



AQUARIGHT®
WE TREAT IT RIGHT

PRODUCT DATA

PD 142

Information for the desalination industry

AQUARIGHT ZV - A

Antifoam for use in sea water

General Product Information

AQUARIGHT ZV-A is a high performance liquid product for the control of alkaline scale formation in all types of seawater distillation plants. Used alone or in conjunction with a sponge ball cleaning system, its effectiveness has been demonstrated in plants with maximum brine temperature up to 120 °C.

This well proven additive has the following features :

- Gives effective alkaline scale control at all operating temperatures normally encountered in seawater distillation plants up to a maximum brine temperature of 120 °C.
- It is environmentally friendly-contains no phosphorus or nitrogen to act as a nutrient for micro-organisms.
- It is used at low dose levels and can be a cost effective alternative to polyphosphate based treatments in low temperature plants.
- It is an attractive alternative to acid in high temperature plants offering reduced corrosion rates for materials of construction and safer handling.
- It has excellent storage properties with shelf life in excess of 2 years.

AQUARIGHT ZV-A may be used with other water treatment chemicals such as antifoam agents, dispersing agents and chelating or sequestering agents.

Typical Product Properties

The following are typical properties for AQUARIGHT ZV-A and should not be regarded as specification limits for the product. A product specification is available on request.

Appearance	: Clear Amber Liquid
Odour	: Slight
pH	: 2.0 maximum
Solids content	: 47 - 53% w/w
Specific gravity at 20/20 °C	: 1.16 -1.20
Boiling point range	: 100 to 102 °C
Freezing point range	: 0 to 12 °C

Thermal Stability

Thermogravimetric analysis and differential scanning calorimetry have shown that AQUARIGHT ZV-A is stable up to a temperature of 200 °C.

Chemical Reactivity

AQUARIGHT ZV-A is not affected by chlorine or other oxidizing under normal conditions of use.

Application and Dose Level

AQUARIGHT ZV-A is an aqueous solution of an organic acid and is mildly corrosive in its concentrated form. Corrosion-resistant dosing equipment must be used. Examples of suitable materials are stainless steel 316 L and PVC or other plastic materials.

The injection point may be into the seawater make-up line after any external de-aeration and decarbonation equipment, or into the recycle brine stream at a suitable point after the blowdown and typically into the discharge of the recycle brine pump.

AQUARIGHT ZV-A is miscible with water in all proportions. It may be applied as the neat product, or as a solution distillate and should be dosed continuously, and proportionately to the seawater make-up flow to maintain the recommended dose level.

The dose level required will depend on a number of factors, including the quality of the seawater feed, TBT, recycle brine concentration factor, the type of distillation plant and frequency of application of the sponge ball cleaning system. Typical dose levels are in the range 2 to 10 mg/L. Detailed recommendations for any plant will be made on request.

Logistics

Classification	non-hazardous for conveyance non-hazardous for supply
Packaging	HDPE 220 XL-ring mauser drum 932 x 580 mm height x diameter net weight 230 kg gross weight 258.5 kg

AQUARIGHT ZV-A is also available in semi-bulk and bulk containers @ 25 kg or 30 kg

Every endeavor has been made to ensure that the information contained in this leaflet is reliable but we cannot accept liability for any loss, injury or damage which may result from its use. Data given in this Material Safety Data Sheet are solely for guidance in safe handling and use of the product(s) by customers; they do not form part of any specification. Customers are reminded that there may be uses or application of our products which are protected by patents under which PT ZEFA VALINDO JAYA have no rights. If any difficulties arise, we shall be glad to discuss them. Before using any product, read its label.

- a trade mark of : PT ZEFA VALINDO JAYA , Bekasi – Indonesia