Gusmer Enterprises, Inc.®

Ferm Point® FP102

Product Data Sheet

Product Type: Powdered Nutrient

- Consistent and Repeatable Fermentations
- Maintain Microbial Population Viability
- High Quality and Cost Effective
- Produced in an ISO 9001 and GMP Certified facility

Ferm Point®

Why use nutrients?

Research shows that regular nutrient supplementation helps to maintain a strong, viable and healthy microbial population. Sufficient nutrients ensure dependable fermentations and increased fermentation rates and more consistent end product. A complex nutrient supplement provides microbes with the essential micro-nutrients, polypeptides, and amino acids to ensure good cell growth generation after generation. Pitching nutrient alongside healthy, viable microbial populations leads to less stressful conditions and assures consistency and efficiency in fermentation.

What is Ferm Point®

Ferm Point Powdered Nutrients contain a diverse blend of vitamins, minerals, polypeptides, and amino acids that have been identified as essential precursors required to build biomass and drive precision fermentations. Gusmer Enterprises has been formulating fermentation nutrients for many years and has developed Ferm Point Powdered Nutrients based on the latest fermentation research and with the highest quality, bioavailable ingredients for maximum assimilation by the microbes. The product is non-GMO, non-BSE certified and formulated in the USA. The dedicated team of specialized scientists and manufacturing experts at Gusmer Enterprises are available to assist in supporting your use of Ferm Point Powdered Nutrients from ideation to implementation quickly and cost effectively. By employing the use of precision mixing technology, Gusmer Enterprises can design and make new nutrient blends to optimize your process.

Application:

A refinement of our full spectrum complex powdered nutrient blend with additional B vitamins for extra demanding growth environments. A blend of inorganic and naturally derived nitrogen that promotes cell production through to the end of the fermentation process. A 1:1 trade-out for nitrogen nutrient sources when a little extra boost is needed.

Instructions for use:

Ferm Point FP102 Powdered Nutrient should be mixed at 10 times its weight in process liquid to properly dissolve. Product is not fully dissolvable.

Technical Data:

Addition Level
- Recommended starting dosage is 6.5 g/L
- Dosage optimization will be required

Storage and Shelf Life
- Store under cool and dry conditions
- Shelf life is 24 months unopened and 6 months opened but sealed package.

Appearance
- Tan colored powder with yeast-like aroma

Packaging
- 5 kg pack
- 25 kg pack

Product Specifications:

Microbiological	Specification
Total Bacteria Count	<15,000 / g
Yeast and Mold	<100 / g
Coliform Organisms	<10 / g
E. coli	Negative
Salmonella	Negative

Base Characteristic	Specification
Total Nitrogen	15%
Amino Nitrogen/Total	18%
Salt (as Chlorides)	<2.0%
pH (5% Solution)	6.99

Vitamins	Specification (mg/100g)
Thiamine (B1)	29.24
Riboflavin (B2)	2.62
Niacin (B3)	38.39
Pantothenic Acid (B5)	3.09
Biotin (B7)	0.05
B6	1.38
Folic Acid (B9)	4.12
Vitamin B12	<0.05
Inositol	210.68

Minerals	Specification (mg/100g)
Calcium	34.19
Iron	3.19
Magnesium	347.57
Phosphorus	12292.79
Potassium	1426.34
Sodium	838.77
Zinc	7.87

Amino Acids	Specification (mg/100g)
Alanine	1594.8
Arginine	1176.4
Aspartic Acid	2349.2
Glutamic Acid	3246
Glycine	1092.8
Histidine	477.2
Isoleucine	1178
Cystine	195.2
Leucine	1702
Lysine	1795.2
Methionine	378.8
Phenylalanine	1011.2
Proline	877.6
Threonine	1154.8
Serine	1109.6
Tryptophan	300.4
Tyrosine	886
Valine	1404.8

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