



FOAM

# PGA POWDER

TECHNICAL DATA SHEET

## Description

PGA (Propylene Glycol Alginate) Powder is a specially prepared food grade propylene glycol alginate derived from brown seaweed. It is used as a beer foam stabiliser.

## Benefits

- Protects beer foam against contaminants at dispense e.g. dirty glasses
- Enhances foam stability of beers with a naturally high level of foam inhibitors
- Enhances foam adhesion to the sides of the glass
- Improves measured head retention value in beers
- Effectively stabilises beer foam even in the presence of modern stabilisers such as glycolipids used in NABLAB production

## Principle

Propylene glycol alginate is a molecule possessing both hydrophilic and hydrophobic portions, thus modifying bubble wall characteristics. PGA concentrates at the surface of the bubble with the hydrophobic end interacting with gas molecules inside the bubble and the hydrophilic part in contact with water molecules outside the bubble in the liquid forming the bubble wall. There is less attraction between the hydrophobic groups than there is between the water molecules in which the PGA is dissolved, so the surface tension at the bubble surface is reduced, stabilising the foam structure.

### PRODUCT CODE

PGA

### COMMODITY CODE

13023900

### PACKAGING (kg)

1 kg

### STORAGE

Keep in original container.  
Keep containers sealed when not in use.

### Temperature

Recommended storage temperature is 5°C - 20°C.

### Location

Store in cool, dry conditions.

### Shelf Life

At the recommended storage conditions, 3 years from date of manufacture.

## Application & Rates of Use

The solution of PGA Powder should be added to beer after final filtration and not in combination with any other additions. PGA powder must be dissolved in water before use and requires high-shear mixing to achieve proper solubility. If unsure, consider purchasing PGA Solution instead.

### Product Preparation:

Before it can be used, the product must be dissolved in water:

- Set up a mixing tank with a high shear mixer (e.g. Silverson, Y-tron, Greaves)
- Fill the mixing tank with water at a temperature of between 30 and 40°C
- Turn on the mixer
- Add the PGA Powder to the tank at a rate of 20 g/L of water
- Mix until the tank contents appear to be homogeneous
- Filter the solution

An addition to beer of 0.2 L/hL of a 2% solution of PGA Powder will ensure retention of beer head. To enhance the beer head, use a rate of 0.4 L/hL. The maximum recommended addition of such a solution is 0.5 L/hL and should not be exceeded.

## Guidelines For Use

- Check that the product is within its shelf life before use
- Carry out optimisation trials to determine the correct rate of use
- Add product after final filtration
- Remember that PGA solutions are temperature sensitive
- Use the product quickly after making up the solution
- Read the Safety Data Sheet prior to use

## TECHNICAL SUPPORT

+44 (0) 115 978 5494 | [techsupport@murphyandson.co.uk](mailto:techsupport@murphyandson.co.uk)

### REGULATORY COMPLIANCE INFORMATION

Refer to the '**Product Specification Sheet**' or contact us on:  
**+44 (0) 115 978 5494 | [compliance@murphyandson.co.uk](mailto:compliance@murphyandson.co.uk)**

 EST. 1887 <b>MURPHY &amp; SON</b>	Product name : PGA Powder
	Product code: PGA
	Doc Ref: TDS056
For Health & Safety Information refer to the Safety Data Sheet.	Issue Date: 12/02/2025
	Issue Number: V01
	Written by: Celina Dugulin
	Authorised by: Iain Kenny