

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:

When only naturally derived nitrogen is needed, this powdered nutrient made from autolyzed yeast is formulated to target biomass production. Ferm Point FP201 can also be used to supplement ammonia-based nitrogen sources when more complex amino acids are needed to ensure cell health and vitality.

Instructions for use:

Ferm Point FP201 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 3 g/L
- Dosage optimization will be required
- Recommended dosage rate for supplementation of microbial propagation media is 0.3 - 0.8 g/L

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

- 1 kg pack
- 10 kg pack

Vitamins	Specification (mg/100g)
Thiamine (B1)	53.86
Riboflavin (B2)	2.66
Niacin (B3)	39.81
Pantothenic Acid (B5)	3.74
Biotin (B7)	0.11
B6	1.86
Folic Acid (B9)	2.13
Vitamin B12	<0.05
Inositol	382.12

Minerals	Specification (mg/100g)
Calcium	72.42
Iron	6.25
Magnesium	59.20
Phosphorus	831.21
Potassium	2091.43
Sodium	969.70
Zinc	19.54

Product Specifications:

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

Base Characteristic	Specification
Total Nitrogen	8.62%
Amino Nitrogen/Total	3.62%
Salt (as Chlorides)	<2.0%
pH (5% Solution)	5.96

Amino Acids	Specification (mg/100g)
Alanine	3091.18
Arginine	2308.74
Aspartic Acid	4900.22
Glutamic Acid	6780.10
Glycine	2171.48
Histidine	957.02
Isoleucine	2471.30
Cystine	352.32
Leucine	3575.70
Lysine	3638.32
Methionine	804.58
Phenylalanine	2113.92
Proline	1819.16
Threonine	2461.18
Serine	2266.36
Tryptophan	652.14
Tyrosine	1814.10
Valine	2828.68



Important Note: Gusmer Enterprises, Inc. provides this information to the best of our knowledge. This information does not claim to be complete and Gusmer Enterprises, Inc. cannot assume liability for improper use. All users are advised to test products to meet their specific needs.