

Y3627 Yeast Carbon Base

Product Description

Yeast Carbon Base is recommended for use in the classification of yeasts on the basis of their ability to assimilate nitrogen compounds. The nitrogen assimilation ability is tested by adding various nitrogen sources such as ammonium sulfate, urea, potassium nitrate, asparagines, and peptone. Yeast Carbon Base is composed of a defined set of nutrients including a carbon source, amino acids, vitamins, and minerals required for the growth of yeasts.

Components

| Item | g/L |
|--------------------------------------|----------|
| Dextrose | 10.00 |
| L-Histidine Hydrochloride | 0.001 |
| DL-Methionine | 0.002 |
| DL-Tryptophan | 0.002 |
| Biotin | 0.000002 |
| Calcium Pantothenate | 0.0004 |
| Folic Acid | 0.000002 |
| Inositol | 0.002 |
| Niacin | 0.0004 |
| p-Amino Benzoic Acid | 0.0002 |
| Pyridoxine Hydrochloride | 0.0004 |
| Riboflavin (Vitamin B ₂) | 0.0002 |
| Thiamine Hydrochloride | 0.0004 |
| Boric acid | 0.0005 |
| Copper Sulfate | 0.00004 |
| Potassium Iodide | 0.0001 |
| Ferric Chloride | 0.0002 |
| Manganese Sulfate | 0.0004 |
| Sodium Molybdate | 0.0002 |
| Zinc Sulfate | 0.0004 |
| Monopotassium Phosphate | 1.00 |
| Magnesium Sulfate | 0.50 |
| Sodium Chloride | 0.10 |
| Calcium Chloride | 0.10 |

pH: 5.30–5.70 [1.17% (w/v) aqueous solution at 25 °C]

Preparation Instructions

- Nitrogen Assimilation test – Prepare the broth base at 10× concentration by dissolving 11.7 grams of Yeast Carbon Base in 100 mL of distilled water. Add the appropriate nitrogen source. Warm if necessary to dissolve the medium completely. Sterilize by filtration.
- Detection of yeasts, other than *Saccharomyces cerevisiae* – Dissolve 2.35 grams of Yeast Carbon Base in 100 mL of distilled water.
- Detection of wild yeasts in beer and other brewing components – Add 0.33 g of ammonium sulphate (Catalog No. A2939) and 4 g of bacteriological agar (Catalog No. A5306) to base B. Sterilize by autoclaving at 15 lbs pressure (121 °C) for 15 minutes.

Storage/Stability

Store the product and the prepared medium at 2–8 °C.



Product Profile

Appearance: White to off-white colored, homogeneous, free flowing powder.

Solubility: clear, colorless solution [1.17% (w/v) aqueous solution at 25 °C]

Cultural Response (observed after 6–7 days, longer if necessary, at 25–30 °C.)

| Organism (ATCC) | Growth | |
|--|-----------|------------------------------|
| | Plain | with Ammoniu m Sulfate |
| <i>Saccharomyces cerevisiae</i> (9763) | none–poor | good |
| <i>Saccharomyces uvarum</i> (9080) | none–poor | good |

References

1. Wickerham, J. Bact., **52**, 293 (1946)
2. Wickerham, U.S. Dept. Agric. Tech. Bull. No. 1029 (1951).
3. American Type Culture Collection, Manassas, Va., U.S.A.

Storage Temperature 2–8 °C

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

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