

**DUONETT D7**
**100321600**
**SECTION 1 Identification of the substance/mixture and of the company/undertaking**
**1.1. Product identifier**
**Trade name** : DUONETT D7

**1.2. Relevant identified uses of the substance or mixture and uses advised against**
**1.2.1 Relevant identified uses** : Descaling product

**1.3. Details of the supplier of the safety data sheet** : DEHON SERVICE

 26 Avenue du Petit Parc  
 94683 VINCENNES Cedex France  
 Tel : +33 (0) 1 43 98 75 00  
 Fax : +33 (0) 1 43 98 21 51

**e-mail** : ContactFDS@climalife.dehon.com

**1.4 Emergency telephone number** : EMERGENCY TELEPHONE NUMBER (24h/24) : + 33 (0) 1 72 11 00 03

 Anti-poison Center : INRS/ORFILA (France) : +33 (0) 1 45 42 59 59  
 Anti-poison Centre (Belgium) : +32 70 245 245  
 Anti-poison Centre (Spain) : +34 91 562 04 20  
 Anti-poison Centre (Finland/Estonia) : +358 9 471977  
 Anti-poison Centre (Netherlands) : +31 30 274 8888  
 Anti-poison Centre (United Kingdom) : +44 870 600 6266  
 Poisons Information Centre (Hungary) : +36 80 201 199

**SECTION 2 Hazards identification**

 \* **2.1. Classification of the substance or mixture**
**2.1.1. Regulation (EC) No 1272/2008 (CLP)** : Not classified as dangerous product.

**2.2. Label elements**
**2.2.1 Labelling EC 1272/2008 (CLP)**
**Supplemental hazard information** : EUH210 : Safety data sheet available on request

**2.3. Other hazards** : May be harmful if swallowed.  
 Slightly irritating to skin  
 Causes eye irritation.

**SECTION 3 Composition/information on ingredients**
**3.1./3.2. Substance / Mixture** : Mixture

**Components contributing to the hazard :**

Substance name	Contents	CAS No	EC No	Index No	Ref REACH	Classification
Hydrochloric acid	5 to 10 %	7647-01-0	231-595-7	017-002-01-X	01-2119484862-27	C: R34 Xi; R37  Skin Corr. 1B; H314 STOT SE3; H335

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**SECTION 4 First aid measures**
**4.1. Description of first aid measures**

- Inhalation** : Not specifically applicable (aqueous liquid)  
 In case of troubles : Move the affected person to the fresh air  
 If breathing difficulties persist : Seek medical advice.
- Skin contact** : Wash with plenty of soap and water.  
 If skin irritation occurs: Get medical advice/attention
- Eye contact** : Rinse cautiously with water for several minutes.  
 Remove contact lenses, if present and easy to do. Continue rinsing.  
 If eye irritation persists: Get medical advice/attention
- Ingestion** : Do not give anything to drink. Do not induce vomiting.  
 Call a doctor immediately

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

- Inhalation** : May cause irritation to the respiratory tract.
- Skin contact** : May cause slight irritation to the skin  
 Prolonged or repeated contact may cause skin to become dry.
- Eye contact** : Eye irritation.  
 Redness.  
 Watering of the eyes  
 Swelling.
- Ingestion** : Irritation to the digestive tract  
 Nausea  
 Vomiting  
 Diarrhoea

**4.3. Indication of any immediate medical attention and special treatment needed** : No information available

**SECTION 5 Fire-fighting measures**
**5.1. Extinguishing media**

**Suitable extinguishing media** : All extinguishing agents can be used

**5.2. Special hazards arising from the substance or mixture** : No data

**5.3. Advice for firefighters**

**Protection of fire-fighters** : Impermeable protective equipment  
 Self-contained breathing apparatus

**SECTION 6 Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures** : Avoid contact with skin and eyes  
 Do not attempt to fight the fire without suitable protective equipment  
 Ventilate spillage area

**6.2. Environmental precautions** : Wash contaminated area with large amounts of water

**6.3. Methods and material for containment and cleaning up** : Absorb spillage with:  
 - sodium bicarbonate  
 Dispose of contaminated materials in accordance with current regulations.

**6.4 Reference to other sections** : For further information refer to section 8 "Exposure controls/personal protection"

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**SECTION 7 Handling and storage**
**7.1. Precautions for safe handling**
**Precautions**

 : Work in a well-ventilated area  
 Wear protective gloves/protective clothing/eye protection/face protection.

**Industrial hygiene**

 : Always wash your hands immediately after handling this product, and once again before leaving the workplace  
 Do not drink, eat or smoke in the workplace

**7.2. Conditions for safe storage, including any incompatibilities**
**Storage conditions**
**- Recommended**

 : Keep the container hermetically sealed  
 Store :  
 - at temperature between 12 °C and 81 °C  
 - in a well-ventilated area

**Incompatible products**

 : Strong oxidizing agents  
 Alkalis and caustic products

**Packaging materials**
**- Recommended**

: Original packaging

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

: No data

**SECTION 8 Exposure controls/personal protection**
**8.1. Control parameters**
**8.1.1. Occupational Exposure Limits**

 : Hydrochloric acid : European Union : VME (8h; mg/m<sup>3</sup>) : 8  
 Hydrochloric acid : European Union : VME (8h; ppm) : 5  
 Hydrochloric acid : European Union : VLE (15min; mg/m<sup>3</sup>) : 15  
 Hydrochloric acid : European Union : VLE (15min; ppm) : 10  
 Hydrochloric acid : France : LEP - VLE (15min; mg/m<sup>3</sup>) : 7.6  
 Hydrochloric acid : France : LEP - VLE (15min; ppm) : 5  
 Hydrochloric acid : United Kingdom : WEL - TWA (8h; mg/m<sup>3</sup>) : 2  
 Hydrochloric acid : United Kingdom : WEL - STEL (15min; mg/m<sup>3</sup>) : 8  
 Hydrochloric acid : United Kingdom : WEL - STEL (15min; ppm) : 5  
 Hydrochloric acid : United Kingdom : WEL - STEL (15min; ppm) : 5  
 Hydrochloric acid : Germany : MAK - TWA (8h; mg/m<sup>3</sup>) : 3  
 Hydrochloric acid : Germany : MAK - TWA (8h; ppm) : 2  
 Hydrochloric acid : Germany : MAK - STEL (15min; mg/m<sup>3</sup>) : 6  
 Hydrochloric acid : Germany : MAK - STEL (15min; ppm) : 4  
 Hydrochloric acid : Hungary : ÁK - TWA (8h; mg/m<sup>3</sup>) : 8  
 Hydrochloric acid : Hungary : ÁK - STEL (15min; mg/m<sup>3</sup>) : 16  
 Hydrochloric acid : Netherlands : MAC - TWA (8h; mg/m<sup>3</sup>) : 8  
 Hydrochloric acid : Netherlands : MAC - STEL (15min; mg/m<sup>3</sup>) : 15  
 Hydrochloric acid : Belgium : GWBB - TWA (8h; mg/m<sup>3</sup>) : 8  
 Hydrochloric acid : Belgium : GWBB - TWA (8h; ppm) : 5  
 Hydrochloric acid : Belgium : GWBB - STEL (15min; mg/m<sup>3</sup>) : 15  
 Hydrochloric acid : Belgium : GWBB - STEL (15min; ppm) : 10  
 Hydrochloric acid : USA (OSHA) : PEL - STEL (15min; mg/m<sup>3</sup>) : 7  
 Hydrochloric acid : USA (OSHA) : PEL - STEL (15min; ppm) : 5  
 Hydrochloric acid : Switzerland : LEP - VME (8h; mg/m<sup>3</sup>) : 3  
 Hydrochloric acid : Switzerland : LEP - VME (8h; ppm) : 2  
 Hydrochloric acid : Switzerland : LEP - VLE (15min; mg/m<sup>3</sup>) : 6  
 Hydrochloric acid : Switzerland : LEP - VLE (15min; ppm) : 4

**8.2. Exposure controls**
**Personal protection :**
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**SECTION 8 Exposure controls/personal protection (continued)**

- Respiratory protection : If the ventilation is suitable, it is not essential to wear respiratory equipment  
If vapour is released : Self-contained breathing apparatus
- Hand protection : Protective gloves made of rubber
- Eye protection : Safety spectacles with side shields
- Skin protection : Protective clothing

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

- Physical state** : Liquid
- Colour** : Brown
- 9.1.b. Odour** : almonds
- 9.1.c. Odour threshold** : No information available
- 9.1.d. pH** : Not applicable (<3)
- 9.1.e. Melting point / Freezing point** : -26 °C
- 9.1.f. Initial boiling point - boiling range** : 100 °C
- 9.1.g. Flash point** : Not applicable
- 9.1.h. Evaporation rate** : No information available
- 9.1.i. Flammability** : Non flammable.
- 9.1.j. Explosion limits (lower - upper)** : Not applicable
- 9.1.k. Vapour pressure** : No information available
- 9.1.l. Vapour density** : > 1
- 9.1.m. Relative density** : 1.045
- 9.1.n. Solubility**
- in water : Complete
- 9.1.o. Partition coefficient : n-octanol / water** : No information available
- 9.1.p. Auto-ignition temperature** : No information available
- 9.1.q. Thermal decomposition** : No information available
- 9.1.r. Viscosity** : No information available
- 9.1.s. Explosive Properties** : Not explosive material according to EC criteria
- 9.1.t. Oxidising properties** : Non oxidizing material according to EC criteria

**9.2. Other information**
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**SECTION 10 Stability and reactivity**

- 10.1. Reactivity** : No dangerous reactions known under normal conditions of use  
 No dangerous polymerization.
- 10.2. Chemical stability** : Stable at ambient temperature and under normal conditions of use
- 10.3. Possibility of hazardous reactions** : No information available
- 10.4. Conditions to avoid** : Extremely high or low temperatures.
- 10.5. Incompatible materials** : - alkalis and caustic products  
 - chlorinated solvents.  
 - strong oxidizing agents
- 10.6. Hazardous decomposition products** : No hazardous decomposition products known

**SECTION 11 Toxicological information**

- 11.1. Information on toxicological effects**
- **Acute toxicity** : May be harmful if swallowed.
- On ingredients**
- Hydrochloric acid** : Rat oral LD50 [mg/kg] : 700  
 : Rabbit dermal LD50 [mg/kg] : > 5010  
 : Rat inhalation LC50 [mg/l/h] : 3124
- **Skin corrosion/irritation** : Slightly irritating to skin
  - **Serious eye damage/irritation** : Causes eye irritation.
  - **Respiratory or skin sensitisation** : No sensitizing effect is known
  - **Germ cell mutagenicity** : No information available
  - **Carcinogenicity** : No information available
  - **Reproductive toxicity** : No information available
  - **STOT-single exposure** : No information available
  - **STOT-repeated exposure** : No information available
  - **Aspiration hazard** : No information available

**SECTION 12 Ecological information**

- 12.1. Toxicity** : This product does not present any particular risk for the environment
- 12.2. Persistence and degradability** : Readily biodegradable
- 12.3. Bioaccumulative potential** : Not potentially bioaccumulable.
- 12.4. Mobility in soil** : In water, material soluble.  
 Very mobile in soil.
- 12.5. Results of PBT and vPvB assessment** : This mixture contains no substance meeting PBT and vPvB criteria
- 12.6. Other adverse effects**

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## SECTION 13 Disposal considerations

### 13.1. Waste treatment methods

#### WASTE FROM PRODUCT :

**Destruction/Disposal** : Neutralize prior to disposal (pH between 5.5 and 8.5) with :  
- water. - sodium bicarbonate

#### CONTAMINATED PACKAGING :

**Decontamination/cleaning** : Empty the packaging completely prior to disposal  
Clean with water

**Destruction/Disposal** : Recycle following cleaning or dispose of at an authorised site

**NOTE** : The user's attention is drawn to the possible existence of specific european, national or local regulations regarding disposal

## SECTION 14 Transport information

**RID/ADR/IMDG/IATA** : Not regulated

## SECTION 15 Regulatory information

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture** : Ensure all national/local regulations are observed.

**15.2. Chemical safety assessment** : No information available

## SECTION 16 Other information

**Further information** : Product for industrial use only  
For more information regarding the use of this product, please refer to our technical information or contact the sales department in your region

**Text of R-Phrases in § 3** : R34 : Causes burns.  
R37 : Irritating to respiratory system.

**Text of H-Phrases in § 3** : H314 - Causes severe skin burns and eye damage  
H335 - May cause respiratory irritation

**\* Update** : Modifications are indicated by an asterisk (\*)

This sheet complements the technical sheets but does not replace them. The information given is based on our knowledge of the product, at the time of publication. It is given in good faith.

Besides, the attention of the user is drawn to the possible risks incurred by using the product for any other use than that for which it was intended.

In no way does this exempt the user from knowing and applying all the regulations controlling his activity. He alone will take on the responsibility for taking the precautions involved by the use of the product.

The aim of all the mandatory regulations mentioned is just to help the user to fulfil his obligations regarding the use of hazardous products.

This information must not be considered exhaustive. It does not exempt the user from ensuring that other obligations than those mentioned could apply, related to the storage and use of the product, this being his sole responsibility.

End of document

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