**TDS 12073**

# RELITE 2AS

RELITE 2AS is a "TYPE II" porous type strongly basic anion exchange resin.

Its main characteristics are a very high capacity, a good exchange kinetics and resistance to mechanical and osmotic shocks. Its basicity is lower that that of RELITE 3AS, therefore its regeneration efficiency and operating capacity are significantly higher. The porous structure allows a better reversibility in front of organic fouling.

Its composition complies with the existing food processing rules and regulations.

RELITE 2AS can be supplied under request in calibrated screen grades to meet all the standardized application systems (co-current, counter-current, fluidized beds, layered beds, continuous processes, etc.).

The main application of this product is the water and organic solutions demineralization.

## TYPICAL CHARACTERISTICS

| | | | |
|---|---|---|---|
| **Matrix** | : | **Porous copolymer styrene-DVB** | |
| **Functional group** | : | **Dimethylethanolamine** | |
| **Colour and physical form** | : | **Light yellowish/white opaque beads** | |
| **Particle size range** | : | **0.3 ÷ 1.18** | **m m** |
| **Effective size** | : | **0.40 min** | **m m** |
| **Uniformity Coefficient** | : | **1.6** | **max** |
| **Ionic form at the delivery** | : | **$Cl^-$** | |
| **Volume change** | : | **+ 12 max** | **% $Cl^-$ --> $OH^-$ form** |
| **Total exchange capacity** | : | **1.2 min** | **eq/l** |
| **Water retention** | : | **49 ÷ 55** | **%** |
| **Chemical stability** | : | **stable in the whole pH range** | |
| **Thermal stability** | : | **40 °C max** | **($OH^-$); 60 °C max ($Cl^-$)** |
| **Shipping density** | : | **700** | **g/l approx.** |
| **Standard packaging** | : | **25 or 1000** | **liter bags** |

## RECOMMENDED OPERATING CONDITIONS

| | | | |
|---|---|---|---|
| **Operating pH range** | : | **1 ÷ 14** | |
| **Operating temperature range** | : | **5 ÷ 40** | **°C** |
| **Minimum bed depth** | : | **800** | **m m** |
| **Linear operating flowrate** | : | **5 ÷ 50** | **m/h** |
| **Backwash expansion** | : | **50 ÷ 80** | **%** |
| **Regenerant** | : | **NaOH** | |
| **Regenerant level range** | : | **50 ÷ 150** | **g/l** |
| **Concentration range** | : | **3 ÷ 6** | **%** |
| **Slow rinse volume** | : | **1.5 ÷ 2** | **BV** |
| **Fast rinse volume** | : | **5 ÷ 10** | **BV** |

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TDS12073

# OPERATING CAPACITY

Operating capacity depends on various parameters, such as inlet composition, endpoint, kinetic load and regenerant level.

In case of need, please contact our TECHNICAL DEPARTMENT.

Fig. 1 BED EXPANSION IN WATER

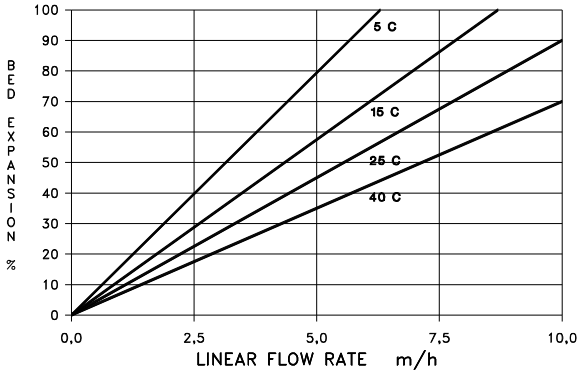
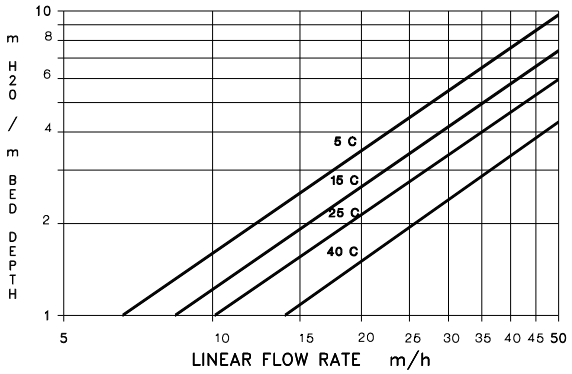



Fig. 2 PRESSURE DROP IN WATER




**RECOMMENDED NaOH QUALITY FOR REGENERATION (*)**

| | | | |
|---|---|---|---|
| Silica | 10 ppm | Sodium carbonate | 0.5 % |
| Iron | 10 ppm | Sodium chloride | 0.5 % |
| Mercury | 2 ppm | Sodium sulphate | 0.2 % |
| Heavy metals | 5 ppm | Hardness | 0 ppm |
| Chlorates | 10 ppm as $O_2$ | Suspended solids | 0 ppm |

(*) Values referred to NaOH 100%.