

ASFERM PLUS

GENERAL DESCRIPTION FOR RAW MATERIAL

ASFERM PLUS is *Aspergillus* ferment with rice. Food fermentations are ancient technologies that harness microorganisms and their enzymes to improve the human diet. Fermented foods keep better, have enhanced flavours, textures and aromas, and may also possess certain health benefits including superior digestibility. Especially, Asian cuisines rely on a large repertoire of fermented foods. In particular, *Aspergillus oryzae* and *Aspergillus sojae*, sometimes called koji moulds, are employed in many ways. The koji moulds release amylases that break down rice starch which in turn can be fermented to make rice wine. Fermented rice beverages have numerous local variations and names depending on country and region. Rice wine is called *shaoshing* in parts of China, *sake* in Japan, *takju* or *yakju* in Korea. The koji moulds are also effective in a variety of legume fermentations of which miso and soy sauce are best know.



TECHNICAL INFORMATION

Product specification

Appearance	Pale yellow ~ Brown liquid
Odor	Typical
Refractive Index (N_D^{20})	1.340 ~ 1.370
pH(Neat)	3.0 ~ 5.0
Specific Gravity (d20/20)	1.025 ~ 1.075
Total bacterial count	Not more than 100cfu/mL
Yeast & molds	Not more than 10cfu/mL

Processing & Dosage

The recommended dosage of ASFERM PLUS is about 2.0% (or 1%~100%). ASFERM PLUS is a water-soluble active ingredient. In order not to disturb the structure and conformation of the actives, it is recommended to incorporate it into formula at the last phase of the formulation at about 40°C.

Storage & Shelf life

ASFERM PLUS should be stored at room temperature in a tightly closed and lightproof package. If stored in these appropriate conditions the shelf life is at least 24 months. Once the original packing is opened, it is highly recommended to use at once.

Safety information

The following safety tests are assessed.

- Neutral Red Uptake (NRU) assay - No irritation

PRODUCT INFORMATION

TRADE NAME	ASFERM PLUS
INCI NAME	COMPOSITION (INCI Key Index)
RICE FERMENT FILTRATE (SAKE)	A
HYDROXYACETOPHENONE	F
HYDROXYPROPYL CYCLODEXTRIN	F
SODIUM BISULFITE	G
STANDARD PACKAGE	20KG

INCI Key Index
A : Greater than 50%
B : Greater than 25% but less than or equal to 50%
C : Greater than 10% but less than or equal to 25%
D : Greater than 5% but less than or equal to 10%
E : Greater than 1% but less than or equal to 5%
F : Greater than 0.1% but less than or equal to 1%
G : Less than or equal to 0.1%

Remarks

The content of this document was established with utmost possible care. However, we reserve the right to add the information, to correct or to delete it without prior notice.