

Transforming industries through enzymatic innovation



For Herbal Extraction Industry

Bio Plantex



Bio Plantex™

Innovative Bio-processing product to improve herbal extraction

Natural plant-based materials like Wood, Barks, Roots, Stems, Leaves, Flowers / fruits, Seeds etc are being used in various ways after processing – as feed, drugs, bio-chemicals, natural dyes and so on. These bio-actives are contained in complexed macromolecules such as Flavonoids, Terpenes, Tannins, Saponins, Proteins, Carbohydrates, Oils, volatile matters and other organic / in-organic compounds. These bio-active compounds are not loosely attached rather they are complexed / bound to lignins, pectins, xylans, polysaccharides etc.

BioPlantex™ is a bio-product designed with the aim for pretreatment of natural plant materials which helps in improving the yield of extraction of bio-actives in all kinds of extraction processes like distillation, aqueous extraction, solvent extraction etc and also improves the quality of extraction.

Property

BioPlantex™ is brownish liquid with typical fermentation smell. Sp. Gr. is 1.05+/- 0.5%.

Application

Pulverize plant material / herbs in small pieces (1-2 mm size), dip pulverized herb in sufficient demineralized water so that there is water at the surface, dose BioPlantex™ @ 0.5% to 1% of the dry weight of plant material / herbs, mix properly, maintain pH 5 and temperature at 50°C and leave the material over night or allow at least 6 hours for proper result. After this step proceed for your normal extraction process with optimization i.e. in case of solvent extraction reduce solvent up to 50% to this BioPlantex™ pretreated solid-liquid mix and in case of aqueous extraction

reduce temperature by up to 75%. For best optimization laboratory scale trial is suggested.

Specifications

BioPlantex™ complies with the current recommended purity specifications for food grade enzymes given by the Joint FAO/WHO Expert Committee on Food Additives (JECFA).

BioPlantex™ is compliant with HACCP, Kosher and Halal requirements. BioPlantex™ is produced under strict process control certified as per ISO 9001:2008 and cGMP certification.

Storage

Store in airtight containers, under cool (<30°C) and dry conditions. It should be used within 12 months beyond which loss of activity starts, which may accelerate in the case of improper storage.

Safety

Contact or Inhalation of enzymes in any form may cause allergic reactions and should be avoided. In case of contact with the skin or eyes, promptly rinse with water for at least 15 minutes. Please refer to the Material Safety Data Sheet (available on request) for all safety instructions.

Support

Team Varuna is committed to provide support in successful application of BioPlantex™ in extraction process on site at customers' unit.

Benefits

Increases
extraction yield

Improves
extraction quality
and economy

Reduction
in energy cost

Does not
interfere with
subsequent processing

Improves
bio-composting of
extraction waste

Helps
in bringing down
carbon footprint



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