

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



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 full spectrum complex powdered nutrient blend of inorganic and naturally derived nitrogen sources optimized for solubility. A jack-of-all-trades, it provides refined polypeptides and other essential nutrients to promote cell growth along with nitrogen sources that drive the fermentation process to completion. This nutrient acts as a 1:1 trade-out for fully naturally derived or ammonia-based nitrogen nutrient sources.

Instructions for use:

Ferm Point FP101 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 6.2 g/L
- Dosage optimization will be required
- Recommended dosage rate for supplementation of microbial propagation media is 0.8 - 1.2 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

- 5 kg pack
- 25 kg pack

Vitamins	Specification (mg/100g)
Thiamine (B1)	55.25
Riboflavin (B2)	2.77
Niacin (B3)	17.91
Pantothenic Acid (B5)	3.28
Biotin (B7)	0.05
B6	1.48
Folic Acid (B9)	2.05
Vitamin B12	<0.05
Inositol	207.22

Minerals	Specification (mg/100g)
Calcium	24.15
Iron	3.20
Magnesium	74.78
Phosphorus	12317.66
Potassium	1537.25
Sodium	881.72
Zinc	7.97

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	15.31%
Amino Nitrogen/Total	18.87%
Salt (as Chlorides)	<1.0%
pH (5% Solution)	7.03

Amino Acids	Specification (mg/100g)
Alanine	1679.66
Arginine	1222.50
Aspartic Acid	2463.46
Glutamic Acid	3449.42
Glycine	1145.44
Histidine	498.34
Isoleucine	1232.26
Cystine	203.76
Leucine	1776.54
Lysine	1883.36
Methionine	394.46
Phenylalanine	1054.44
Proline	920.68
Threonine	1200.38
Serine	1158.44
Tryptophan	311.58
Tyrosine	925.74
Valine	1472.96



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.