

## DISPERSE 753

### ANTISCALANT

- **Quick biocide activity**
- **Long term preservation**
- **Effective control of scale formation**
- **Sequestering action on iron and manganese**

#### DESCRIPTION AND USE

DISPERSE 753 is an anti-scaling agent based on an aqueous solution of organophosphate derivative, resistant to chlorine and hydrolysis. The product formulation demonstrates superior stability compared to HMPS and most polymers.

DISPERSE 753 effectively inhibits scale of calcium carbonate, calcium sulfate, barium sulfate, strontium sulfate, calcium fluoride and other low soluble salts.

DISPERSE 753 has sequestering activity on iron and manganese avoiding scale formation and fouling of metallic compounds. The presence of aluminum in its colloidal form does not interfere with the benefits of this scale inhibitor.

DISPERSE 753 does not generate bio fouling in membranes or filters. Concentrated super-saturated levels of silica up to 180 mg/l is controlled effectively. For higher concentrations, please, contact NORLEX for specific recommendations.

DISPERSE 753 offers the following inhibition benefits:

Max. ISS CaSO <sub>4</sub> :	3 *
Max. ISS SrSO <sub>4</sub> :	12 *
Max. ISS BaSO <sub>4</sub> :	100 *

Max. ISS CaF <sub>2</sub> :	120 *
Max. Langelier Index:	+2.6 *
Max. level of silica saturation:	180 ppm **

\* Maximum saturation level in concentrate. Contact NORLEX for specific or further evaluations.

\*\* Silica saturation levels depend on different factors such as temperature, pH and trivalent metallic ions.

DISPERSE 753 is completely biodegradable.

#### CHARACTERISTICS

Appearance:	Transparent liquid
Color:	Slightly yellowish
Freezing point:	< -4°C
Density:	1.20 – 1.24 g/ml
pH:	2 – 3
Dry matter:	28% minimum
Active ingredient:	HEDP + DTPMPA
Viscosity:	< 45 cps

#### APPLICATION

DISPERSE 753 is specially recommended as scale inhibitor for nanofiltration membranes (NF), reverse osmosis (RO) and in re-circulated and/or reversible electro dialysis (RED) brine.

DISPERSE 753 is compatible with all types of membranes. Dose levels depends on the conversion rate of the plant, the temperature, physical and chemical characteristics of the water to be treated, and especially of those elements responsible for scaling and fouling.

As a general idea, DISPERSE 753 is used at a dose between 0.5 and 5 ppm (mg/l).

NORLEX Technical Service can support on the evaluation of scale risk of sparingly soluble salts, the optimum conversion rate and the applicable dose of product under different conditions.

## GENERAL INSTRUCTIONS

DISPERSE 753 is totally soluble in water. It can be added directly as it is or previously diluted in water using a metering pump to dose it into the water to be treated. In case of dilution, it is recommended to dilute to no more than 10%, and precautions against microbial growth should be taken. Prepared dilutions should be used within 3 days of preparation.

DISPERSE 753 is compatible with stainless steel and most usual construction materials.

It is recommended to add product into the feed water flow prior or after any cartridge filters and always before membrane units.

DISPERSE 753 should be dosed inline and proportionally to the feeding volume with the objective to keep a constant concentration of the product in the filtration unit.

## PACKAGING AND STORAGE

DISPERSE 753 can be supplied in Jerricans of 25 kg net or IBC of 1.200 kg net. On request, the

product can also be supplied in other packaging.

Store in cool and dry place (temperatures between 0 °C and 50 °C), protected from sunlight. Keep product in tightly closed original container. Shelf life of 24 months from production date.

Not classified as dangerous goods for transport.

## MATERIAL SAFETY DATA SHEET

It is recommended to handle the product taking the typical precaution measures for this type of chemical including protective clothing, overalls, gloves, goggles and face protection. Avoid contact with skin, eyes and mucous membranes. Use chemicals safely. Always read the label and product information before use.

A material Safety Data Sheet that contains detailed information and safety precautions about this product is available upon request.

## NSF-ANSI STANDARD 60

DISPERSE 753 is produced from raw materials registered with NSF International.

The product can be used in industrial membrane desalination plants producing potable water according to current Health Watch Programs. Healthy Product sheets are available upon request.