

SHEPA DD-40 (AL) (EM)-TECHNICAL DATA SHEET

DEFOAMING SOLUTION FOR DISTILLERIES WITH ALFA LAVAL PROCESS

Foam can be a disaster in fermenters because it frequently results in loss of production. In a biotechnology system the conditions for foam production are always potentially present. Many organisms generate proteins, which are released into the surrounding medium. The proteins and the CO₂ liberated generate foam in the fermentation system. SHEPA offers a specially developed product **SHEPA DD-40 (AL) (EM)**, which has the performance of an antifoam and defoamer to suppress this foam.

SHEPA DD-40 (AL) (EM) is a **Polyol fatty acid ester**. The product acts as a defoamer and antifoamer—i.e., it kills the foam formed and also reduces foam formation tendency in the system.

The product very well suits the fermentation system and has no adverse effect on yeast vitality and cell count (even at 1000 ppm in the fermentation system). This plays an important role in the **Alfa Laval process**, since the yeast is re-cycled in the process.

The Polyol fatty acid ester has a high molecular weight and will not distil off and contaminate the end product.

Application:

We recommend **10% emulsion of SHEPA DD-40 (AL) (EM)** for dosing. The emulsion can be easily prepared even with manual stirring.

Properties:

Parameter	Specification
Appearance	Light yellow emulsion
Chemical Nature	Polyol Fatty Acid Ester
Acid Value	6 Max.
Saponification Value	30–40
Dispersibility in Water (10%)	Thin milky white emulsion
pH (5% Emulsion)	5–8
Solid Content by LOD for 1.5 h @105°C	40% Min.