

**253-251 - ARDOL II****SAFETY DATA SHEET**  
(REACH regulation (EC) n° 1907/2006 - n° 2020/878)**SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1. Product identifier**

Product name : 253-251 - ARDOL II

**1.2. Relevant identified uses of the substance or mixture and uses advised against**Relevant identified uses: Deodorant disinfectant for coffins.  
- N/A**1.3. Details of the supplier of the safety data sheet**Registered company name : HYGECO INTERNATIONAL PRODUITS.  
Address : 12-16, rue Sarah Bernhardt.92600.ASNIERES SUR SEINE.France.  
Telephone : +33 (0)1 34 53 40 60. Fax : -.  
Email : info@hygeco.com  
https://www.hygeco.com**1.4. Emergency telephone number : +33 (0)1 45 42 59 59.**Association/Organisation : INRS / ORFILA <http://www.centres-antipoison.net>.**Other emergency numbers**National Poisons Information Service of England: <http://npis.org> - NHS 111: dial 111 - National Poisons Information Centre of Ireland: 353 (1) 809 2166 - LUXEMBOURG : (+352) 8002 5500 - European Emergency Number Association (EENA) : 112**SECTION 2 : HAZARDS IDENTIFICATION****2.1. Classification of the substance or mixture****In compliance with EC regulation No. 1272/2008 and its amendments.**

Hazardous to the aquatic environment - Chronic hazard, Category 3 (Aquatic Chronic 3, H412).

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

**2.2. Label elements**

Biocidal mixture (see section 15).

**In compliance with EC regulation No. 1272/2008 and its amendments.**

Hazard statements :

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements - Prevention :

P273 Avoid release to the environment.

Precautionary statements - Disposal :

P501 Dispose of contents/container at a disposal facility in accordance with local regulations.

**2.3. Other hazards**

In use, may form flammable/explosive dust-air mixture.

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC)  $\geq 0.1\%$  published by the European Chemicals Agency (ECHA) under article 57 of REACH: <http://echa.europa.eu/fr/candidate-list-table>

The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

The mixture does not contain substances  $\geq 0.1\%$  with endocrine disrupting properties in accordance with the criteria of the Delegated Regulation (EU) 2017/2100 of the Commission or Regulation (EU) 2018/605 of the Commission.**SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS****3.2. Mixtures****Composition :**

Identification	(EC) 1272/2008	Note	%
CAS: 9005-25-8 EC: 232-679-6		[1]	25 $\leq$ x % < 50
STARCH			

## 253-251 - ARDOL II

CAS: 14808-60-7 EC: 238-878-4		[1]	25 <= x % < 50
QUARTZ (SIO2)			
CAS: 68424-85-1 EC: 270-325-2 REACH: 01-2119965180-41	GHS07, GHS05, GHS09 Dgr Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Aquatic Acute 1, H400 M Acute = 10 Aquatic Chronic 1, H410 M Chronic = 1		0.1 <= x % < 1
QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES			

**Specific concentration limits:**

Identification	Specific concentration limits	ATE
CAS: 68424-85-1 EC: 270-325-2 REACH: 01-2119965180-41		oral: ATE = 397.5 mg/kg BW
QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES		

**Information on ingredients :**

(Full text of H-phrases: see section 16)

[1] Substance for which maximum workplace exposure limits are available.

**SECTION 4 : FIRST AID MEASURES**

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

**4.1. description of first aid measures****In the event of exposure by inhalation :**

If inhaled, move the patient into the fresh air and keep warm and at rest.

If breathing is irregular or has stopped, proceed with artificial respiration and seek medical attention.

**In the event of splashes or contact with eyes :**

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

If there is any redness, pain or visual impairment, consult an ophthalmologist.

**In the event of splashes or contact with skin :**

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

**In the event of swallowing :**

Seek medical attention, showing the label.

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

No data available.

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

No data available.

**SECTION 5 : FIREFIGHTING MEASURES**

Non-flammable.

**5.1. Extinguishing media****Suitable methods of extinction**

In the event of a fire, use :

- sprayed water or water mist
- carbon dioxide (CO2)
- foam
- powder

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

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)

**253-251 - ARDOL II**

- carbon dioxide (CO<sub>2</sub>)

**5.3. Advice for firefighters**

Due to the toxicity of the gas emitted on thermal decomposition of the products, fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

**SECTION 6 : ACCIDENTAL RELEASE MEASURES****6.1. Personal precautions, protective equipment and emergency procedures**

Consult the safety measures listed under headings 7 and 8.

**For first aid worker**

First aid workers will be equipped with suitable personal protective equipment (See section 8).

**6.2. Environmental precautions**

Prevent any material from entering drains or waterways.

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

Retrieve the product by mechanical means (sweeping/vacuuming) : do not generate dust.

**6.4. Reference to other sections**

No data available.

**SECTION 7 : HANDLING AND STORAGE**

Requirements relating to storage premises apply to all facilities where the mixture is handled.

**7.1. Precautions for safe handling**

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

**Fire prevention :**

Prevent access by unauthorised personnel.

**Recommended equipment and procedures :**

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

**Prohibited equipment and procedures :**

No smoking, eating or drinking in areas where the mixture is used.

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

No data available.

**Packaging**

Always keep in packaging made of an identical material to the original.

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

No data available.

**SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1. Control parameters****Occupational exposure limits :**

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
9005-25-8	10 mg/m <sup>3</sup>			A4	
14808-60-7	0.05 mg/m <sup>3</sup>	-	-	-	R

- Australia (NOHSC: 3008, 1995) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
9005-25-8	10 mg/m <sup>3</sup>			H	
14808-60-7	0.1 mg/m <sup>3</sup>				

- Austria (BGBl. II Nr. 156/2021) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
14808-60-7	0.05 A mg/m <sup>3</sup>				

- Belgium (Royal decree of 11/05/2021) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
9005-25-8	10 mg/m <sup>3</sup>				
14808-60-7	0.1 mg/m <sup>3</sup>			C	

**253-251 - ARDOL II**

- France (INRS - Outils 65 / 2021-1849, 2021-1763, decree of 09/12/2021) :

CAS	VME-ppm :	VME-mg/m3 :	VLE-ppm :	VLE-mg/m3 :	Notes :	TMP No :
14808-60-7	-	0.1 A	-	-	-	25

- Switzerland (Suva 2021) :

CAS	VME	VLE	Valeur plafond	Notations
9005-25-8	3 ppm			
14808-60-7	0.15 ppm			

- UK / WEL (Workplace exposure limits, EH40/2005, Fourth Edition 2020) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
9005-25-8	4 mg/m <sup>3</sup>				
14808-60-7	0.3 mg/m <sup>3</sup>	-	-	-	R

- USA / OSHA PEL (Occupational Safety and Health Administration, Permissible Exposure Limits) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
9005-25-8	15 mg/m <sup>3</sup>				
14808-60-7	-	-	-	-	T

## 8.2. Exposure controls

### Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :



Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

#### - Eye / face protection

Avoid contact with eyes.

Before handling powders or dust emission, wear mask goggles in accordance with standard EN166.

#### - Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN ISO 374-1.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

#### - Body protection

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

#### - Respiratory protection

Avoid inhaling dust.

Type of FFP mask :

Wear a disposable half-mask dust filter in accordance with standard EN149/A1.

## SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

#### Physical state

Physical state : Powder or dust.

#### Colour

Unspecified

#### Odour

Odour threshold : Not stated.

#### Freezing point

Freezing point / Freezing range : Not stated.

#### Boiling point or initial boiling point and boiling range

Boiling point/boiling range : Not relevant.

#### Flammability

Flammability (solid, gas) : Not stated.

**253-251 - ARDOL II**

**Lower and upper explosion limit**

Explosive properties, lower explosivity limit (%) : Not stated.  
Explosive properties, upper explosivity limit (%) : Not stated.

**Flash point**

Flash point interval : Not relevant.

**Auto-ignition temperature**

Self-ignition temperature : Not relevant.

**Decomposition temperature**

Decomposition point/decomposition range : Not relevant.

**pH**

pH (aqueous solution) : Not stated.  
pH : Not relevant.

**Kinematic viscosity**

Viscosity : Not stated.

**Solubility**

Water solubility : Insoluble.  
Fat solubility : Not stated.

**Partition coefficient n-octanol/water (log value)**

Partition coefficient: n-octanol/water : Not stated.

**Vapour pressure**

Vapour pressure (50°C) : Not relevant.

**Density and/or relative density**

Density : Not stated.

**Relative vapour density**

Vapour density : Not stated.

**9.2. Other information**

No data available.

**9.2.1. Information with regard to physical hazard classes**

No data available.

**9.2.2. Other safety characteristics**

No data available.

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**SECTION 10 : STABILITY AND REACTIVITY**

**10.1. Reactivity**

No data available.

**10.2. Chemical stability**

This mixture is stable under the recommended handling and storage conditions in section 7.

**10.3. Possibility of hazardous reactions**

No data available.

**10.4. Conditions to avoid**

Avoid :  
- formation of dusts  
- flames and hot surfaces

**10.5. Incompatible materials**

No data available.

**10.6. Hazardous decomposition products**

The thermal decomposition may release/form :  
- carbon monoxide (CO)  
- carbon dioxide (CO<sub>2</sub>)

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**SECTION 11 : TOXICOLOGICAL INFORMATION**

**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

No data available.

**253-251 - ARDOL II**

**11.1.1. Substances**

**Acute toxicity :**

QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES (CAS: 68424-85-1)

Oral route : LD50 = 397.5 mg/kg  
Species : Rat

Dermal route : 1,000 < LD50 <= 2000 mg/kg  
Species : Rat

**11.1.2. Mixture**

No toxicological data available for the mixture.

**11.2. Information on other hazards**

**Monograph(s) from the IARC (International Agency for Research on Cancer) :**

CAS 5989-27-5 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.

CAS 123-35-3 : IARC Group 2B : The agent is possibly carcinogenic to humans.

CAS 14808-60-7 : IARC Group 1 : The agent is carcinogenic to humans.

CAS 14808-60-7 : IARC Group 1 : The agent is carcinogenic to humans.

**SECTION 12 : ECOLOGICAL INFORMATION**

Harmful to aquatic life with long lasting effects.

The product must not be allowed to run into drains or waterways.

**12.1. Toxicity**

**12.1.1. Substances**

QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES (CAS: 68424-85-1)

Fish toxicity : LC50 = 0.85 mg/l  
Factor M = 1  
Species : Oncorhynchus mykiss  
Duration of exposure : 96 h

NOEC = 0.0322 mg/l  
Duration of exposure : 28 days

Crustacean toxicity : EC50 = 0.016 mg/l  
Factor M = 10  
Species : Daphnia magna  
Duration of exposure : 48 h

NOEC = 0.025 mg/l  
Species : Daphnia magna  
Duration of exposure : 21 days

Algae toxicity : ECr50 = 0.02 mg/l  
Factor M = 10  
Species : Selenastrum capricornutum  
Duration of exposure : 72 h

0.001 < NOEC <= 0.01 mg/l  
Factor M = 1

**12.1.2. Mixtures**

No aquatic toxicity data available for the mixture.

**12.2. Persistence and degradability**

**12.2.1. Substances**

QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES (CAS: 68424-85-1)

Biodegradability : Rapidly degradable.

**12.3. Bioaccumulative potential**

**12.3.1. Substances**

**253-251 - ARDOL II**

QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES (CAS: 68424-85-1)

Octanol/water partition coefficient : log K<sub>ow</sub> < 3.  
OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)

Bioaccumulation : BCF < 100.

**12.4. Mobility in soil**

No data available.

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

No data available.

**12.6. Endocrine disrupting properties**

No data available.

**12.7. Other adverse effects**

No data available.

**German regulations concerning the classification of hazards for water (WGK, AwSV Annex I, KBws) :**

WGK 1 : Slightly hazardous for water.

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**SECTION 13 : DISPOSAL CONSIDERATIONS**

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

**13.1. Waste treatment methods**

Do not pour into drains or waterways.

**Waste :**

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

**Soiled packaging :**

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

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**SECTION 14 : TRANSPORT INFORMATION**

Exempt from transport classification and labelling.

**14.1. UN number or ID number**

-

**14.2. UN proper shipping name**

-

**14.3. Transport hazard class(es)**

-

**14.4. Packing group**

-

**14.5. Environmental hazards**

-

**14.6. Special precautions for user**

-

**14.7. Maritime transport in bulk according to IMO instruments**

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**SECTION 15: Regulatory information**

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

**- Classification and labelling information included in section 2:**

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2022/692 (ATP 18)

**- Container information:**

The mixture does not contain any substance restricted under Annex XVII of Regulation (EC) No. 1907/2006 (REACH):  
<https://echa.europa.eu/substances-restricted-under-reach>.

**253-251 - ARDOL II****- Particular provisions :**

No data available.

**- Labelling for biocidal products (Regulation (UE) n° 528/2012) :**

Name	CAS	%	Product-type
QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES	68424-85-1	2.66 g/kg	02

Product-type 2 : Disinfectants and algaecides not intended for direct application to humans or animals.

**- German regulations concerning the classification of hazards for water (WGK, AwSV Annex I, KBws) :**

WGK 1 : Slightly hazardous for water.

**- Swiss ordinance on the incentive tax on volatile organic compounds :**

5989-27-5 D-limonène ([R]-p-mentha-1,8-diene)

**15.2. Chemical safety assessment**

No data available.

**SECTION 16 : OTHER INFORMATION**

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

**Wording of the phrases mentioned in section 3 :**

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

**Abbreviations :**

LD50 : The dose of a test substance resulting in 50% lethality in a given time period.  
LC50 : The concentration of a test substance resulting in 50% lethality in a given period.  
EC50 : The effective concentration of substance that causes 50% of the maximum response.  
ECr50 : The effective concentration of substance that causes 50% reduction in growth rate.  
NOEC : The concentration with no observed effect.  
REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances.  
ATE : Acute Toxicity Estimate  
BW : Body Weight  
STEL : Short-term exposure limit  
TWA : Time Weighted Averages  
TMP : French Occupational Illness table  
TLV : Threshold Limit Value (exposure)  
AEV : Average Exposure Value.  
ADR : European agreement concerning the international carriage of dangerous goods by Road.  
IMDG : International Maritime Dangerous Goods.  
IATA : International Air Transport Association.  
ICAO : International Civil Aviation Organisation  
RID : Regulations concerning the International carriage of Dangerous goods by rail.  
WGK : Wassergefährdungsklasse (Water Hazard Class).  
PBT: Persistent, bioaccumulable and toxic.  
vPvB : Very persistent, very bioaccumulable.  
SVHC : Substances of very high concern.