





## Fast acting in Food Manufacturing For Effective Removal of Fats and Proteins

PROTO-O has been developed to take advantage of new generation peroxide stable surfactants to produce a product that aids in removal of the difficult to remove build-up when added to an alkaline CIP solution.

Tough alkaline formulas assists safe food manufacturing, with food safety being the Industry's number one concern, PROTO-O is formulated to high performance standards ensuring fast and effective removal of fats and proteins.

Effective cleaning when used with industry standard Alakali while in many food industries the common approach to removal of cooked and dried on proteins, carbohydrates, fats and oils is to introduce a chlorine or acid system. Proto-0 can be introduced to replace chlorine systems. The reaction of the peroxide in the alkaline CIP solution softens these soils allowing the alkali and surfactants to clean more efficiently.

PROTO-O low foaming characteristic means less foam, less time to rinse. No clogged equipment and no pump cavitation. PROTO-O provides labour and time savings!





PROTO-O is fully dissolved into water making it safe on filtration units and bag presses etc. no risk of powder residue from clean skin type cleaners.

This procedure adds extra oxygen molecules to the water which is better for the effluent.

You will see a reduction in mal-odours which is prevalent in the effluent water. CLEAN-IN-PLACE/SOAKING/BOIL OUT: (process is only required on a remedial basis) Dilute PROTO\_O to between 0.5 and 2.0% for CIP applications, will depend on soil build-up If possible heat water to 45 degrees Celsius plus will help with faster and better results. Firstly circulate your caustic (alkaline cleaner) and water for approx 2 minutes, then add your Proto O for the remainder of the cleaning cycle. Drain and Rinse thoroughly Then neutralise and or sanitise the surface. For more specific instruction, particularly relating to soil types and speciality cleaning, please refer to your Castle Chemicals Technical Representative.

## Wine Industry

For the removal of protein stains from the inside of stainless steel wine tanks, can also be used on cross flow bag presses and tank CIP cleaning. Ideal for the use on bottling filler lines as well.

## How to Use

Have a good powerful pump over 6kw with a good spray ball or preferably a fury for best results:

- **1.** Set up your caustic solution for normal CIP tank cleaning. If possible use heat at 45°C plus for better faster results.
- **2.** Example... fill tank with 500 liters of water add your normal dose of caustic... (May vary per tartrate loads 1% 2% caustic in total solution).
- **3.** Close door circulate 20 seconds to mix caustic and water... Important don't put Proto directly on top of Caustic that you have just put in the tank.
- **4.** Open door pour in for Initial wash 2.5 litres of Proto-O/500 litres of water and caustic which is 0.5%. After initial use of Proto-O you can then reduce the quantity / caustic wash

solution down to 0.2% as the stains will be less severe to remove.

- **5.** Close door and circulate for 30-45 minutes pending stain loads in tank or on equipment. Longer with spray balls up to 50 minutes.
- 6. Open door and protein will be removed.
- **7.** Rinse tank out and neutralize/sanitise as you would normally do.
- **8.** For other Equipment cleaning such as filtration systems and or bag presses... follow your current procedures per item and add Proto-O at a dilution of 0.5% of total cleaning volume/water/caustic.

