

**MINOS AUTO FOAM CLEANER - Foam cleaner  
24-166**

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

- 1.1 Product identifier:** MINOS AUTO FOAM CLEANER - Foam cleaner  
24-166
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**  
Relevant uses: 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:** EVOCHEM S.A.  
Tzavardella Place  
133 41 PHILI , ATTICA - GREECE  
Phone.: 0030 210 5590460 , 0030 210 5590155 -  
Fax: 0030 210 6254737 , 0030 210 5590244  
info@evochem.gr; vmergoupis@evochem.gr;  
sales@evochem.gr  
www.evochem.gr
- 1.4 Emergency telephone number:** National Poisoning Center 2107793777

**SECTION 2: HAZARDS IDENTIFICATION**

- 2.1 Classification of the substance or mixture:**  
**CLP Regulation (EC) n° 1272/2008:**  
Classification of this product has been carried out in accordance with CLP Regulation (EC) n° 1272/2008.  
Aerosol 1: Pressurised container: May burst if heated., H229  
Aerosol 1: Flammable aerosols, Category 1, H222  
Eye Irrit. 2: Eye irritation, Category 2, H319  
Skin Irrit. 2: Skin irritation, Category 2, H315
- 2.2 Label elements:**  
**CLP Regulation (EC) n° 1272/2008:**  
**Danger**
- 
- Hazard statements:**  
Aerosol 1: H229 - Pressurised container: May burst if heated  
Aerosol 1: H222 - Extremely flammable aerosol  
Eye Irrit. 2: H319 - Causes serious eye irritation  
Skin Irrit. 2: H315 - Causes skin irritation
- Precautionary statements:**  
P101: If medical advice is needed, have product container or label at hand  
P102: Keep out of reach of children  
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking  
P211: Do not spray on an open flame or other ignition source  
P251: Do not pierce or burn, even after use  
P280: Wear protective gloves/protective clothing/eye protection/face protection  
P410+P412: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F  
P501: Dispose of contents and / or their container according to the separated collection system used in your municipality
- 2.3 Other hazards:**  
Non-applicable

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

- 3.1 Substance:**  
Non-applicable
- 3.2 Mixture:**  
**Chemical description:** Aqueous solution of tensoactives  
**Components:**

- CONTINUED ON NEXT PAGE -

**MINOS AUTO FOAM CLEANER - Foam cleaner  
24-166**

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

In accordance with Annex II of Regulation (EC) n°1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification		Concentration
CAS: 67-63-0 EC: 200-661-7 Index: 603-117-00-0 REACH: 01-2119457558-25-XXXX	<b>Propan-2-ol</b>	ATP CLP00	<b>4,9 - &lt;9,9 %</b>
	Regulation 1272/2008	Eye Irrit. 2: H319; Flam. Liq. 2: H225; STOT SE 3: H336 - Danger	
CAS: 532-32-1 EC: 208-534-8 Index: Non-applicable REACH: 01-2119460683-35-XXXX	<b>Sodium benzoate</b>	Self-classified	<b>0,9 - &lt;2,4 %</b>
	Regulation 1272/2008	Eye Irrit. 2: H319 - Warning	
CAS: 872-50-4 EC: 212-828-1 Index: 606-021-00-7 REACH: 01-2119472430-46-XXXX	<b>N-methyl-2-pyrrolidone</b>	ATP ATP01	<b>0,9 - &lt;2,4 %</b>
	Regulation 1272/2008	Eye Irrit. 2: H319; Repr. 1B: H360D; Skin Irrit. 2: H315; STOT SE 3: H335 - Danger	
CAS: 1310-73-2 EC: 215-185-5 Index: 011-002-00-6 REACH: 01-2119457892-27-XXXX	<b>Sodium hydroxide</b>	ATP CLP00	<b>0,9 - &lt;2,4 %</b>
	Regulation 1272/2008	Skin Corr. 1A: H314 - Danger	
CAS: 107-98-2 EC: 203-539-1 Index: 603-064-00-3 REACH: 01-2119457435-35-XXXX	<b>1-methoxy-2-propanol</b>	ATP ATP01	<b>0,24 - &lt;0,9 %</b>
	Regulation 1272/2008	Flam. Liq. 3: H226; STOT SE 3: H336 - Warning	
CAS: 111-76-2 EC: 203-905-0 Index: 603-014-00-0 REACH: 01-2119475108-36-XXXX	<b>2-butoxyethanol</b>	ATP CLP00	<b>0,09 - &lt;0,24 %</b>
	Regulation 1272/2008	Acute Tox. 4: H302+H312+H332; Eye Irrit. 2: H319; Skin Irrit. 2: H315 - Warning	

To obtain more information on the risk of the substances consult sections 8, 11, 12 and 16.

**SECTION 4: FIRST AID MEASURES**

**4.1 Description of first aid measures:**

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

**By inhalation:**

This product does not contain substances classified as dangerous for inhalation, however, in case of symptoms of intoxication remove the person affected from the exposure area and provide with fresh air. Seek medical attention if the symptoms get worse or persist.

**By skin contact:**

In case of contact it is recommended to clean the affected area thoroughly with water and neutral soap. In case of modifications on the skin (stinging, redness, rashes, blisters,...), seek medical advice with this Security Data Sheet

**By eye contact:**

This product does not contain substances classified as dangerous for eye contact. Rinse eyes thoroughly for at least 15 minutes with lukewarm water, ensuring that the person affected does not rub or close their eyes.

**By ingestion/aspiration:**

Do not induce vomiting, but if it does happen keep the head up to avoid inhalation. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

**4.2 Most important symptoms and effects, both acute and delayed:**

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

**4.3 Indication of any immediate medical attention and special treatment needed:**

Non-applicable

**SECTION 5: FIREFIGHTING MEASURES**

**5.1 Extinguishing media:**

Product is non-flammable under normal conditions of storage, manipulation and use. In the case of inflammation as a result of improper manipulation, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems. IT IS NOT RECOMMENDED to use tap water as an extinguishing agent.

**5.2 Special hazards arising from the substance or mixture:**

- CONTINUED ON NEXT PAGE -

**MINOS AUTO FOAM CLEANER - Foam cleaner**  
**24-166**

**SECTION 5: FIREFIGHTING MEASURES (continue)**

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 individual respiratory equipment. 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. Destroy any source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflammation, 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:**

Isolate leaks provided that there is no additional risk for the people performing this task. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Evacuate the area and keep out those who do not have protection.

**6.2 Environmental precautions:**

This product is not classified as dangerous to the environment. Keep product away from drains, surface and underground water.

**6.3 Methods and material for containment and cleaning up:**

It is recommended:

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

**6.4 Reference to other sections:**

See sections 8 and 13.

**SECTION 7: HANDLING AND STORAGE**

**7.1 Precautions for safe handling:**

A.- Precautions for safe manipulation

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

Product is non-flammable under normal conditions of storage, manipulation and use. It is recommended to transfer at slow speeds to avoid the generation of electrostatic charges that can affect flammable products. Consult section 10 for information on conditions and materials that should be avoided.

C.- Technical recommendations to prevent ergonomic and toxicological risks

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

**7.2 Conditions for safe storage, including any incompatibilities:**

A.- Technical measures for storage

Minimum Temp.: 5 °C

Maximum Temp.: 35 °C

Maximum time: 12 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.

- CONTINUED ON NEXT PAGE -

**MINOS AUTO FOAM CLEANER - Foam cleaner**  
**24-166**

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

**8.1 Control parameters:**

Substances whose occupational exposure limits have to be monitored in the work environment

Identification	Environmental limits		
N-methyl-2-pyrrolidone CAS: 872-50-4 EC: 212-828-1	IOELV (8h)	10 ppm	40 mg/m <sup>3</sup>
	IOELV (STEL)	20 ppm	80 mg/m <sup>3</sup>
	Year	2014	
1-methoxy-2-propanol CAS: 107-98-2 EC: 203-539-1	IOELV (8h)	100 ppm	375 mg/m <sup>3</sup>
	IOELV (STEL)	150 ppm	563 mg/m <sup>3</sup>
	Year	2014	
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	IOELV (8h)	20 ppm	98 mg/m <sup>3</sup>
	IOELV (STEL)	50 ppm	246 mg/m <sup>3</sup>
	Year	2014	

**DNEL (Workers):**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Propan-2-ol CAS: 67-63-0 EC: 200-661-7	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	888 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	500 mg/m <sup>3</sup>	Non-applicable
Sodium benzoate CAS: 532-32-1 EC: 208-534-8	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	62,5 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	3 mg/m <sup>3</sup>	0,1 mg/m <sup>3</sup>
N-methyl-2-pyrrolidone CAS: 872-50-4 EC: 212-828-1	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	208 mg/kg	Non-applicable	19,8 mg/kg	Non-applicable
	Inhalation	80 mg/m <sup>3</sup>	Non-applicable	40 mg/m <sup>3</sup>	Non-applicable
Sodium hydroxide CAS: 1310-73-2 EC: 215-185-5	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	Non-applicable	1 mg/m <sup>3</sup>
1-methoxy-2-propanol CAS: 107-98-2 EC: 203-539-1	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	50,6 mg/kg	Non-applicable
	Inhalation	Non-applicable	553,5 mg/m <sup>3</sup>	369 mg/m <sup>3</sup>	Non-applicable
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	89 mg/kg	Non-applicable	75 mg/kg	Non-applicable
	Inhalation	663 mg/m <sup>3</sup>	246 mg/m <sup>3</sup>	98 mg/m <sup>3</sup>	Non-applicable

**DNEL (General population):**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Propan-2-ol CAS: 67-63-0 EC: 200-661-7	Oral	Non-applicable	Non-applicable	26 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	319 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	89 mg/m <sup>3</sup>	Non-applicable
Sodium benzoate CAS: 532-32-1 EC: 208-534-8	Oral	Non-applicable	Non-applicable	16,6 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	31,25 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	1,5 mg/m <sup>3</sup>	0,06 mg/m <sup>3</sup>
N-methyl-2-pyrrolidone CAS: 872-50-4 EC: 212-828-1	Oral	26 mg/kg	Non-applicable	6,3 mg/kg	Non-applicable
	Dermal	125 mg/kg	Non-applicable	11,9 mg/kg	Non-applicable
	Inhalation	80 mg/m <sup>3</sup>	Non-applicable	12,5 mg/m <sup>3</sup>	Non-applicable
Sodium hydroxide CAS: 1310-73-2 EC: 215-185-5	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	Non-applicable	1 mg/m <sup>3</sup>
1-methoxy-2-propanol CAS: 107-98-2 EC: 203-539-1	Oral	Non-applicable	Non-applicable	3,3 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	18,1 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	43,9 mg/m <sup>3</sup>	Non-applicable
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	Oral	13,4 mg/kg	Non-applicable	3,2 mg/kg	Non-applicable
	Dermal	44,5 mg/kg	Non-applicable	38 mg/kg	Non-applicable
	Inhalation	426 mg/m <sup>3</sup>	123 mg/m <sup>3</sup>	49 mg/m <sup>3</sup>	Non-applicable

- CONTINUED ON NEXT PAGE -

**MINOS AUTO FOAM CLEANER - Foam cleaner**  
**24-166**
**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continue)**
**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	160 g/kg	Sediment (Marine water)	552 mg/kg
Sodium benzoate CAS: 532-32-1 EC: 208-534-8	STP	10 mg/L	Fresh water	0,13 mg/L
	Soil	0,000265 mg/kg	Marine water	0,013 mg/L
	Intermittent	0,305 mg/L	Sediment (Fresh water)	1,76 mg/kg
	Oral	300 g/kg	Sediment (Marine water)	0,176 mg/kg
N-methyl-2-pyrrolidone CAS: 872-50-4 EC: 212-828-1	STP	10 mg/L	Fresh water	0,25 mg/L
	Soil	0,138 mg/kg	Marine water	0,025 mg/L
	Intermittent	5 mg/L	Sediment (Fresh water)	1,42 mg/kg
	Oral	1,67 g/kg	Sediment (Marine water)	0,142 mg/kg
1-methoxy-2-propanol CAS: 107-98-2 EC: 203-539-1	STP	100 mg/L	Fresh water	10 mg/L
	Soil	5,49 mg/kg	Marine water	1 mg/L
	Intermittent	100 mg/L	Sediment (Fresh water)	52,3 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	5,2 mg/kg
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	STP	463 mg/L	Fresh water	8,8 mg/L
	Soil	3,13 mg/kg	Marine water	0,88 mg/L
	Intermittent	9,1 mg/L	Sediment (Fresh water)	34,6 mg/kg
	Oral	20 g/kg	Sediment (Marine water)	Non-applicable

**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 Protection Equipment, with the corresponding <<CE marking>> in accordance with Directive 89/686/EC. For more information on Personal Protection Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1.

All information contained herein is a recommendation 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**

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


**C.- Specific protection for the hands**

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Chemical protective gloves		EN 374-1:2003 EN 374-3:2003/AC:2006 EN 420:2003+A1:2009	Replace the gloves at any sign of deterioration.

**D.- Ocular and facial protection**

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Panoramic glasses against liquid splash		EN 166:2001 EN 172:1994/A1:2000 EN 172:1994/A2:2001 EN ISO 4007:2012	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.


**E.- Bodily protection**

Pictogram	PPE	Labelling	CEN Standard	Remarks
	Work clothing		EN ISO 13688:2013	For professional use only.



- CONTINUED ON NEXT PAGE -

**MINOS AUTO FOAM CLEANER - Foam cleaner  
24-166**

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

Pictogram	PPE	Labelling	CEN Standard	Remarks
	Anti-slip work shoes		EN ISO 20347:2012 EN ISO 20344:2011	None

**F.- Additional emergency measures**

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2002	 Eyewash stations	DIN 12 899 ISO 3864-1:2002

**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): 30,25 % weight  
V.O.C. density at 20 °C: 302,46 kg/m<sup>3</sup> (302,46 g/L)  
Average carbon number: 3,43  
Average molecular weight: 68,9 g/mol

With regard to Directive 2004/42/EC, this product which is ready to use has the following characteristics:

V.O.C. density at 20 °C: 302,46 kg/m<sup>3</sup> (302,46 g/L)  
EUlimit for the product (Cat. B.E): 840 g/L (2010)  
Components: Non-applicable

**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  
Appearance: Fluid  
Color: ☐ Colourless  
Odor: Characteristic

**Volatility:**

Boiling point at atmospheric pressure: -42 °C (Propellant)  
Vapour pressure at 20 °C: Non-applicable \*  
Vapour pressure at 50 °C: <300000 Pa (300 kPa)  
Evaporation rate at 20 °C: Non-applicable \*

**Product description:**

Density at 20 °C: 1000 kg/m<sup>3</sup>  
Relative density at 20 °C: Non-applicable \*  
Dynamic viscosity at 20 °C: Non-applicable \*  
Kinematic viscosity at 20 °C: Non-applicable \*  
Kinematic viscosity at 40 °C: Non-applicable \*  
Concentration: 1000 g/L (active ingredient)  
pH: Non-applicable \*

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

- CONTINUED ON NEXT PAGE -

**MINOS AUTO FOAM CLEANER - Foam cleaner  
24-166**

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

Vapour density at 20 °C:	Non-applicable *
Partition coefficient n-octanol/water 20 °C:	Non-applicable *
Solubility in water at 20 °C:	Non-applicable *
Solubility properties:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Recipient pressure:	Non-applicable *

**Flammability:**

Flash Point:	-104 °C (Propellant)
Autoignition temperature:	410 °C (Propellant)
Lower flammability limit:	Non-applicable *
Upper flammability limit:	Non-applicable *

**9.2 Other information:**

Surface tension at 20 °C:	Non-applicable *
Refraction index:	Non-applicable *

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

**SECTION 10: STABILITY AND REACTIVITY**

**10.1 Reactivity:**

No hazardous reactions are expected if the following technical instructions storage of chemicals. 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	Not applicable	Avoid direct impact	Not applicable

**10.5 Incompatible materials:**

Acids	Water	Combustive materials	Combustible materials	Others
Not applicable	Not applicable	Avoid direct impact	Not applicable	Not applicable

**10.6 Hazardous decomposition products:**

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

**SECTION 11: TOXICOLOGICAL INFORMATION**

**11.1 Information on toxicological effects:**

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

Contains glycols. With possibility of effects that are hazardous to the health, it is recommended not to breathe the vapours for long periods of time.

**Dangerous health implications:**

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

A.- Ingestion:

- CONTINUED ON NEXT PAGE -

**MINOS AUTO FOAM CLEANER - Foam cleaner**  
**24-166**

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

- Acute toxicity: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.
- B- Inhalation:
  - Acute 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, however it does contain substances classified as dangerous for this effect. For more information see section 3.
- C- Contact with the skin and the eyes:
  - Contact with the skin: Produces skin inflammation.
  - 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 dangerous for the effects mentioned. For more information see section 3.
  - 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, however it does 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 sensibilizing 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)-time exposure:
 

Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for inhalation. For more information see section 3.
- G- Specific target organ toxicity (STOT)-repeated exposure:
  - Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, 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, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- H- Aspiration hazard:
 

Based on available data, the classification criteria are not met, as it does not 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
Propan-2-ol CAS: 67-63-0 EC: 200-661-7	LD50 oral	5280 mg/kg	Rat
	LD50 dermal	12800 mg/kg	Rat
	LC50 inhalation	72,6 mg/L (4 h)	Rat
N-methyl-2-pyrrolidone CAS: 872-50-4 EC: 212-828-1	LD50 oral	3598 mg/kg	Rat
	LD50 dermal	7000 mg/kg	Rat
	LC50 inhalation	Non-applicable	
Sodium benzoate CAS: 532-32-1 EC: 208-534-8	LD50 oral	4070 mg/kg	Rat
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	LD50 oral	500 mg/kg	Rat
	LD50 dermal	1100 mg/kg	Rat
	LC50 inhalation	11 mg/L (4 h)	Rat

**SECTION 12: ECOLOGICAL INFORMATION**

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

- CONTINUED ON NEXT PAGE -



**MINOS AUTO FOAM CLEANER - Foam cleaner**  
**24-166**

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

**12.1 Toxicity:**

Identification	Acute toxicity	Specie	Genus
Propan-2-ol	LC50 9640 mg/L (96 h)	Pimephales promelas	Fish
CAS: 67-63-0	EC50 13299 mg/L (48 h)	Daphnia magna	Crustacean
EC: 200-661-7	EC50 1000 mg/L (72 h)	Scenedesmus subspicatus	Algae
N-methyl-2-pyrrolidone	LC50 832 mg/L (96 h)	Lepomis macrochirus	Fish
CAS: 872-50-4	EC50 4897 mg/L (48 h)	Daphnia magna	Crustacean
EC: 212-828-1	EC50 500 mg/L (72 h)	Scenedesmus subspicatus	Algae
Sodium hydroxide	LC50 189 mg/L (48 h)	Leuciscus idus	Fish
CAS: 1310-73-2	EC50 33 mg/L	Crangon crangon	Crustacean
EC: 215-185-5	EC50 Non-applicable		
1-methoxy-2-propanol	LC50 20800 mg/L (96 h)	Pimephales promelas	Fish
CAS: 107-98-2	EC50 23300 mg/L (48 h)	Daphnia magna	Crustacean
EC: 203-539-1	EC50 1000 mg/L (168 h)	Selenastrum capricornutum	Algae
2-butoxyethanol	LC50 1490 mg/L (96 h)	Lepomis macrochirus	Fish
CAS: 111-76-2	EC50 1815 mg/L (48 h)	Daphnia magna	Crustacean
EC: 203-905-0	EC50 911 mg/L (72 h)	Pseudokirchneriella subcapitata	Algae

**12.2 Persistence and degradability:**

Identification	Degradability	Biodegradability
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 %
N-methyl-2-pyrrolidone	BOD5 1.09 g O2/g	Concentration 100 mg/L
CAS: 872-50-4	COD 1.6 g O2/g	Period 28 days
EC: 212-828-1	BOD5/COD 0.68	% Biodegradable 73 %
1-methoxy-2-propanol	BOD5 Non-applicable	Concentration 100 mg/L
CAS: 107-98-2	COD Non-applicable	Period 28 days
EC: 203-539-1	BOD5/COD Non-applicable	% Biodegradable 90 %
2-butoxyethanol	BOD5 0.71 g O2/g	Concentration 100 mg/L
CAS: 111-76-2	COD 2.2 g O2/g	Period 14 days
EC: 203-905-0	BOD5/COD 0.32	% Biodegradable 96 %

**12.3 Bioaccumulative potential:**

Identification	Bioaccumulation potential
Propan-2-ol	BCF 3
CAS: 67-63-0	Pow Log 0,05
EC: 200-661-7	Potential Low
N-methyl-2-pyrrolidone	BCF 0,23
CAS: 872-50-4	Pow Log -0,46
EC: 212-828-1	Potential Low
1-methoxy-2-propanol	BCF 3
CAS: 107-98-2	Pow Log -0,44
EC: 203-539-1	Potential Low
2-butoxyethanol	BCF 3
CAS: 111-76-2	Pow Log 0,83
EC: 203-905-0	Potential Low

**12.4 Mobility in soil:**

Identification	Absorption/desorption	Volatility
Propan-2-ol	Koc 1,5	Henry 8,207E-1 Pa·m <sup>3</sup> /mol
CAS: 67-63-0	Conclusion Very High	Dry soil Yes
EC: 200-661-7	Surface tension 22400 N/m (25 °C)	Moist soil Yes
N-methyl-2-pyrrolidone	Koc Non-applicable	Henry Non-applicable
CAS: 872-50-4	Conclusion Non-applicable	Dry soil Non-applicable
EC: 212-828-1	Surface tension 40070 N/m (25 °C)	Moist soil Non-applicable

- CONTINUED ON NEXT PAGE -

**MINOS AUTO FOAM CLEANER - Foam cleaner  
24-166**

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

Identification	Absorption/desorption		Volatility	
2-butoxyethanol	Koc	8	Henry	1,621E-1 Pa·m <sup>3</sup> /mol
CAS: 111-76-2	Conclusion	Very High	Dry soil	No
EC: 203-905-0	Surface tension	27290 N/m (25 °C)	Moist soil	Yes

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

Non-applicable

**12.6 Other adverse effects:**

Not described

**SECTION 13: DISPOSAL CONSIDERATIONS**

**13.1 Waste treatment methods:**

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

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

HP3 Flammable, HP4 Irritant — skin irritation and eye damage, HP10 Toxic for reproduction

**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) n°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 2015 and RID 2015:



- 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 Dangerous for the environment:** No  
**14.6 Special precautions for user**  
Special regulations: 190, 327, 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 73/78 and the IBC Code:** Non-applicable

**Transport of dangerous goods by sea:**

With regard to IMDG 37-14:

- CONTINUED ON NEXT PAGE -

**MINOS AUTO FOAM CLEANER - Foam cleaner**  
**24-166**

**SECTION 14: TRANSPORT INFORMATION (continue)**



- 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 Dangerous for the environment:** No  
**14.6 Special precautions for user**  
Special regulations: Non-applicable  
EmS Codes: F-D, S-U  
Physico-Chemical properties: see section 9  
Limited quantities: 1 L  
**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** Non-applicable

**Transport of dangerous goods by air:**

With regard to IATA/ICAO 2015:



- 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 Dangerous for the environment:** No  
**14.6 Special precautions for user**  
Physico-Chemical properties: see section 9  
**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** Non-applicable

**SECTION 15: REGULATORY INFORMATION**

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

Candidate substances for authorisation under the Regulation (EC) 1907/2006 (REACH): N-methyl-2-pyrrolidone

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

Regulation (EC) 1005/2009, about substances that deplete the ozone layer: Non-applicable

Active substances for which a decision of non-inclusion onto Annex I (Regulation (EU) No 528/2012): Sodium benzoate (excluded for the product type 1, 2, 6, 11)

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

**Regulation (EC) n°648/2004 on detergents:**

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

The tensoactives contained in this mixture comply with the biodegradability criteria stipulated in Regulation (EC) n°648/2004 on detergents. The information to prove this is available to the relevant authorities of the Member States and will be shown to them by direct request or the request of a detergent manufacturer.

**Contents labelled:**

Component	Concentration interval
Aliphatic hydrocarbons	15 ≤ % (w/w) < 30
Anionic surfactants	% (w/w) < 5

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

Non-applicable

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

It is recommended to use the information included in this safety data sheet as data used in a risk evaluation of the local circumstances in order to establish the necessary risk prevention measures for the manipulation, use, storage and disposal of this product.

- CONTINUED ON NEXT PAGE -

**MINOS AUTO FOAM CLEANER - Foam cleaner  
24-166****SECTION 15: REGULATORY INFORMATION (continue)****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

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

**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:**

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 453/2010)

**Modifications related to the previous security card which concerns the ways of managing risks. :**

Non-applicable

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

H319: Causes serious eye irritation

H315: Causes skin irritation

H229: Pressurised container: May burst if heated

H222: Extremely flammable aerosol

**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) n° 1272/2008:**

Acute Tox. 4: H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled

Eye Irrit. 2: H319 - Causes serious eye irritation

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

Flam. Liq. 3: H226 - Flammable liquid and vapour

Repr. 1B: H360D - May damage the unborn child.

Skin Corr. 1A: H314 - Causes severe skin burns and eye damage

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:**

Eye Irrit. 2: Calculation method

Skin Irrit. 2: Calculation method

Aerosol 1: Calculation method

Aerosol 1: Calculation method

**Advice related to training:**

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

**Principal bibliographical sources:**

<http://esis.jrc.ec.europa.eu>

<http://echa.europa.eu>

<http://eur-lex.europa.eu>

**Abbreviations and acronyms:**

- CONTINUED ON NEXT PAGE -

**MINOS AUTO FOAM CLEANER - Foam cleaner**  
**24-166**

**SECTION 16: OTHER INFORMATION (continue)**

- 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: 5-day biochemical oxygen demand
- BCF: Bioconcentration factor
- LD50: Lethal Dose 50
- CL50: Lethal Concentration 50
- EC50: Effective concentration 50
- Log-POW: Octanol–water partition coefficient
- Koc: Partition coefficient of organic carbon

The information contained in this security 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 security data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -