

Yeast Extract Powder (with 5' nucleotides)

Cat. No. YENG-0001

Lot. No. (See product label)

Introduction

Description

Yeast Extract Powder (with 5' nucleotides) is a food-grade savory ingredient prepared from the soluble components of edible *Saccharomyces cerevisiae* cells and supplied in dried powder form. This grade contains flavor-active 5'-nucleotides for enhanced umami performance in food formulations.

Applications

Savory foods and seasoning systems, including soups, bouillons, sauces, gravies, instant foods, snack seasonings, processed meat products, plant-based foods, and ready-meal formulations.

Synonyms

Yeast Extract; Bakers Yeast Extract; Autolyzed Yeast Extract; Yeast Autolysate

Product Information

Species

Saccharomyces cerevisiae

Source

Water-soluble components of food-grade *Saccharomyces cerevisiae* cells

Appearance

Light yellow to brown powder

Form

Powder

CAS No.

8013-01-2

Chemical Name

Bakers yeast extract

Contaminants

U.S. regulatory reference for bakers yeast extract under 21 CFR 184.1983, dry-weight basis: Arsenic: <0.4 ppm Cadmium: <0.13 ppm Lead: <0.2 ppm Mercury: <0.05 ppm Selenium: <0.09 ppm Zinc: <10 ppm Aerobic plate count: <10,000 organisms/g Yeasts and molds: <10/g *Salmonella*, *Escherichia coli*, coagulase-positive *Staphylococci*, *Clostridium perfringens*, *Clostridium botulinum*, other recognized microbial pathogens, and harmful microbial toxins: Negative

Structure

Complex mixture with no single defined molecular structure.

Composition

Water-soluble yeast-cell components, primarily amino acids, peptides, carbohydrates, salts, and flavor-active 5'-nucleotides. Exact free glutamate, 5'-GMP, 5'-IMP, total nucleotide, sodium, and moisture values are grade-specific.

Function

Flavor enhancer; flavoring agent or adjuvant; savory and umami enhancement

Solubility

Soluble or readily dispersible in water; solution color and clarity are grade-dependent.

Quality

Contains flavor-active 5'-nucleotides; exact total and individual nucleotide levels are grade-specific.

Grade

Food Grade

Notes

This product is a complex food ingredient, so a single molecular formula and molecular weight do not apply. CAS 8013-01-2 is listed by FDA for bakers yeast extract. The designation "with 5' nucleotides" does not define a universal assay; confirm the actual total and individual nucleotide values on the lot-specific specification or certificate of analysis.

Advantages

Enhanced savory and umami character 5'-nucleotide and glutamate flavor synergy

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Supports flavor depth and continuity Powder form suited to dry blending and aqueous food systems

Usage

For food applications covered by 21 CFR 184.1983, bakers yeast extract may be used as a flavoring agent and adjuvant at a level not exceeding 5% in food. For other markets and applications, establish the use level according to the applicable food regulations and sensory validation. When a target nucleotide dose is required, calculate the addition from the actual 5'-GMP, 5'-IMP, and total 5'-nucleotide values stated in the lot-specific analytical specification; do not assume a universal nucleotid