

# ISP

# Polyclar<sup>®</sup> Plus 730

## Single-use Balanced Beer Stabilizer



### Description

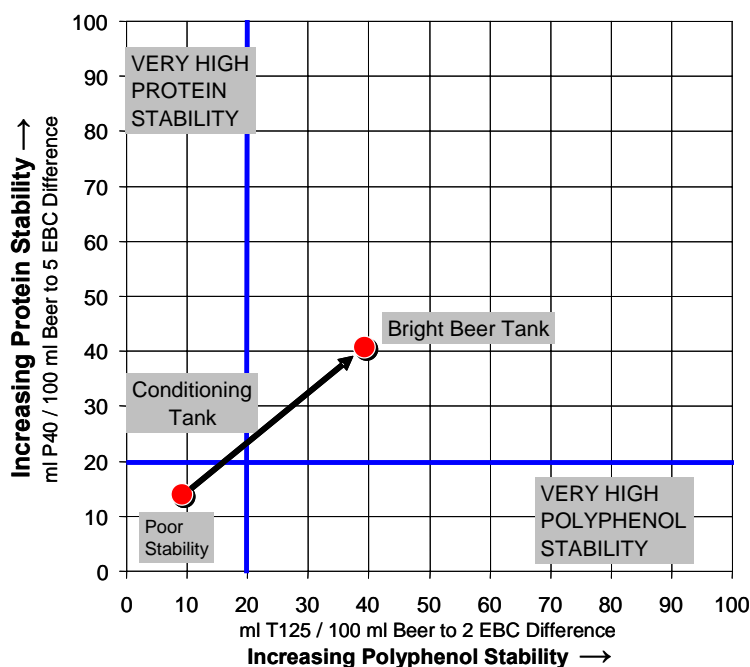
The new Polyclar<sup>®</sup> Plus 730 beer stabilizer is an optimized blend of polyvinylpyrrolidone (PVPP) and silica xerogel. It is a single-use product offering a highly effective means of preventing non-biological haze in beer.

The combined use of PVPP and silica gel provides a balanced stabilization of both haze producing constituents preventing the protein-polyphenol complexes from forming.

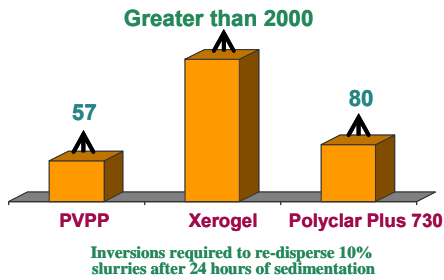
### Specific Benefits

Polyclar Plus 730 stabilizer represents a significant development in preserving the quality and character of beer after packaging. It offers the following benefits:

- Balanced haze polyphenol and protein stabilization with a single product
- Completely insoluble in beer
- Applicable to all types of beer
- Higher efficacy - lower dosage rate than equivalent separate stabilization regimes
- Easy to use - excellent handling characteristics
- Insoluble process aids, with wide regulatory approval
- No negative impact on foam, flavor or other quality parameters
- Improved dispersion and sedimentation characteristics
- Longer filter run lengths compared to silica alone
- Uses existing plant equipment

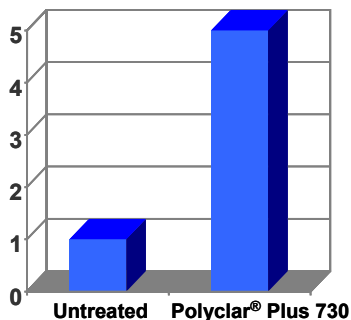


Balanced polyphenol and protein stabilization with Polyclar Plus 730



Superior dispersion characteristics of Polyclar Plus 730 results in more uniform beer treatment and less residue in dosing tank.

#### Predicted Shelf-Life in Months



1 week @ 37°C with total haze @ 2 EBC is equivalent to 1 month of shelf-life

Improvement in predicted shelf life of American lager treated with Polyclar Plus 730 at 40g/hl.

## Methods of Use

Polyclar Plus 730 is made up as an 8 - 12% slurry in de-aerated water. The minimum recommended hydration time is 60 minutes and the slurry should be kept constantly agitated to ensure proper hydration and mixing. Sparging with CO<sub>2</sub> may be used in the dosing vessel to minimize oxygen pick-up.

The Polyclar Plus 730 slurry may be added during transfer from fermentation to maturation or directly to the maturation vessel.

It is usually added to the beer stream en-route to filtration, via a separate stabilizer-dosing tank, or by addition to the DE/Kieselguhr slurry tank for combined dosing with filter aid. The use of a trap filter after the DE filter is recommended.

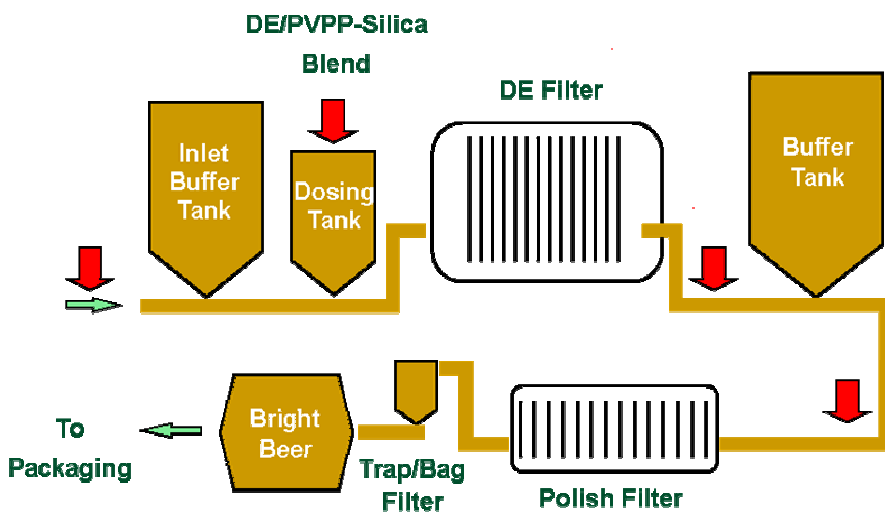
Polyclar Plus 730 is effective with a contact time of a few minutes. However, for maximum benefit a contact time of 10 minutes is recommended.

This can be achieved with proportional dosing of the stabilizer into the beer stream on entry into the maturation vessel or prior to the inlet buffer tank..

## Dosage Rates

The exact dosing rate for Polyclar Plus 730 is dependant upon the brewing raw materials used, process conditions and the shelf life requirement.

The usual dosage level range for Polyclar Plus 730 is 15 - 100g/hl (4 - 26 lbs/100US bbls). Typical examples include:



Arrows indicate possible injection points for Polyclar Plus 730

Beer Type	Addition Rate (g/hl)
Strong beers >7 % alc.	20 - 100
All malt lagers	20 - 50
All malt ales	20 - 80
Malt/adjunct lagers	15 - 50
Keg beers	10 - 40

## Quality, Safety & Service



### Quality

Polyclar products are manufactured to Internationally recognized quality standards. Details are available upon request.

### Regulatory

PVPP is permitted for use in beverages in all countries with regulations covering the use of additives and process aids. Always seek guidance from your local regulatory authorities.

### Safety

Material Safety Data Sheets are available upon request.

### Technical Support

Technical support for ISP's Beverage Product portfolio is provided by a team of dedicated industry specialists, from locations in Europe, USA and Asia. For further information on the use of our products, please contact your local

ISP representative or authorized distributor.

ISP also supplies products and services to the wine, beverage and wider food industries. We are constantly introducing innovative new products to better serve our increasing number of customers in these industries.



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