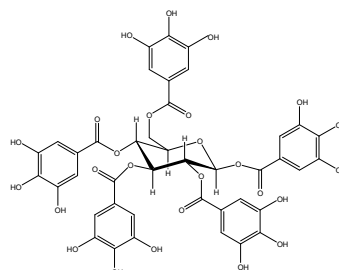


PGG Crude

>>> Pentagalloyl glucose Crude Product data-sheet

1,2,3,4,6-Pentagalloyl-O-d-glucose is one of the major components present in natural hydrolysable gallotannins. PGG is isolated from this natural matrix by means of proprietary Ajinomoto OmniChem separation techniques and is specially purified for applications in the pharmaceutical, nutraceutical and cosmetics industry. PGG is a natural material derived from renewable plant materials using strictly controlled production facilities. No added preservatives or additives are used in the production of PGG Crude.



>>> PROPERTIES^(*)

- | | |
|-----------------------------|----------------------------------------------|
| ▪ Delivery form: | Off-white powder, free of visible impurities |
| ▪ Purity (on dry material): | min. 85 % |
| ▪ Moisture: | max. 5 % |
| ▪ Heavy metal content: | max 20 ppm |

^(*) Only selected data is represented here, for a full set of specifications we refer to our **Specifications** sheet.

>>> USAGE

PGG can be used in applications such as:

- preparation of API-PGG complexes with slow release properties
- formulated drugs
- anti-perspirants
- skin-whitening agents
- anti-oxidant in anti-ageing cosmetic applications
- anti-oxidant in nutraceuticals
- ...

PGG exhibits the extraordinary anti-oxidant capacity of hydrolysable tannins combined with the well defined composition of a mono-component. However, in applications that require a very high degree of control on impurities our PGG HP is more suitable.

TEAC anti-oxidant capacity	μmol TE/g
Tanal WG – Grape Seed Extract	8400
Brewtan – Hydrolysable tannin	10500
PGG	7300

PGG exhibits strong anti-tyrosinase properties which make it particularly interesting for skin-whitening formulations.

Unlike normal hydrolysable tannins PGG is completely insoluble in water. It is readily soluble in water-ethanol mixtures containing minimal 1-2 % ethanol. Instead of ethanol other water miscible alcohols can also be used.

>>> STORAGE AND HANDLING

PGG Crude does not require special storage conditions and can be stored for prolonged periods of time without deterioration if stored in a dry area in its original closed packaging. The product is not frost sensitive and normal ambient storage temperatures (i.e. 5-25°C) suffice.

Prolonged exposure of PGG Crude to light can cause a gradual colour shift. This does not influence technical performance of the product unless colour is a critical parameter in the application. Therefore reseal the inner plastic bag and keep the lid on the fibre drum if PGG Crude is not in use.

>>> PACKAGING

PGG is available in 25 kg fibre drums lined with an inner polyethylene bag or 10 kg cardboard boxes.

>>> FURTHER INFORMATION

Further safety information is provided in our **Material Safety Data Sheet**.

Upon simple request a controlled copy of our **Specifications** can be provided by our QC-department.

Information on usage and applications can be found in our **Application Fact Sheet**. Our R&D department can provide you further detailed information on composition and regulatory status.

Deliveries are accompanied by a **Certificate of Analysis**.

CAS Registry Nr: 14937-32-7

The information provided in this product data sheet is based on the present state of our knowledge. Some of the applications mentioned in this document are protected by patent law. Ajinomoto OmniChem nv/sa cannot be held responsible for patent law infringements and the customer should contact the patent holder if so required. Due to the many process parameters involved we are not able to submit a general recommendation. It only shows without liability on our part the uses to which our products can be put. However, Ajinomoto OmniChem nv/sa cannot be held responsible for the consequences of the application of the above described product.