

**ZMYWACZ DO HAMULCÓW - BRAKE CLEANER - SPRAY****SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

**1.1 Product identifier:** ZMYWACZ DO HAMULCÓW - BRAKE CLEANER - SPRAY

**Other means of identification:**

**UFI:** QEWW-H0K7-X001-ENTK

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

Relevant uses (Consumer use): Brake cleaner.

Relevant uses (Professional users): Brake cleaner.

Relevant uses (Industrial user): Brake cleaner.

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

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<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

Skin Irrit. 2: Skin irritation, Category 2, H315

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:**

H222 - Extremely flammable aerosol.

H229 - Pressurised container: May burst if heated.

H315 - Causes skin irritation.

H336 - May cause drowsiness or dizziness.

H411 - Toxic to aquatic life with long lasting effects.

**Precautionary statements:**

*\*\* Changes with regards to the previous version*

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**ZMYWACZ DO HAMULCÓW - BRAKE CLEANER - SPRAY****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 spray  
P271: Use only outdoors or in a well-ventilated area.  
P273: Avoid release to the environment.  
P280: Wear protective gloves/eye protection.  
P302+P352: IF ON SKIN: Wash with plenty of water.  
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
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 regulations on hazardous waste or packaging and packaging waste respectively.

**Substances that contribute to the classification**

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane; propan-2-ol

**UFI:** QEWW-H0K7-X001-ENTK

**2.3 Other hazards:**

Product does not meet PBT/vPvB criteria

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

*\*\* Changes with regards to the previous version*

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS \*\*****3.1 Substance:**




Not relevant

**3.2 Mixture:**

**Chemical description:** active ingredient mixture with a propellant. Propellant: carbon dioxide

**Components:**

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

Identification	Chemical name/Classification		Concentration
CAS: Not relevant EC: 921-024-6 Index: Not relevant REACH: 01-2119475514-35-XXXX	<b>Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, &lt;5% n-hexane<sup>(1)</sup></b>	Self-classified	<b>75 - &lt;100 %</b>
	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: 67-63-0 EC: 200-661-7 Index: 603-117-00-0 REACH: 01-2119457558-25-XXXX	<b>propan-2-ol<sup>(1)</sup></b>	ATP CLP00	<b>2,5 - &lt;10 %</b>
	Regulation 1272/2008	Eye Irrit. 2: H319; Flam. Liq. 2: H225; STOT SE 3: H336 - Danger 	
CAS: 124-38-9 EC: 204-696-9 Index: Not relevant REACH: Not relevant	<b>Carbon dioxide<sup>(2)</sup></b>	Self-classified	<b>2,5 - &lt;10 %</b>
	Regulation 1272/2008	Press. Gas: H280 - Warning 	

<sup>(1)</sup> Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2020/878

<sup>(2)</sup> Substance with a Union workplace exposure limit

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

*\*\* Changes with regards to the previous version*

**SECTION 4: FIRST AID MEASURES****4.1 Description of first aid measures:**

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**ZMYWACZ DO HAMULCÓW - BRAKE CLEANER - SPRAY****SECTION 4: FIRST AID MEASURES (continued)**

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:**

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. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...)

**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.

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**ZMYWACZ DO HAMULCÓW - BRAKE CLEANER - SPRAY****SECTION 6: ACCIDENTAL RELEASE MEASURES (continued)****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:

Prevent the entrance of product in drains, sewers or watercourses. Absorb the spill using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. Collect the product in appropriate containers and manage it according to current legislation.

Spillages in water or sea:

Small spillages:

Contain spillage using barriers or similar equipment. Use suitable absorbents for collection and treat the waste in accordance with current regulations.

Large spillages:

If possible, contain spillage in open water using barriers or similar equipment. If this is not possible, try to control its spread and collect the product with suitable mechanical means. Always consult experts before using dispersants and make sure you have the necessary approvals if they are to be used. Treat the waste according to current regulations.

**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

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.- Specific storage requirements

Minimum Temp.: 5 °C

Maximum Temp.: 20 °C

Maximum time: 24 Months

B.- General conditions for storage

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

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

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

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1 Control parameters:**

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**ZMYWACZ DO HAMULCÓW - BRAKE CLEANER - SPRAY**
**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**

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		
Carbon dioxide CAS: 124-38-9 EC: 204-696-9		IOELV (8h)	5000 ppm	9000 mg/m <sup>3</sup>
		IOELV (STEL)		

**DNEL (Workers):**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane CAS: Not relevant EC: 921-024-6	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	773 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	2035 mg/m <sup>3</sup>	Not relevant
propan-2-ol CAS: 67-63-0 EC: 200-661-7	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	888 mg/kg	Not relevant
	Inhalation	1000 mg/m <sup>3</sup>	Not relevant	500 mg/m <sup>3</sup>	Not relevant

**DNEL (General population):**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane CAS: Not relevant EC: 921-024-6	Oral	Not relevant	Not relevant	699 mg/kg	Not relevant
	Dermal	Not relevant	Not relevant	699 mg/kg	Not relevant
	Inhalation	Not relevant	Not relevant	608 mg/m <sup>3</sup>	Not relevant
propan-2-ol CAS: 67-63-0 EC: 200-661-7	Oral	51 mg/kg	Not relevant	26 mg/kg	Not relevant
	Dermal	Not relevant	Not relevant	319 mg/kg	Not relevant
	Inhalation	178 mg/m <sup>3</sup>	Not relevant	114 mg/m <sup>3</sup>	Not relevant

**PNEC:**



Identification					
propan-2-ol CAS: 67-63-0 EC: 200-661-7	STP	2251 mg/L	Fresh water		140,9 mg/L
	Soil	28 mg/kg	Marine water		140,9 mg/L
	Intermittent	140,9 mg/L	Sediment (Fresh water)		552 mg/kg
	Oral	0,16 g/kg	Sediment (Marine water)		552 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 (Filter type: A)	 CAT III	EN 149:2001+A1:2010 EN 405:2002+A1:2010 EN ISO 136:1998	Replace when an increase in resistance to breathing is observed and/or a smell or taste of the contaminant is detected.

C.- Specific protection for the hands



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**ZMYWACZ DO HAMULCÓW - BRAKE CLEANER - SPRAY**
**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**





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)		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**



Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.		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		EN 1149-1:2007 EN 1149-2:1998 EN 1149-3:2004 UNE-EN ISO 18526-1 al 4:2020 EN ISO 14116:2015 EN 1149-5:2018	Limited protection against flames.
 Mandatory foot protection	Safety footwear with antistatic and heat resistant properties		EN ISO 13287:2020 EN ISO 20345:2022	Replace boots at any sign of deterioration.

**F.- Additional emergency measures**

It is advised to implement additional emergency equipments in workplaces that are particularly exposed to the product or in situations where risk assessments highlight the necessity of such equipments.

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:**

To comply with environmental protection regulations, it is recommended to prevent any spillage of the product and its container. For more detailed information, please refer to subsection 7.1.D.

**Volatile organic compounds:**

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

V.O.C. (Supply):	96,5 % weight
V.O.C. density at 20 °C:	694,8 kg/m <sup>3</sup> (694,8 g/L)
Average carbon number:	6,56
Average molecular weight:	93,88 g/mol

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**
**9.1 Information on basic physical and chemical properties:**

For complete information see the product datasheet.

**Appearance:**

Physical state at 20 °C: Aerosol

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

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**ZMYWACZ DO HAMULCÓW - BRAKE CLEANER - SPRAY****SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)**

Appearance:	Fluid
Colour:	Colourless
Odour:	Characteristic
Odour threshold:	Not available *
<b>Volatility:</b>	
Boiling point at atmospheric pressure:	82 °C (Propellant)
Vapour pressure at 20 °C:	549955 Pa
Vapour pressure at 50 °C:	Not available *
Evaporation rate at 20 °C:	Not available *
<b>Product description:</b>	
Density at 20 °C:	720 kg/m <sup>3</sup>
Relative density at 20 °C:	0,72
Dynamic viscosity at 20 °C:	Not available *
Kinematic viscosity at 20 °C:	Not available *
Kinematic viscosity at 40 °C:	≤20,5 mm <sup>2</sup> /s
Concentration:	Not available *
pH:	Not available *
Vapour density at 20 °C:	Not available *
Partition coefficient n-octanol/water 20 °C:	Not available *
Solubility in water at 20 °C:	Not available *
Solubility properties:	Immiscible
Decomposition temperature:	Not available *
Melting point/freezing point:	Not available *
Recipient pressure:	Not available *
<b>Flammability:</b>	
Flash Point:	-9 °C (Propellant)
Flammability (solid, gas):	Not available *
Autoignition temperature:	Not available *
Lower flammability limit:	0,8 % Volume
Upper flammability limit:	12 % Volume
<b>Particle characteristics:</b>	
Median equivalent diameter:	Not available *

**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 °C:	Not available *
Refraction index:	Not available *

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

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**ZMYWACZ DO HAMULCÓW - BRAKE CLEANER - SPRAY****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.

**10.4 Conditions to avoid:**

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Precaution	Precaution	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:**

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

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

- Contact with the skin: Produces skin inflammation.
- Contact with the eyes: 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: propan-2-ol (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:**

\*\* Changes with regards to the previous version

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**ZMYWACZ DO HAMULCÓW - BRAKE CLEANER - SPRAY**
**SECTION 11: TOXICOLOGICAL INFORMATION \*\* (continued)**

- 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:**

Exposure in high concentration can interfere with the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.

**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.

**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
propan-2-ol CAS: 67-63-0 EC: 200-661-7	LD50 oral	>5840 mg/kg	Rat
	LD50 dermal	>13900 mg/kg	Rabbit
	LC50 inhalation vapour	>25 mg/L (6 h)	Rat
Carbon dioxide CAS: 124-38-9 EC: 204-696-9	LD50 oral	>2000 mg/kg	
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation gases	>20000 mg/L	
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane CAS: Not relevant EC: 921-024-6	LD50 oral	5840 mg/kg	Rat
	LD50 dermal	2920 mg/kg	Rat
	LC50 inhalation vapour	>20 mg/L	

Only the physical form mist can occur during any reasonably expected use of the product, including when the product is used to produce a new product.

**11.2 Information on other hazards:**
**Endocrine disrupting properties**

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

**Other information**

Not relevant

**\*\* Changes with regards to the previous version**

**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:**

Identification	Concentration		Species	Genus
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane CAS: Not relevant EC: 921-024-6	LC50	5,1 mg/L (96 h)	Oncorhynchus mykiss	Fish
	EC50	Not relevant		
	EC50	Not relevant		

**\*\* Changes with regards to the previous version**

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**ZMYWACZ DO HAMULCÓW - BRAKE CLEANER - SPRAY**
**SECTION 12: ECOLOGICAL INFORMATION \*\* (continued)**

Identification	Concentration	Species	Genus
propan-2-ol	LC50 9640 mg/L (96 h)	Pimephales promelas	Fish
CAS: 67-63-0	EC50 10000 mg/L (24 h)	Daphnia magna	Crustacean
EC: 200-661-7	EC50 Not relevant		

**Chronic toxicity:**

Identification	Concentration	Species	Genus
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	NOEC Not relevant		
CAS: Not relevant EC: 921-024-6	NOEC 0,17 mg/L	Daphnia magna	Crustacean

**12.2 Persistence and degradability:**
**Substance-specific information:**

Identification	Degradability	Biodegradability
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	BOD5 Not relevant	Concentration Not relevant
CAS: Not relevant	COD Not relevant	Period 28 days
EC: 921-024-6	BOD5/COD Not relevant	% Biodegradable 98 %
propan-2-ol	BOD5 1,19 g O2/g	Concentration 100 mg/L
CAS: 67-63-0	COD 2,23 g O2/g	Period 14 days
EC: 200-661-7	BOD5/COD 0,53	% Biodegradable 86 %

**12.3 Bioaccumulative potential:**
**Substance-specific information:**

Identification	Bioaccumulation potential
propan-2-ol	BCF 3
CAS: 67-63-0	Pow Log 0.05
EC: 200-661-7	Potential Low

**12.4 Mobility in soil:**

Identification	Absorption/desorption	Volatility
propan-2-ol	Koc 1.5	Henry 8,207E-1 Pa·m³/mol
CAS: 67-63-0	Conclusion Very High	Dry soil Yes
EC: 200-661-7	Surface tension 2,24E-2 N/m (25 °C)	Moist soil Yes
Carbon dioxide	Koc Not relevant	Henry Not relevant
CAS: 124-38-9	Conclusion Not relevant	Dry soil Not relevant
EC: 204-696-9	Surface tension 5,7E-4 N/m (25 °C)	Moist soil Not relevant

**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

**\*\* Changes with regards to the previous version**

**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, HP4 Irritant — skin irritation and eye damage

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**ZMYWACZ DO HAMULCÓW - BRAKE CLEANER - SPRAY****SECTION 13: DISPOSAL CONSIDERATIONS (continued)****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:



- |  |                    |
|--|--------------------|
| <b>14.1 UN number or ID number:</b>                                  | UN1950             |
| <b>14.2 UN proper shipping name:</b>                                 | AEROSOLS           |
| <b>14.3 Transport hazard class(es):</b>                              | 2                  |
| Labels:  | 2.1                |
| <b>14.4 Packing group:</b>   | N/A                |
| <b>14.5 Environmental hazards:</b>                                   | Yes                |
| <b>14.6 Special precautions for user</b>                             |                    |
| Special regulations:   | 190, 327, 344, 625 |
| Tunnel restriction code:   | D                  |
| Physico-Chemical properties:   | see section 9      |
| Limited quantities:  | 1 L                |
| <b>14.7 Maritime transport in bulk according to IMO instruments:</b> | Not relevant       |

**Transport of dangerous goods by sea:**

With regard to IMDG 41-22:



- |  |                             |
|--|-----------------------------|
| <b>14.1 UN number or ID number:</b>                                  | UN1950                      |
| <b>14.2 UN proper shipping name:</b>                                 | AEROSOLS                    |
| <b>14.3 Transport hazard class(es):</b>                              | 2                           |
| Labels:  | 2.1                         |
| <b>14.4 Packing group:</b>   | N/A                         |
| <b>14.5 Marine pollutant:</b>  | Yes                         |
| <b>14.6 Special precautions for user</b>                             |                             |
| 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                |
| <b>14.7 Maritime transport in bulk according to IMO instruments:</b> | Not relevant                |

**Transport of dangerous goods by air:**

With regard to IATA/ICAO 2025:

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**ZMYWACZ DO HAMULCÓW - BRAKE CLEANER - SPRAY**
**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**  
 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: *propan-2-ol (67-63-0) - PT: (1,2,4) ; Carbon dioxide (124-38-9) - PT: (15)*
- Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Not relevant
- Regulation (EU) 2019/1021 on persistent organic pollutants: Not relevant
- Regulation (EU) No 2024/590, 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

**Regulation (EC) No 648/2004 on detergents:**

In accordance with this regulation the product complies with the following:

**Labelling for contents:**

Component	Concentration interval
Aliphatic hydrocarbons	% (w/w) >= 30

**Seveso III:**

Section	Description	Lower-tier requirements	Upper-tier requirements
P3b	FLAMMABLE AEROSOLS	5000	50000
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

Regulation (EC) No 1223/2009 of the European Parliament and of the Council of 30 November 2009 on cosmetic products

Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents

Commission Regulation (EC) No 907/2006 of 20 June 2006 amending Regulation (EC) No 648/2004 of the European Parliament and of the Council on detergents, in order to adapt Annexes III and VII

Commission Regulation (EC) No 551/2009 of 25 June 2009 amending Regulation (EC) No 648/2004 of the European Parliament and of the Council on detergents, in order to adapt Annexes V and VI thereto (surfactant derogation)

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

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**ZMYWACZ DO HAMULCÓW - BRAKE CLEANER - SPRAY****SECTION 15: REGULATORY INFORMATION (continued)**

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.:**

COMPOSITION/INFORMATION ON INGREDIENTS (SECTION 3, SECTION 11, SECTION 12):

- New declared substances  
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane
- Removed substances  
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, >5% n-hexane

Substances that contribute to the classification (SECTION 2):

- New declared substances  
propan-2-ol (67-63-0)
- Removed substances  
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, >5% n-hexane

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

H222: Extremely flammable aerosol.

H315: Causes skin 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:**

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. Liq. 2: H225 - Highly flammable liquid and vapour.

Press. Gas: H280 - Contains gas under pressure, may explode if heated.

Skin Irrit. 2: H315 - Causes skin irritation.

STOT SE 3: H336 - May cause drowsiness or dizziness.

**Classification procedure:**

Aerosol 1: Calculation method

Skin Irrit. 2: 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:**

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**ZMYWACZ DO HAMULCÓW - BRAKE CLEANER - SPRAY****SECTION 16: OTHER INFORMATION (continued)**

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

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 -