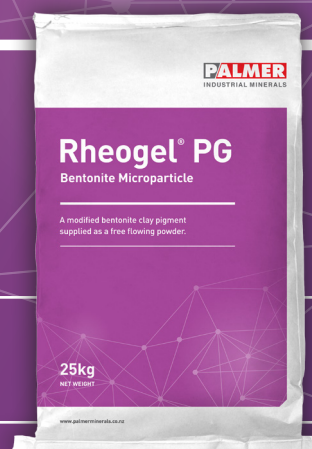


Rheogel® PG

Bentonite Microparticle

A modified Bentonite clay pigment supplied as a free flowing powder.



Chemical:

Sodium montmorillonite form of the smectite trioctahedral swelling clays.

Typical chemical analysis (dry basis):

Silica	52.1%
Aluminium Oxide	16.0%
Ferric Oxide	13.0%
Calcium Oxide	1.6%
Magnesium Oxide	2.7%
Sodium Oxide	3.0%
Titanium Oxide	2.7%
Potassium Oxide	0.3%
Phosphorus	0.2%

Typical properties:

Fineness:

• Residue on a 45µm sieve	0.1%
• Top cut (d98%)	45µm
• Mean particle size (d50%)	15µm
ISO Brightness R457	30%
pH value	9.8-10.2
Moisture @ 88 C, when packed	9-11%
Loose bulk density	0.76g/ml
Packed bulk density	0.92g/ml
Specific Gravity	2.3g/ml
Sand content	>2%

Main application:

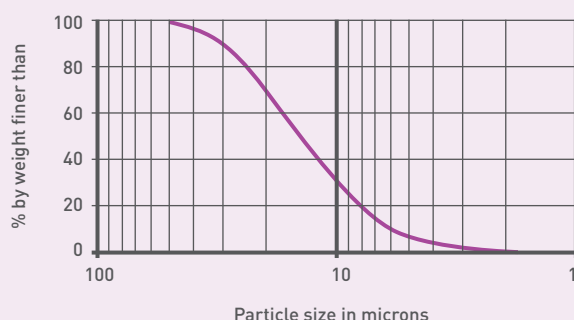
Papermaking.

Benefits:

- Superior wet-end retention of fines, CaCO₃, TiO₂, and kaolin clay in papermaking furnishes
- Provides stable wet-end conditions to improve sheet uniformity and papermaking properties
- Enhances drainage for energy savings in sheet forming, pressing and drying
- Decreases white water solids to improve raw material yield and save all efficiency
- Performs over a wide pH range. Proven microparticle for alkaline conversions in fine paper
- Enhances wet-end colloidal retention leading to improved sixing and dye efficiency
- Improves paper machine output and runnability for maximum return on investment
- Contains no VOC or surfactant components to harm the environment
- Available in semi-bulk bag, and bulk silo systems for ease of handling and safety.

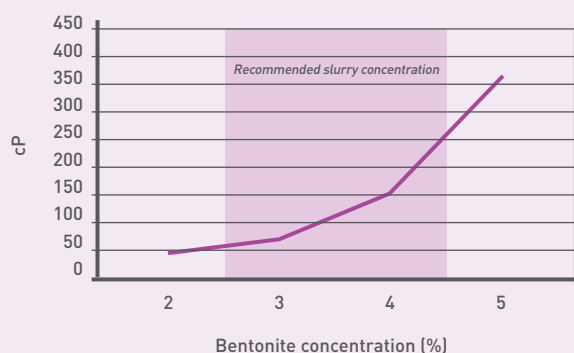
Particle size distribution:

Malvern Mastersizer.



Viscosity curve:

Brookfield viscosity in distilled water at 25°C



Application and storage:

Recommended slurry concentrations:

- Slurry 0.25 - 4.5%.

Recommended storage periods:

- Slurry 1 month
- Dry bentonite up to 5 years
- Storage of bentonite should be in a cool, dry place.

Production plant:

17-35 Bridge Street, Coalgate, Canterbury 7673, New Zealand.

Shipping & handling:

Hydrocol ONZ is supplied in one tonne lot palletised and shrink wrapped in either 1 tonne bulk or 25kg polypropylene bags.

In accordance with good industrial practice, handle with care and prevent contamination of the environment. Avoid dust formation and ignition sources. Dry bentonite spills should be swept or vacuumed. Bentonite slurry spills should be contained with an inert material and disposed of in a proper manner.

FOR INDUSTRIAL USE ONLY.

Health & safety:

This product has a low order of toxicity, and no special precaution are necessary in handling other than standard industrial protection. Detailed information on the product(s) described in this leaflet can be found in our relevant Health and Safety information (Material Safety Data Sheet).

Registration:

Hydrocol ONZ.

Important:

The following supersedes Buyers documents. SELLER MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. No statements herein are to be construed as inducements to infringe any relevant patent. Under no circumstances shall Seller be liable for incidental, tort of contract arising in connection with the product(s). Buyer's sole remedy and Seller's sole liability for any claims shall be Buyer's purchase price. Data and results are based on controlled or lab work and must be confirmed by Buyer by testing for its intended conditions of use. The product(s) has not been tested for, and is therefore not recommended for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended; or for uses for which implantation within the human body is intended.