**PROMOTE QUALITY & FOOD SAFETY**

A Solution Story

**Ultrasil™ 09: NPE-free Surfactant Additive**

Ultrasil 09 helped a large dairy processor eliminate Nonylphenol Ethoxylates (NPEs) while increasing the efficiency of their skim milk UF membrane operations.

### CHALLENGES

- Dairy processor needed to eliminate the use of NPEs from their cleaning process in order to meet their customer’s requirements
- Attempts to eliminate NPEs in the past had negatively impacted the performance of the membrane systems due to poor fat removal

### SOLUTION

- The plant partnered with Ecolab to trial Ultrasil 09 for 78 days in combination with their liquid Ultrasil alkaline cleaner and chlorine product as part of their membrane cleaning routine
- Ecolab technical team provided on-site support to help convert to Ultrasil 09 and provided extensive lab and analytical testing for NPE-residue

### RESULTS

**with Ultrasil 09**

**Average Permeation Rate**

- **Before**: 22.25 LMH/Bar*
- **With Ultrasil 09**: 25.00 LMH/Bar*

**11.3% more milk**

**increased capacity to process 1.4M additional gallons of milk per year**

*Measuring permeation rate as LMH/Bar – Litres per Meter Square per Hour per Bar pressure allows processors to normalize for membrane area and baseline pressures in order to calculate capacity and throughput.

To find out more, contact your Ecolab representative or call 1-800-392-3392.