

In accordance with Regulation 1907/2006 and Regulation 453/2010

Date of compilation: 22/05/14

Date of revision: 22/05/14

Revision:

Pag. 1 di 12

**Product: ARMAL SPRAY**

## 1. Identification of the preparation and the Company/enterprise

**1.1 Product identifier**                      **ARMAL SPRAY**

**1.2 Relevant identified uses of the substance or mixture:**

Chemical product for the control of wc odours – industrial use only

**1.3 Details of the supplier of the safety data sheet:**

ARMAL S.R.L.

Via Fiorentina, 109

50052 Certaldo (FI)

Tel. 0571/663455

**1.4 Emergency phone number**

0571/663455

e-mail TC: paolaulivi@dangerandsafety.it

## 2. Hazards identification

**2.1 Classification of the substance or mixture**

**Classification according to Directive 67/548/EEC and Directive 1999/45/EC:**

Xn; R20/21/22; Xn; R68/20/21/22; Xi; R41

**Nature of special risks attributed:**

R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed.

R41 - Risk of serious damage to eyes.

R68/20/21/22 - Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.

**2.2. Label elements:**

**Warning symbols:**

Xn – Harmful



**ARMAL srl** Unipersonale

Società soggetta a direzione e coordinamento di Porta Romana 1 s.r.l.

Via Fiorentina, 109 - 50052 Certaldo (FI)

C.F./P.Iva 03922500487 - Cap.Soc. Euro 10.400,00 i.v. - N° REA FI399675

Phone + 39 0571 665305 - Fax +39 0571 651 260

armal@armal.biz - info@cert.armal.biz - www.armal.biz

In accordance with Regulation 1907/2006 and Regulation 453/2010

Date of compilation: 22/05/14

Date of revision: 22/05/14

Revision:

Pag. 2 di 12

**Product: ARMAL SPRAY**

**Hazard sentences (R):**

R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed.

R41 - Risk of serious damage to eyes.

R68/20/21/22 - Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.

**Caution recommendations (S):**

S25 - Avoid contact with eyes.

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

S60 - This material and its container must be disposed of as hazardous waste.

**Contains:**

Methanol

**2.3 Other hazards:**

none

**3. Composition/Information on ingredients**

**3.1 Substances**

Not pertinent

**3.2 Mixtures**

**Chemical composition**

Name	Concentration (%)	Classification			
		Directive 67/ 548/CEE	Regulation CE/1272/2008		
methanol	6 < C < 10	F	R11	Flam. Liq. 2	H225
CAS No 67-56-1		T	R39/23/24/25	STOT SE 1	H370
CE No 200-659-6		T	R23/24/25	Acute Tox. 3	H331
Index No 603-001-00-X				Acute Tox. 3	H311
				Acute Tox. 3	H301
fragrance	7 < C < 9	Xi	R41	Eye Dam. 1	H318
CAS No nd					

**ARMAL srl** Unipersonale

Società soggetta a direzione e coordinamento di Porta Romana 1 s.r.l.

Via Fiorentina, 109 - 50052 Certaldo (FI)

C.F./P.Iva 03922500487 - Cap.Soc. Euro 10.400,00 i.v. - N° REA FI399675

Phone + 39 0571 665305 - Fax +39 0571 651 260

armal@armal.biz - info@cert.armal.biz - www.armal.biz

In accordance with Regulation 1907/2006 and Regulation 453/2010

Date of compilation: 22/05/14

Date of revision: 22/05/14

Revision:

Pag. 3 di 12

**Product: ARMAL SPRAY**

Alkyl dimethyl benzylammonium chloride	2 < C < 3	C	R34	Skin Corr. 1B H314	
CAS No 63449-41-2		Xn	R21/22	Acute Tox. 4	H302
CE No 264-151-6				Acute Tox. 4	H312
Index No 612-140-00-5		N	R50	Aquatic Acute 1	H400

The full text of hazard statements and risk phrases (R) is specified in section 16.

**4. First-aid measures**

**4.1 Description of first aid measures**

Inhalation

Remove the victim from contaminated area and keep him in a well ventilated and comfortable place with the chest up. Avoid cooling (covered). If breathing is difficult, seek medical advice immediately.

Skin contact

Wash immediately with plenty of water and soap. Remove contaminated clothing. Seek medical attention. Wash contaminated clothing before using them.

Eyes contact

Irrigate immediately and copiously with clean, fresh water for at least 15 minutes, keeping opened eyes. In any case consult a specialist immediately.

Ingestion

Medical emergency. Don't induce vomiting. Never give anything by mouth to an unconscious and if it is not indicated by the doctor. Medical emergency..

Other

Change contaminated clothing

**4.2. Most important symptoms and effects, both acute and delayed**  
not available

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

In case of inhalation: If breathing is difficult, seek medical advice immediately.

In case of skin contact: Seek medical attention.

In case of eye contact: In any case consult a specialist immediately.

In case of ingestion: Medical emergency.

**ARMAL srl** Unipersonale

Società soggetta a direzione e coordinamento di Porta Romana 1 s.r.l.

Via Fiorentina, 109 - 50052 Certaldo (FI)

C.F./P.Iva 03922500487 - Cap.Soc. Euro 10.400,00 i.v. - N° REA FI399675

Phone + 39 0571 665305 - Fax +39 0571 651 260

armal@armal.biz - info@cert.armal.biz - www.armal.biz

In accordance with Regulation 1907/2006 and Regulation 453/2010

Date of compilation: 22/05/14

Date of revision: 22/05/14

Revision:

Pag. 4 di 12

**Product: ARMAL SPRAY**

## 5. Fire-fighting measures

### 5.1 Extinguishing media

#### Advised extinguishing agents:

CO<sub>2</sub>, nebulized water, foam, chemical powder

#### Unappropriate extinction methods:

none

### 5.2. Special hazards arising from the substance or mixture

The product under fire condition may develop irritant/toxic gas (COx, NOx, HCl)

### 5.3. Advice for firefighters

Wear the fire equipment all the time. Water used in fire-fighting has to be disposed following Local regulation.

## 6. Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Avoid the contact with eyes and skin. Supply a good air circulation. In case of formation of vapours use a suitable respiratory protection. Remove or exclude any source of ignition. Move away any unauthorised person.

### 6.2. Environmental precautions

Collect the product in suitable container for disposal. Notify authorities if product enters sewer or public waters

### 6.3. Methods and material for containment and cleaning up

Cover the spillage with inert absorbent material. Collect as far as possible the resulting mass and discard the remainder by spraying water.

### 6.4 Reference to other sections

Refer to paragraphs 8 and 13 for more information

In accordance with Regulation 1907/2006 and Regulation 453/2010

Date of compilation: 22/05/14

Date of revision: 22/05/14

Revision:

Pag. 5 di 12

**Product: ARMAL SPRAY**

## 7. Handling and storage

### 7.1. Precautions for safe handling

Supply good air circulation in working area. Avoid all unnecessary exposure, handle in accordance with good industrial hygiene and safety procedures. Wear protective equipment. Do not smoke, eat or drink during the working processes.

### 7.2. Conditions for safe storage, including any incompatibilities

Store the packaging closed in a fresh and ventilated area, far from sources of ignition. Protect from frost.

### 7.3. Specific end use(s)

For particular uses of the product, is necessary to refer to the specific information or contact the technical service of the Company.

## 8. Exposure controls/personal protection

### 8.1. Control parameters

#### methanol

TLV-ACGH: 262mg/m<sup>3</sup> (as TWA); 328mg/m<sup>3</sup> (as STEL)

OEL-EU: 260mg/m<sup>3</sup>, 200ppm (as TWA)

DNEL

Systemic effects to short term acute exposure - contact with the skin: 40 mg/ kg body weight / day

Local effects to short term acute exposure - inhalation: 260 mg/m<sup>3</sup>

Systemic effects to long term exposure - contact with the skin: 40 mg/ kg body weight / day

Systemic effects to long term exposure - inhalation: 260 mg/m<sup>3</sup>

Local effects to long term exposure inhalation: 260 mg/m<sup>3</sup>

PNEC:

Freshwater: 154 mg/l

Marine water: 15,4 mg/l

Intermittent releases: 1540 mg/l

STP: 100 mg/l

**ARMAL srl** Unipersonale

Società soggetta a direzione e coordinamento di Porta Romana 1 s.r.l.

Via Fiorentina, 109 - 50052 Certaldo (FI)

C.F./P.Iva 03922500487 - Cap.Soc. Euro 10.400,00 i.v. - N° REA FI399675

Phone + 39 0571 665305 - Fax +39 0571 651 260

armal@armal.biz - info@cert.armal.biz - www.armal.biz

In accordance with Regulation 1907/2006 and Regulation 453/2010

Date of compilation: 22/05/14

Date of revision: 22/05/14

Revision:

Pag. 6 di 12

**Product: ARMAL SPRAY**

Sediment (marine water): 570,4 mg/kg dry weight

Soil: 23,5 mg/kg dry weight

**8.2 Exposure controls**

In order to minimize exposure as far as possible, it is strongly recommended to use adequate individual protective measures. Do not eat, drink or smoke while handling it. Accurately wash the hands with soap and water before meals and at the end of the work shift. The shower is strongly recommended.

**Individual protection**

The DPI's choice must be done on the basis of the test's results obtained according to the rule EN 374

Hand protection : : protective gloves of nitrile, neoprene. Penetration time of glove material: the exact break through time has been found out by the manufacturer of the protective gloves and has to be observed.

Eye protection : Goggles

Skin protection : suitable protective clothing

Respiratory protection : Mask with filter (type A) for organic vapours

**9. Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Physical and chemical properties	Value	Determination method
Appearance	Clear liquid	
Odour	characteristic	
Odour threshold	not available	
pH	not available	
Melting point/freezing point	not available	
Initial boiling point and boiling range	not available	
Flash point	> 93° C	
Evaporation rate	not available	
Flammability (solid, gas)	not pertinent	
Upper/lower flammability or explosive limits	not pertinent	

**ARMAL srl** Unipersonale

Società soggetta a direzione e coordinamento di Porta Romana 1 s.r.l.

Via Fiorentina, 109 - 50052 Certaldo (FI)

C.F./P.Iva 03922500487 - Cap.Soc. Euro 10.400,00 i.v. - N° REA FI399675

Phone + 39 0571 665305 - Fax +39 0571 651 260

armal@armal.biz - info@cert.armal.biz - www.armal.biz



In accordance with Regulation 1907/2006 and Regulation 453/2010

Date of compilation: 22/05/14

Date of revision: 22/05/14

Revision:

Pag. 7 di 12

## Product: ARMAL SPRAY

Vapour pressure	not available
Vapour density	not available
Relative density	not available
Solubility	soluble in water
Water solubility	completely soluble
Partition coefficient: n-octanol/water	not available
Auto-ignition temperature	not available
Decomposition temperature	not available
Viscosity	not available
Specific weight	1,11 g/cm <sup>3</sup>
Explosive properties	not explosive
Oxidising properties	not oxidising

### 9.2. Other information

VOC (Directive 1999/13/CE): 6-10%

## 10. Stability and reactivity

### 10.1. Reactivity

In contact with strong oxidants exothermal reaction may occur.

### 10.2. Chemical stability

The product is stable in normal conditions of use and storage.

### 10.3. Possibility of hazardous reactions:

no data available

### 10.4. Conditions to avoid:

Avoid every possible ignition source

### 10.5. Incompatible materials:

no data available

In accordance with Regulation 1907/2006 and Regulation 453/2010

Date of compilation: 22/05/14

Date of revision: 22/05/14

Revision:

Pag. 8 di 12

## Product: ARMAL SPRAY

### 10.6. Hazardous decomposition products

Due to thermal decomposition or in the event of a fire vapours may be produced potentially dangerous to health (CO<sub>x</sub>, NO<sub>x</sub>, HCl).

## 11. Toxicological information

### 11.1. Information on toxicological effects

#### Acute effects:

The product is harmful following acute exposure to it and causes serious health hazards if inhaled, ingested or brought into contact with skin.

If brought into contact with eyes, the product causes serious damages to eyes, such as an opaque cornea or injury to iris.

The product may have irreversible effects

#### **Methanol**

**ROUTES OF EXPOSURE:** The substance can be absorbed into the body by inhalation, through the skin and by ingestion.

**INHALATION:** A harmful contamination of the air can be reached rather quickly on evaporation of this substance at 20°C.

**EFFECTS OF SHORT-TERM:** the substance is irritating to the eyes, to the skin and to the respiratory tract. The substance may cause effects on the central nervous system, causing impairment of supervision.

**EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:** Repeated or prolonged contact with skin may cause dermatitis. The substances may have effects on the central nervous system, causing persistent or recurrent headaches and vision damaged.

**ACUTE HAZARDS / SYMPTOMS** Cough. Dizziness. Headache. Nausea. Weakness. Disorders of visione.

**SKIN:** CAN 'BE ABSORBED! Dry skin. Redness.

**EYES:** Redness. pain

**INGESTION:** abdominal pain. Shortness of breath. Vomiting. Convulsions. Unconsciousness. (Further see Inhalation).

**NOTES** Depending on the degree of exposure, periodic medical examination is indicated.

#### Alkyl dimethyl benzylammonium chloride

**ROUTES OF EXPOSURE:** The substance can be absorbed into the body through the skin and by ingestion.

**EFFECTS OF SHORT-TERM EXPOSURE:** The substance is corrosive to eyes, skin and respiratory tract. Corrosive by ingestion. If the solution is swallowed, aspiration into the lungs can lead to chemical pneumonitis.

#### **ACUTE HAZARDS/SYMPTOMS**

**INHALATION:** Sore throat. Cough. Respiratory problems.

**SKIN:** Redness. Skin burns. Pain.

**EYES:** Redness. Pain. Blurred vision. Severe burns.

**INGESTION:** abdominal pain. Nausea. Vomiting. Burning sensation. Diarrhea. Shock or collasso.

**NOTE:** symptoms of lung edema often do not become manifest until a few hours and are aggravated by physical effort. They are therefore essential rest and medical observation.

#### Corrosive/irritation power:

Eyes: serious eye damage

Skin: slightly irritant

**ARMAL srl** Unipersonale

Società soggetta a direzione e coordinamento di Porta Romana 1 s.r.l.

Via Fiorentina, 109 - 50052 Certaldo (FI)

C.F./P.Iva 03922500487 - Cap.Soc. Euro 10.400,00 i.v. - N° REA FI399675

Phone + 39 0571 665305 - Fax +39 0571 651 260

armal@armal.biz - info@cert.armal.biz - www.armal.biz

In accordance with Regulation 1907/2006 and Regulation 453/2010

Date of compilation: 22/05/14

Date of revision: 22/05/14

Revision:

Pag. 9 di 12

**Product: ARMAL SPRAY**

## 12. Ecological Information

### 12.1. Toxicity:

Use this product according to good working practices. Avoid litter. Inform the competent authorities, should the product reach waterways or sewers or contaminate soil or vegetation.

*Methanol: EC50: >10000mg/l (Daphnia Magna, 48h)*

### 12.2. Persistence and degradability

**Methanol:** readily biodegradable

BOD5: 1236 mg O<sub>2</sub>/g

### 12.3. Bioaccumulative potential:

**Methanol:** LogPow: -0,77

### 12.4. Mobility in soil: not available

### 12.5. Results of PBT and vPvB assessment:

**Methanol:** the substance is not PBT/vPvB

### 12.6. Other adverse effects: not available

*This product contains AOX*

## 13. Disposal considerations

### 13.1. Waste treatment methods

Operate following the current Local or National Laws.

The non reclaimed containers have to be disposed as the product.

Consider the possibility of burning the product in a suitable incinerator.

## 14. Transport information

The product is not classified dangerous under transport regulation.

In accordance with Regulation 1907/2006 and Regulation 453/2010

Date of compilation: 22/05/14

Date of revision: 22/05/14

Revision:

Pag. 10 di 12

**Product: ARMAL SPRAY****15. Regulatory Information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Danger labelling under directives 67/548/EEC and 1999/45/EC and following amendments and adjustments.

Regulation	CAS	Substance
428/2009 ex CE 1334/2000 Ann.1	-	-
273/04 Tab.1 Cat.1	-	-
273/04 Tab.1 Cat.2	-	-
273/04 Tab.1 Cat.3	-	-
Reg. CE 1907/2006 Ann. XIV	-	-
Reg. CE 1907/2006 Substances SVHC	-	-
552/2009 (amending Reg. CE 1907/2006 as regards Ann. XVII)	-	-
276/2010 (amending Reg. CE 1907/2006 as regards Ann. XVII)	-	-
2003/105/CE Ann.1 part 1	67-56-1	Methanol
2003/105/CE Ann.1 part 2	-	-

**15.2. Chemical safety assessment**

The supplier did not have made a chemical safety assessment

**16. Other information****Description of the sentences of risk set out in paragraph 3:**

H225 = Highly flammable liquid and vapour.

H301 = Toxic if swallowed.

H302 = Harmful if swallowed.

H311 = Toxic in contact with skin.

H312 = Harmful in contact with skin.

**ARMAL srl** Unipersonale

Società soggetta a direzione e coordinamento di Porta Romana 1 s.r.l.

Via Fiorentina, 109 - 50052 Certaldo (FI)

C.F./P.Iva 03922500487 - Cap.Soc. Euro 10.400,00 i.v. - N° REA FI399675

Phone + 39 0571 665305 - Fax +39 0571 651 260

armal@armal.biz - info@cert.armal.biz - www.armal.biz

In accordance with Regulation 1907/2006 and Regulation 453/2010

Date of compilation: 22/05/14

Date of revision: 22/05/14

Revision:

Pag. 11 di 12

## Product: ARMAL SPRAY

H314 = Causes severe skin burns and eye damage.

H318 = Causes serious eye damage.

H331 = Toxic if inhaled.

H370 = Causes damage to organs .

H400 = Very toxic to aquatic life.

### Description of the safety advice (R) exposed to point 3:

R11 = Highly flammable.

R21/22 = Harmful in contact with skin and if swallowed.

R23/24/25= Toxic by inhalation, in contact with skin and if swallowed.

R34 = Causes burns.

R39/23/ 24/25 = Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

R41 = Risk of serious damage to eyes.

R50 = Very toxic to aquatic organisms.

*Classification based by calculation, on data of all components of the mixture*

In accordance with Regulation 1907/2006 and Regulation 453/2010

Date of compilation: 22/05/14

Date of revision: 22/05/14

Revision:

Pag. 12 di 12

**Product: ARMAL SPRAY**

## GENERAL BIBLIOGRAPHY:

1. Directive 1999/45/EC as amended
2. Directive 67/548/EEC and its amendments and adjustments (technical adjustment XXIX)
3. Regulation (EC) 1907/2006 of the European Parliament (REACH)
4. Regulation (EC) 1272/2008 of the European Parliament (CLP)
5. Regulation (EC) 790 / 2009
6. Regulation (EU) 453/2010
7. The Merck Index. Ed 10
8. Handling Chemical Safety
9. NIOSH - Registry of Toxic Effects of Chemical Substances
10. INRS - Fiche Toxicologique
11. Patty - Industrial Hygiene and Toxicology
12. NI Sax - Dangerous Properties of Industrial Materials-7, 1989 Edition

## Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product. This document must not be regarded as a guarantee on any specific product property. The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

This sheet cancels and substitutes any previous edition.