	106 mg/m³	Not relevant
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	Oral	Not relevant	Not relevant	699 mg/kg	Not relevant
CAS: Non-applicable	Dermal	Not relevant	Not relevant	699 mg/kg	Not relevant
EC: 921-024-6	Inhalation	Not relevant	Not relevant	608 mg/m³	Not relevant
ethanol	Oral	Not relevant	Not relevant	87 mg/kg	Not relevant
CAS: 64-17-5	Dermal	Not relevant	Not relevant	206 mg/kg	Not relevant
EC: 200-578-6	Inhalation	Not relevant	Not relevant	114 mg/m³	Not relevant

PNEC:

Identification				
Butanone	STP	709 mg/L	Fresh water	55,8 mg/L
CAS: 78-93-3	Soil	22,5 mg/kg	Marine water	55,8 mg/L
EC: 201-159-0	Intermittent	55,8 mg/L	Sediment (Fresh water)	284,74 mg/kg
	Oral	1 g/kg	Sediment (Marine water)	284,7 mg/kg
ethanol	STP	580 mg/L	Fresh water	0,96 mg/L
CAS: 64-17-5	Soil	0,63 mg/kg	Marine water	0,79 mg/L
EC: 200-578-6	Intermittent	2,75 mg/L	Sediment (Fresh water)	3,6 mg/kg
	Oral	0,38 g/kg	Sediment (Marine water)	2,9 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	Chemical protective gloves (Material: Linear low-density polyethylene (LLDPE), Breakthrough time: > 480 min, Thickness: 0.062 mm)	CE CAT III	EN ISO 21420:2020	Replace the gloves at any sign of deterioration.

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

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Face shield	CE CAT II	EN 166:2002 EN 167:2002 EN 168:2002 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	Disposable clothing for protection against chemical risks, with antistatic and fireproof properties	CE CAT III	EN 1149-1,2,3 EN 13034:2005+A1:2009 EN ISO 13982-1:2004/A1:2010 EN ISO 6529:2013 EN ISO 6530:2005 EN ISO 13688:2013 EN 464:1994	For professional use only. Clean periodically according to the manufacturer´s instructions.
 Mandatory foot protection	Safety footwear for protection against chemical risk, with antistatic and heat resistant properties	CE CAT III	EN ISO 13287:2020 EN ISO 20345:2011 EN 13832-1:2019	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:

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):	74,76 % weight
V.O.C. density at 20 ºC:	559,2 kg/m³ (559,2 g/L)
Average carbon number:	8,06
Average molecular weight:	115,35 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 ºC:	Aerosol
Appearance:	Fluid
Colour:	Black
Odour:	Characteristic
Odour threshold:	Not available *

Volatility:

Boiling point at atmospheric pressure:	-45 ºC (Propellant)
Vapour pressure at 20 ºC:	490000 Pa
Vapour pressure at 50 ºC:	Not available *

*Not available 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)

Evaporation rate at 20 ºC:	Not available *
Product description:	
Density at 20 ºC:	748 kg/m³
Relative density at 20 ºC:	0,748
Dynamic viscosity at 20 ºC:	7500 - 10500 cP
Kinematic viscosity at 20 ºC:	Not available *
Kinematic viscosity at 40 ºC:	≤20,5 mm²/s
Concentration:	Not available *
pH:	Not available *
Vapour density at 20 ºC:	Not available *
Partition coefficient n-octanol/water 20 ºC:	Not available *
Solubility in water at 20 ºC:	Not available *
Solubility properties:	Immiscible
Decomposition temperature:	Not available *
Melting point/freezing point:	Not available *
Recipient pressure:	Not available *
Flammability:	
Flash Point:	-97 ºC (Propellant)
Flammability (solid, gas):	Not available *
Autoignition temperature:	270 ºC (Propellant)
Lower flammability limit:	Not available *
Upper flammability limit:	Not available *
Particle characteristics:	
Median equivalent diameter:	Non-applicable

9.2 Other information:

Information with regard to physical hazard classes:

Explosive properties:	Not available *
Oxidising properties:	Not available *
Corrosive to metals:	Not available *
Heat of combustion:	Not available *
Aerosols-total percentage (by mass) of flammable components:	Not available *
Other safety characteristics:	
Surface tension at 20 ºC:	Not available *
Refraction index:	Not available *

*Not available 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 from Safety Data Sheet.

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.

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SECTION 10: STABILITY AND REACTIVITY (continued)

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	Auto ignition at the surfaces of porous or fibrous materials impregnated with this product, can occur at temperatures as low as 100°C.

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_2), carbon monoxide and other organic compounds.

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

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, as it does not contain substances classified as hazardous 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, as it does not contain substances classified as hazardous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Causes irritation in respiratory passages, which is normally reversible and limited to the upper respiratory passages.

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: Produces eye damage after contact.

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

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for the effects mentioned. For more information see section 3.
  IARC: Hydrocarbons, C9, aromatics (3); ethanol (1); Asphalt (2B); Hydrocarbons, C9-C11,n-alkanes, iso-alkanes, cyclics, <2% aromatics (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: 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.

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

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

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

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: Repeated exposure may cause skin dryness or cracking

H- Aspiration hazard:

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.

Other information:

Not relevant

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
Propane	LD50 oral	>2000 mg/kg	
CAS: 74-98-6	LD50 dermal	>2000 mg/kg	
EC: 200-827-9	LC50 inhalation	>5 mg/L	
Hydrocarbons, C9, aromatics	LD50 oral	>2000 mg/kg	
CAS: 128601-23-0	LD50 dermal	>2000 mg/kg	
EC: 918-668-5	LC50 inhalation	>20 mg/L	
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	LD50 oral	5840 mg/kg	Rat
CAS: Non-applicable	LD50 dermal	2920 mg/kg	Rat
EC: 921-024-6	LC50 inhalation	>20 mg/L	
Butanone	LD50 oral	4000 mg/kg	Rat
CAS: 78-93-3	LD50 dermal	6400 mg/kg	Rabbit
EC: 201-159-0	LC50 inhalation	23,5 mg/L (4 h)	Rat
Asphalt	LD50 oral	>2000 mg/kg	
CAS: 8052-42-4	LD50 dermal	>2000 mg/kg	
EC: 232-490-9	LC50 inhalation	>5 mg/L	
Butane	LD50 oral	>2000 mg/kg	
CAS: 106-97-8	LD50 dermal	>2000 mg/kg	
EC: 203-448-7	LC50 inhalation	658 mg/L (4 h)	Rat
Isobutane	LD50 oral	>2000 mg/kg	
CAS: 75-28-5	LD50 dermal	>2000 mg/kg	
EC: 200-857-2	LC50 inhalation	>5 mg/L	
Hydrocarbons, C9-C11,n-alkanes, iso-alkanes, cyclics, <2% aromatics	LD50 oral	>5000 mg/kg	Rat
CAS: Non-applicable	LD50 dermal	>2000 mg/kg	
EC: 919-857-5	LC50 inhalation	>20 mg/L	
ethanol	LD50 oral	6200 mg/kg	Rat
CAS: 64-17-5	LD50 dermal	20000 mg/kg	Rabbit
EC: 200-578-6	LC50 inhalation	124,7 mg/L (4 h)	Rat

11.2 Information on other hazards:

Endocrine disrupting properties

Endocrine-disrupting properties: The product does not meet the criteria.

Other information

Not relevant

SECTION 12: ECOLOGICAL INFORMATION

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

Toxic to aquatic life with long lasting effects.

12.1 Toxicity:

Acute toxicity:

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Concentration		Species	Genus
Hydrocarbons, C9, aromatics	LC50	>1 - 10 mg/L (96 h)		Fish
CAS: 128601-23-0	EC50	>1 - 10 mg/L (48 h)		Crustacean
EC: 918-668-5	EC50	>1 - 10 mg/L (72 h)		Algae
Butanone	LC50	3220 mg/L (96 h)	Pimephales promelas	Fish
CAS: 78-93-3	EC50	5091 mg/L (48 h)	Daphnia magna	Crustacean
EC: 201-159-0	EC50	4300 mg/L (168 h)	Scenedesmus quadricauda	Algae
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	LC50	5,1 mg/L (96 h)	Oncorhynchus mykiss	Fish
CAS: Non-applicable	EC50	Not relevant		
EC: 921-024-6	EC50	Not relevant		
ethanol	LC50	11000 mg/L (96 h)	Alburnus alburnus	Fish
CAS: 64-17-5	EC50	9268 mg/L (48 h)	Daphnia magna	Crustacean
EC: 200-578-6	EC50	1450 mg/L (192 h)	Microcystis aeruginosa	Algae

Chronic toxicity:

Identification	Concentration		Species	Genus
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	NOEC	Not relevant		
CAS: Non-applicable EC: 921-024-6	NOEC	0,17 mg/L	Daphnia magna	Crustacean
ethanol	NOEC	250 mg/L	Danio rerio	Fish
CAS: 64-17-5 EC: 200-578-6	NOEC	2 mg/L	Ceriodaphnia dubia	Crustacean

12.2 Persistence and degradability:

Substance-specific information:

Identification	Degradability		Biodegradability	
Hydrocarbons, C9-C11,n-alkanes, iso-alkanes, cyclics, <2% aromatics	BOD5	Not relevant	Concentration	Not relevant
CAS: Non-applicable	COD	Not relevant	Period	28 days
EC: 919-857-5	BOD5/COD	Not relevant	% Biodegradable	80 %
Butanone	BOD5	2,03 g O2/g	Concentration	Not relevant
CAS: 78-93-3	COD	2,31 g O2/g	Period	20 days
EC: 201-159-0	BOD5/COD	0,88	% Biodegradable	89 %
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	BOD5	Not relevant	Concentration	Not relevant
CAS: Non-applicable	COD	Not relevant	Period	28 days
EC: 921-024-6	BOD5/COD	Not relevant	% Biodegradable	98 %
ethanol	BOD5	Not relevant	Concentration	100 mg/L
CAS: 64-17-5	COD	Not relevant	Period	14 days
EC: 200-578-6	BOD5/COD	Not relevant	% Biodegradable	89 %

12.3 Bioaccumulative potential:

Substance-specific information:

Identification	Bioaccumulation potential	
Propane	BCF	13
CAS: 74-98-6	Pow Log	2.86
EC: 200-827-9	Potential	Low
Butanone	BCF	3
CAS: 78-93-3	Pow Log	0.29
EC: 201-159-0	Potential	Low
Butane	BCF	33
CAS: 106-97-8	Pow Log	2.89
EC: 203-448-7	Potential	Moderate
Isobutane	BCF	27
CAS: 75-28-5	Pow Log	2.76
EC: 200-857-2	Potential	Low

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Bioaccumulation potential	
ethanol	BCF	3
CAS: 64-17-5	Pow Log	-0.31
EC: 200-578-6	Potential	Low

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
Propane	Koc	460	Henry	71636,78 Pa·m³/mol
CAS: 74-98-6	Conclusion	Moderate	Dry soil	Yes
EC: 200-827-9	Surface tension	7,02E-3 N/m (25 ºC)	Moist soil	Yes
Butanone	Koc	30	Henry	5,77 Pa·m³/mol
CAS: 78-93-3	Conclusion	Very High	Dry soil	Yes
EC: 201-159-0	Surface tension	2,396E-2 N/m (25 ºC)	Moist soil	Yes
Butane	Koc	900	Henry	96258,75 Pa·m³/mol
CAS: 106-97-8	Conclusion	Low	Dry soil	Yes
EC: 203-448-7	Surface tension	1,187E-2 N/m (25 ºC)	Moist soil	Yes
Isobutane	Koc	35	Henry	120576,75 Pa·m³/mol
CAS: 75-28-5	Conclusion	Very High	Dry soil	Yes
EC: 200-857-2	Surface tension	9,84E-3 N/m (25 ºC)	Moist soil	Yes
ethanol	Koc	1	Henry	4,61E-1 Pa·m³/mol
CAS: 64-17-5	Conclusion	Very High	Dry soil	Yes
EC: 200-578-6	Surface tension	2,339E-2 N/m (25 ºC)	Moist soil	Yes

12.5 Results of PBT and vPvB assessment:

Product does not meet PBT/vPvB criteria

12.6 Endocrine disrupting properties:

Endocrine-disrupting properties: The product does not 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	Hazardous

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

HP3 Flammable, HP14 Ecotoxic, HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

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-hazardous residue. Waste should not be disposed of to drains. 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 2023 and RID 2023:

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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:	2.1
14.4	**Packing group:**	N/A
14.5	**Environmental hazards:**	Yes
14.6	**Special precautions for user**	
	Special regulations:	190, 327, 344, 625
	Tunnel restriction code:	D
	Physico-Chemical properties:	see section 9
	Limited quantities:	1 L
14.7	**Maritime transport in bulk according to IMO instruments:**	Not relevant

Transport of dangerous goods by sea:

With regard to IMDG 41-22:

14.1	**UN number or ID number:**	UN1950
14.2	**UN proper shipping name:**	AEROSOLS
14.3	**Transport hazard class(es):**	2
	Labels:	2.1
14.4	**Packing group:**	N/A
14.5	**Marine pollutant:**	Yes
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:	Not relevant
14.7	**Maritime transport in bulk according to IMO instruments:**	Not relevant

Transport of dangerous goods by air:

With regard to IATA/ICAO 2024:

14.1	**UN number or ID number:**	UN1950
14.2	**UN proper shipping name:**	AEROSOLS
14.3	**Transport hazard class(es):**	2
	Labels:	2.1
14.4	**Packing group:**	N/A
14.5	**Environmental hazards:**	Yes
14.6	**Special precautions for user**	
	Physico-Chemical properties:	see section 9
14.7	**Maritime transport in bulk according to IMO instruments:**	Not relevant

SECTION 15: REGULATORY INFORMATION

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

- Article 95, REGULATION (EU) No 528/2012: *ethanol (64-17-5) - PT: (1,2,4,6)*
- Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Not relevant
- Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Not relevant
- REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Not relevant
- Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Not relevant

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SECTION 15: REGULATORY INFORMATION (continued)

Seveso III:

Section	Description	Lower-tier requirements	Upper-tier requirements
P3a	FLAMMABLE AEROSOLS	150	500
E2	ENVIRONMENTAL HAZARDS	200	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:

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.:

Not relevant

Texts of the legislative phrases mentioned in section 2:

H222: Extremely flammable aerosol.
H319: Causes serious eye irritation.
H335: May cause respiratory irritation.
H336: May cause drowsiness or dizziness.
H411: Toxic to aquatic life with long lasting effects.
H229: Pressurised container: May burst if heated.

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:

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SECTION 16: OTHER INFORMATION (continued)

Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects.
Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways.
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 (Liq.): H280 - Contains gas under pressure, may explode if heated.
Press. Gas: H280 - Contains gas under pressure, may explode if heated.
Skin Irrit. 2: H315 - Causes skin irritation.
STOT SE 3: H335 - May cause respiratory irritation.
STOT SE 3: H336 - May cause drowsiness or dizziness.

Classification procedure:

Aerosol 1: Calculation method
Eye Irrit. 2: Calculation method
STOT SE 3: Calculation method
STOT SE 3: Calculation method
Aquatic Chronic 2: Calculation method
Aerosol 1: Calculation method

Advice related to training:

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

- END OF SAFETY DATA SHEET -