



Cleaning

# **DUONETT® D7**



Non contractual photo

## INTRODUCTION

**DUONETT® D7** is a descaling liquid for industrial use, intended for removing limescale and limestone, and eliminating sludge and rust deposits from water pipes.

It can be used in heat exchangers (condensers, water evaporators), boilers, water pipelines, and also cooling towers.

**DUONETT**® **D7** is easily biodegradable, and much easier to use than traditional acid products and without posing any risk to the user.

It is available in of cans of 5 or 20 Litres or in a drum of 225 Litres.

#### **PHYSICAL-CHEMICAL PROPERTIES**

| Colour                 | Brown Liquid |
|------------------------|--------------|
| Scent                  |              |
| pH at 10 %             | < 2          |
| Density                |              |
| Boiling Point          | 101 °C       |
| Solubility in water    |              |
| Surface Tension at 1 % |              |

One undiluted litre of DUONETT® D7 will dissolve approximately 280 grams of calcium carbonate at 20°C.

### **INSTRUCTIONS FOR USE**

**DUONETT® D7** can be used as well internally for pipelines (drains...) as externally (condensers, ventilators...).

As a pure product and in its original state, it is biodegradable and can be evacuated into the sewer. As soon as the product has been used, it may contain other products than **DUONETT® D7** and thus can no longer be authorized for evacuation into the sewer (heavy metals, lead, several oxides,....). Comply with the local regulations in force.

**DUONETT® D7** should be diluted in water between 30% and 50% in volume for use on common materials such as copper, steel, stainless, iron, brass, rubber, the plastic, ceramics..., \*. Temperature range for use: between 0°C and +80°C.

Maximum effectiveness: between +10°C and +24°C

When diluted, an exothermic reaction may increase the temperature by 10°C.

\*Except for zinc and aluminium, where the maximum concentration of 10% in volume should be applied.





### For internal use:

Isolate and empty the water supply line

Introduce the **DUONETT® D7**:

- directly in the installation then add the volume of water necessary to obtain the desired concentration
- or having diluted it in the volume of water beforehand (recommended).

Circulate the solution in the system as indicated below\*:

| Installation Volume ' | Circulation Time |
|-----------------------|------------------|
| 0 - 100 l             | 1 hour           |
| 100 l - 200 l         | 2 hours          |
| 200 l - 600 l         | 3 hours          |
| 600 l - 1100 l        | 4 hours          |
| 1100 l - 2000 l       | 6 hours          |
| 2000 l - 3000 l       | 8 hours          |

<sup>\*</sup> These values are given as an indication for a concentration of 50% in volume. Most cleaning operations using **DUONETT® D7** can be carried out in less than 4 hours on common materials, with a concentration of 50% and under the temperatures previously specified.

At the end of the treatment time, carry out 3 inspections of the pH level at intervals of 15 minutes whilst keeping the solution in circulation.

If the pH is greater than 6 for 3 successive measurements, the solution is saturated and must be renewed (partially or entirely).

If the pH remains below 6, then the installation is clean.

Drain, rinse abundantly and restore to service.

Rinse installations generating domestic hot water several times after draining, restore to service and check that water from the installation is pH7.

For an external use: apply the product to the surface to be descaled so that it is completely covered, let it work act controlling the pH level until it stabilizes and is below 6, then rinse.

## **SAFETY INSTRUCTIONS**

Like the majority of detergent solutions, **DUONETT® D7** is an electrolyte. When descaling an installation consisting of different metals, for example copper and steel, it is important to supervise the phenomenon of the transfer of metal particles from one metal to another and avoid treatments taking a long time (more than 8 hours).

For galvanized steel, it is imperative to stick to a concentration ≤ to 35% DUONETT® D7.

The concentration for materials containing aluminium or zinc must be a maximum of 10% and the reaction time must be lower than 2 hours.

Consult the product safety sheet for more information.

The information contained in this product sheet is the result of our studies and experience. It is provided in good faith, but should not, under any circumstance, be taken to constitute a guarantee on our part or an assumption of our responsibility. This is particularly the case when third party rights are at stake or in situations where a user of one of our products fails to observe applicable regulations.



