

This SDS is an English translation of Regulation (EU) no 2015/830, without any country-specific legislation

SPRAY DO SPAWANIA - WELDING - SPRAY

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

1.1 Product identifier:

SPRAY DO SPAWANIA - WELDING - SPRAY

Other means of identification:

Non-applicable

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

Relevant uses: Metal surface treatment.

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:

Agencja Handlowa "BOLL" Wojciech Dalewski Spółka Jawna

ul. Chemiczna 3

65-713 Zielona Góra - Polska

Phone.: 68 451 99 99 - Fax: 68 451 99 00

technolog@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.

Acute Tox. 4: Acute toxicity if swallowed, Category 4, H302

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 Dam. 1: Serious eye damage, Category 1, H318 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.

H302 - Harmful if swallowed.

H315 - Causes skin irritation.

H318 - Causes serious eye damage.

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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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/protective clothing/eye protection/face 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.

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 regulations on hazardous waste or packaging and packaging waste respectively.

Substances that contribute to the classification

pentane; 4-Nonylphenol, branched, ethoxylated

2.3 Other hazards:

Product fails to meet PBT/vPvB 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:	109-66-0	pentane ⁽¹⁾	ATP CLP00	
EC: Index: REACH:	203-692-4 601-006-00-1 01-2119459286-30- XXXX	Regulation 1272/2008	Aquatic Chronic 2: H411; Asp. Tox. 1: H304; Flam. Liq. 2: H225; STOT SE 3: H336; EUH066 - Danger	50 - <75 %
CAS:	106-97-8	Butane ⁽¹⁾	ATP CLP00	
EC: Index: REACH:	203-448-7 601-004-00-0 01-2119474691-32- XXXX	Regulation 1272/2008 Flam. Gas 1A: H220; Press. Gas: H280 - Danger		10 - <25 %
CAS: 74-98-6		Propane(1) ATP CLP00		
EC: 200-827-9 Index: 601-003-00-5 REACH: 01-2119486944-21- XXXX	Regulation 1272/2008	Flam. Gas 1A: H220; Press. Gas: H280 - Danger	10 - <25 %	
CAS:	127087-87-0	4-Nonylphenol, bran	ched, ethoxylated ⁽¹⁾ Self-classified	
EC: Index: REACH:	500-315-8 Non-applicable Non-applicable	Regulation 1272/2008	Aquatic Chronic 2: H411; Eye Irrit. 2: H319; Skin Irrit. 2: H315 - Warning	10 - <25 %
CAS:	75-28-5	Isobutane ⁽¹⁾	ATP CLP00	
Index:	EC: 200-857-2 Index: 601-004-00-0 REACH: 01-2119485395-27- XXXX	Regulation 1272/2008	Flam. Gas 1A: H220; Press. Gas: H280 - Danger	2,5 - <10 %

⁽¹⁾ Voluntarily-listed substance failing to meet any of the criteria set out in Regulation (EU) No. 2015/830

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

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

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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.

Bv 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 water for at least 15 minutes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case removal could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS for the product.

By ingestion/aspiration:

Request medical assistance immediately, showing the SDS of this product. Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. In the case of loss of consciousness do not administer anything orally unless supervised by a doctor. Rinse out the mouth and throat, as they may have been affected during ingestion. Keep the person affected at rest.

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 (CO₂).

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:

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SECTION 6: ACCIDENTAL RELEASE MEASURES (continued)

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.

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.- Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

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

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 °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:

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		
pentane	IOELV (8h)	1000 ppm	3000 mg/m ³
CAS: 109-66-0 EC: 203-692-4	IOELV (STEL)		



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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

DNEL (Workers):

		Short e	xposure	Long ex	xposure
Identification		Systemic	Local	Systemic	Local
pentane	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 109-66-0	Dermal	Non-applicable	Non-applicable	432 mg/kg	Non-applicable
EC: 203-692-4	Inhalation	Non-applicable	Non-applicable	3000 mg/m ³	Non-applicable

DNEL (General population):

		Short e	xposure	Long ex	xposure
Identification		Systemic	Local	Systemic	Local
pentane	Oral	Non-applicable	Non-applicable	214 mg/kg	Non-applicable
CAS: 109-66-0	Dermal	Non-applicable	Non-applicable	214 mg/kg	Non-applicable
EC: 203-692-4	Inhalation	Non-applicable	Non-applicable	643 mg/m ³	Non-applicable

PNEC:

Identification				
pentane	STP	3,6 mg/L	Fresh water	0,23 mg/L
CAS: 109-66-0	Soil	0,55 mg/kg	Marine water	0,23 mg/L
EC: 203-692-4	Intermittent	0,88 mg/L	Sediment (Fresh water)	1,2 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	1,2 mg/kg

8.2 Exposure controls:

A.- General security and hygiene measures in the work place

As a preventative measure it is recommended to use basic Personal 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	CAT III	EN 149:2001+A1:2009 EN 405:2002+A1:2010	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	CATI		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.	CATII	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

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory complete body protection	Antistatic and fireproof protective clothing	CAT III	EN 1149-1:2006 EN 1149-2:1997 EN 1149-3:2004 EN 168:2002 EN ISO 14116:2015 EN 1149-5:2018	Limited protection against flames.
Mandatory foot protection	Safety footwear with antistatic and heat resistant properties	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
+	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	⊣ (♦	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011
Emergency shower		Eyewash stations	

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): 90 % weight

V.O.C. density at 20 °C: 560,7 kg/m³ (560,7 g/L)

Average carbon number: 5

Average molecular weight: 72,2 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:

Appearance:

Colour:

Colourless

Odour:

Characteristic

Odour threshold:

Non-applicable *

Volatility:

Boiling point at atmospheric pressure: -45 °C (Propellant)

Vapour pressure at 20 °C: 260000 Pa
Vapour pressure at 50 °C: Non-applicable *
Evaporation rate at 20 °C: Non-applicable *

Product description:

Density at 20 °C: 623 kg/m³ Relative density at 20 °C: 0,623

Dynamic viscosity at 20 °C:

Kinematic viscosity at 20 °C:

Kinematic viscosity at 40 °C:

*Non-applicable *

*Non-applicable *

*Non-applicable *

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Concentration: Non-applicable *
pH: Non-applicable *
Vapour density at 20 °C: Non-applicable *
Partition coefficient n-octanol/water 20 °C: Non-applicable *

Solubility in water at 20 °C:

Solubility properties:

Decomposition temperature:

Melting point/freezing point:

Recipient pressure:

Explosive properties:

Non-applicable *

Non-applicable *

Non-applicable *

Non-applicable *

Non-applicable *

Flammability:

Flash Point:

-97 °C (Propellant)

Heat of combustion:

Non-applicable *

Flammability (solid, gas):

Autoignition temperature:

Lower flammability limit:

Upper flammability limit:

10,9 % Volume

Explosive:

Lower explosive limit: Non-applicable *
Upper explosive limit: Non-applicable *

9.2 Other information:

Surface tension at 20 °C:

Refraction index:

Non-applicable *

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:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO2), carbon monoxide and other organic compounds.

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SECTION 11: TOXICOLOGICAL INFORMATION **

11.1 Information on toxicological effects:

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

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: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.
 - 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 dangerous 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 dangerous 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: Produces serious 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 dangerous for the effects mentioned. For more information see section 3.

 IARC: Non-applicable
 - 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: 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.
- 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 dangerous for this effect. For more information see section 3.
 - Skin: Based on available data, the classification criteria are not met. However, it does contain substances which are classified as dangerous due to repetitive exposure. For more information see section 3.
- H- Aspiration hazard:

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

Other information:

Non-applicable

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
pentane	LD50 oral	>2000 mg/kg	
CAS: 109-66-0	LD50 dermal	>2000 mg/kg	
EC: 203-692-4	LC50 inhalation	>20 mg/L (4 h)	

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SECTION 11: TOXICOLOGICAL INFORMATION ** (continued)

Identification	A	Acute toxicity	
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
Propane	LD50 oral	>2000 mg/kg	
CAS: 74-98-6	LD50 dermal	>2000 mg/kg	
EC: 200-827-9	LC50 inhalation	>5 mg/L (4 h)	
4-Nonylphenol, branched, ethoxylated	LD50 oral	>2000 mg/kg	
CAS: 127087-87-0	LD50 dermal	>2000 mg/kg	
EC: 500-315-8	LC50 inhalation	>20 mg/L (4 h)	
Isobutane	LD50 oral	>2000 mg/kg	
CAS: 75-28-5	LD50 dermal	>2000 mg/kg	
EC: 200-857-2	LC50 inhalation	>5 mg/L (4 h)	

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SECTION 12: FCOLOGICAL INFORMATION **

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

12.1 Toxicity:

Identification		Acute toxicity	Species	Genus
pentane	LC50	Non-applicable		
CAS: 109-66-0	EC50	9.74 mg/L (48 h)	Daphnia magna	Crustacean
EC: 203-692-4	EC50	Non-applicable		
4-Nonylphenol, branched, ethoxylated	LC50	>1 - 10 mg/L (96 h)		Fish
CAS: 127087-87-0	EC50	>1 - 10 mg/L (48 h)		Crustacean
EC: 500-315-8	EC50	>1 - 10 mg/L (72 h)		Algae

12.2 Persistence and degradability:

Identification	Degradability		Biodegradability	
pentane BOD5 N		Non-applicable	Concentration	100 mg/L
CAS: 109-66-0	COD	Non-applicable	Period	28 days
EC: 203-692-4	BOD5/COD	Non-applicable	% Biodegradable	96 %

12.3 Bioaccumulative potential:

Identification		Bioaccumulation potential		
pentane		BCF	171	
CAS: 109-66-0	Po	Pow Log	3.39	
EC: 203-692-4	Po	Potential	High	
CAS: 106-97-8		BCF	33	
		ow Log	2.89	
		Potential	Moderate	
Propane		3CF	13	
CAS: 74-98-6	Po	ow Log	2.86	
EC: 200-827-9		otential	Low	
Isobutane CAS: 75-28-5 EC: 200-857-2		3CF	27	
		ow Log	2.76	
		otential	Low	

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
pentane	Koc	80	Henry	126656,25 Pa·m³/mol
CAS: 109-66-0	Conclusion	Very High	Dry soil	Yes
EC: 203-692-4	Surface tension	1,547E-2 N/m (25 °C)	Moist soil	Yes

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SECTION 12: ECOLOGICAL INFORMATION ** (continued)

Identification	Absorption/desorption		Volatility	
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 °C)	Moist soil	Yes
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 °C)	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 °C)	Moist soil	Yes

12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
07 01 04*	other organic solvents, washing liquids and mother liquors	Dangerous

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

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 stst

Transport of dangerous goods by land:

With regard to ADR 2021 and RID 2021:

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SECTION 14: TRANSPORT INFORMATION ** (continued)



14.1 UN number: UN1950

14.2 UN proper shipping name: AEROSOLS, flammable

14.3 Transport hazard class(es): 2 Labels: 2.1

14.4 Packing group: N/A14.5 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 Transport in bulk according to Annex II of Marpol and the IBC Code:

Non-applicable

Transport of dangerous goods by sea:

With regard to IMDG 39-18:

14.1 UN number: UN1950

14.2 UN proper shipping name: AEROSOLS, flammable

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: Non-applicable **14.7 Transport in bulk according** Non-applicable

to Annex II of Marpol and the IBC Code:

Transport of dangerous goods by air:

With regard to IATA/ICAO 2021:



14.1 UN number: UN1950

14.2 UN proper shipping name: AEROSOLS, flammable

 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 Transport in bulk according** Non-applicable

to Annex II of Marpol and

the IBC Code:

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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): 4-Nonylphenol, branched, ethoxylated Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: 4-Nonylphenol, branched, ethoxylated (04/01/2021)

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

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SECTION 15: REGULATORY INFORMATION (continued)

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: Contains 4-Nonylphenol, branched, ethoxylated

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.

Contains more than 0.1 % of 4-Nonylphenol, branched, ethoxylated by weight. Shall not be placed on the market, or used, as substances or in mixtures in concentrations equal to or greater than 0,1 % by weight for the following purposes:

- (1) industrial and institutional cleaning except:
- controlled closed dry cleaning systems where the washing liquid is recycled or incinerated,
 cleaning systems with special treatment where the washing liquid is recycled or incinerated.
- (2) domestic cleaning;
- (3) textiles and leather processing except:
- processing with no release into waste water,
 systems with special treatment where the process water is pre-treated to remove the organic fraction completely prior to biological waste water treatment (degreasing of sheepskin);
- (4) emulsifier in agricultural teat dips;
- (5) metal working except:

uses in controlled closed systems where the washing liquid is recycled or incinerated;

- (6) manufacturing of pulp and paper;
- (7) cosmetic products;
- (8) other personal care products except:

spermicides;

(9) co-formulants in pesticides and biocides. However national authorisations for pesticides or biocidal products containing nonylphenol ethoxylates as co-formulant, granted before 17 July 2003, shall not be affected by this restriction until their date of expiry.

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

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

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 *:

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SECTION 16: OTHER INFORMATION ** (continued)

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 (Regulation (EC) No 2015/830).

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

Butane (106-97-8)

Propane (74-98-6)

4-Nonylphenol, branched, ethoxylated (127087-87-0)

Isobutane (75-28-5)

· Removed substances

Isononylphenol-ethoxylate (37205-87-1)

CLP Regulation (EC) No 1272/2008 (SECTION 2, SECTION 16):

- · Pictograms
- · Hazard statements
- · Supplementary information

TRANSPORT INFORMATION (SECTION 14):

- · UN number
- · Packing group

Content of the 3rd section presenting modifications (SECTION 3):

4-Nonylphenol, branched, ethoxylated (127087-87-0): Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH)

Texts of the legislative phrases mentioned in section 2:

- H222: Extremely flammable aerosol.
- H315: Causes skin irritation.
- H302: Harmful if swallowed.
- H336: May cause drowsiness or dizziness.
- H411: Toxic to aquatic life with long lasting effects.
- H229: Pressurised container: May burst if heated.
- H318: Causes serious eye damage.

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. Gas 1A: H220 - Extremely flammable gas.

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 Acute Tox. 4: Calculation method STOT SE 3: Calculation method Aquatic Chronic 2: Calculation method

Aerosol 1: Calculation method Eye Dam. 1: 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:

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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

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 -

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