## **TECHNICAL DATASHEET**



# **CRYSTAL**

Acid descaler with high disaggregating ability

### → DESCRIPTION

**Crystal** is a formulation based on hydrochloric and phosphoric acid, enabling to obtain a highly descaling solution, able to remove inorganic residues from surfaces. Its particular composition makes it possible to use it on iron surfaces.

Crystal can be used for a wide range of applications within the food industry, beverage bottling and dairy industry.

### -> TECHNICAL CHARACTERISTICS

Physical appearance: colourless clear liquid

pH (sol. 5%): < 2

pH: < 2

Relative density at 20°C:  $1,10 \pm 0,05$ Conductivity 1% sol. at 25°C: 20 mS/cm

The above indicated chemical-physical data represent the typical product's characteristics drawn from the analysis carried out on the product. These values are not a specification.

### → INSTRUCTIONS FOR USE\*

Crystal is normally used at a concentration of 5%. The optimal temperature should be maintained around 50°C. Remember to keep the pH of the solution under control, to prevent it from rising above 2.5 during the descaling operations, limit value to have an effective activity.

Crystal can be used for iron and steel equipment, but in all cases, it is necessary to strictly observe concentrations and contact time (which should not exceed 3 hours). The descaling of bottle washing machines and other particularly encrusted equipment could cause, after the treatment, an unsuitable water retention, because of the disintegration of the limestone closing crevices and fittings. We therefore recommend a careful control of the structures prior to the start of the descaling operation.

### -> FIELDS OF APPLICATION

Descaling of closed circuits and bottle washing machines. Elimination of limestone from hard surfaces and acid-resistant floors (with particular attention to joints).

# **CRYSTAL**

### -> COMPATIBILITY OF THE FORMULATION

**Crystal** is compatible with most material normally present in food industries, if used according to the producer's indications. Do not use on aluminium, copper, zinc-plated iron and phenolic resins. Do not leave the static solutions in contact with surfaces for a long time. In case of doubt, carry out a test on the single material before using the product.

### -> PRECAUTIONS FOR HANDLING AND STORAGE

Store in the original containers and avoid extreme temperatures. Consult the Material Safety Data Sheet.

### → TITRATION METHOD

Sample: 50 mL of washing solution

Indicator: phenolphthalein

Titrating agent: solution of sodium hydroxide (NaOH) 1N

% (v/v) **Crystal** = mL titrating agent x 0,283 % (w/w) **Crystal** = mL titrating agent x 0,339.

pleased to advise you and to cooperate with you.

### -> PACKAGING

25 kg net drums.

on the particular water hardness, the working method or cleaning problems, please consult us; our technical service will be

Reference: CRYSTAL\_TDS\_EN\_2180624\_Italy

<sup>\*</sup>The indications have been established for general use conditions. For conditions differing from the norm, for example depending