

# ENZYMATIC DIGEST OF CASEIN KH -A144600

# **Description**

Origin: Enzymatic Digest of Casein KH (Kosher, Halal) is obtained by an enzymatic

digestion of casein of Oceanic (NZ or AUS) origin using all Kosher & Halal components. The product is considered **Kosher Dairy** due to the presence of milk

derived casein.

Context: this peptone is produced from alimentary or food-grade casein, with enzymes of microbial origin. It is therefore compliant with the Note for Guidance EMEA/410/01

- Rev. 3 of March 2011 (2011/C 73/01 of the Official Journal of the European Union) but cannot be considered allergen-free due to the presence of milk proteins (Annex

IIIa of the EU directive 2003/89/EC, updated with 2006/142/EC).

Application : obtained through a process designed to produce a Kosher/Halal equivalent to

Tryptone USP, but without the pancreatin, this peptone has been specifically developed for use in the food fermentation and probiotics industry, where growth of lactic acid bacteria is the primary focus but where a non-animal product is not essential. This peptone can be used by itself or as a component in more complex

growth media as MRS broth, where excellent results have been observed.



#### **Physical properties**

Appearance: white powder Stability (2% in solution): stable Solubility in water at 2%: total

### **Microbiological controls**

Total aerobic mesophilic flora ≤ 5000 cfu/q

#### **Chemical analysis**

Total nitrogen (NT) : 12.1%  $\alpha$ -amino nitrogen (N $\alpha$ ) : 3.5%

 $N\alpha$  / NT : 0.29 Sulfuric ash : 13.0% pH (2% in solution ) : 7.3 Total carbohydrates : 0.4%. Chlorides (as NaCl) : 0.1% Loss on drying :  $\leq$  6.0%

## Standard packaging / Storage

25 kg carton; other formats inquire.

Delivered with Certificate of Analysis, Certificate of Origin, *Kashrus* &/or Halal certificate. Separate non-Animal, GMO and allergen statements available upon request.

Keep in original packaging when not in use, in a dry area ideally between 10 and 35°C. Avoid direct sunlight. Hygroscopic product.

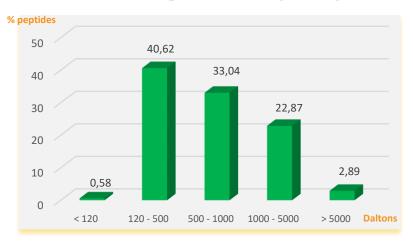
Expiry date: 5 years from date of manufacture.

#### **Sanitary / Regulatory statement**

Given the origins and processing of this product, it remains outside of the scope of European Pharmacopoeia directives 1999/82/EC, 1999/104/EC, 2000/418/EC & 2011/C 73/01, as well as as well as the Note for Guidance EMEA/410/01 Rev. 3. The casein used as a starting material is sourced from animals in good health and the milk declared fit for human consumption. Geographical origins are New Zealand or Australia.

To the best of our knowledge it is GMO free (according to the European Directive 2001/18/CE defining legislation for labeling; absence = less than 0.9%).

# **Molecular weight distribution (Daltons)**



#### **Chemical / Biochemical characteristics**

Nitrites: negative Proteoses: positive Indole: negative Tryptophan: positive

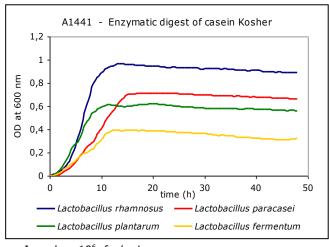
Undigested proteins : negative

Calcium : < 0.08%

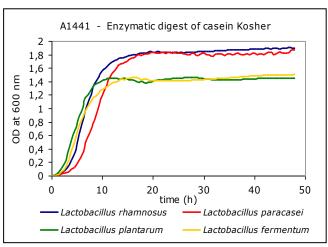
#### Amino acid distribution (mg/g)

|               | Total amino<br>acids |               | Total amino acids |
|---------------|----------------------|---------------|-------------------|
| Aspartic acid | 54.6                 | Methionine    | 17.2              |
| Threonine     | 32.3                 | Isoleucine    | 39.6              |
| Serine        | 41.4                 | Leucine       | 69.9              |
| Glutamic acid | 167.0                | Tyrosine      | 29.5              |
| Proline       | 81.4                 | Phenylalanine | 39.1              |
| Glycine       | 14.8                 | Histidine     | 21.4              |
| Alanine       | 23.8                 | Lysine        | 59.7              |
| Cysteine      | 1.90                 | Arginine      | 28.2              |
| Valine        | 50.3                 | Tryptophan    | 10.2              |

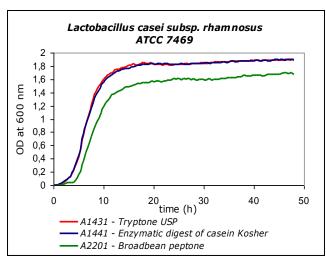
# OBSERVED MICROBIAL GROWTH POTENTIAL\*:



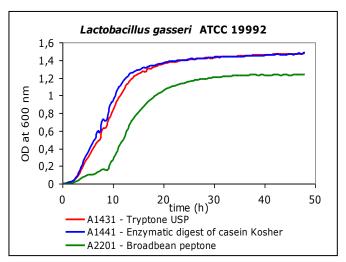
Inoculum 106 cfu / mL Growth medium: 3 % peptone + 0.25 % glucose



Inoculum 106 cfu / mL Growth medium: modified MRS Medium



Inoculum 106 cfu / mL Growth medium: modified MRS Medium Comparison to standard Tryptone and one non-animal peptone



Inoculum 106 cfu / mL Growth medium: modified MRS Medium Comparison to standard Tryptone and one non-animal peptone

\*The identical A144100, Enzymatic digest of Casein Kosher was used for the bacterial growth tests. This peptone demonstrates excellent growth of a wide variety of microorganisms and can be used in various applications as an allpurpose substrate. Equivalency tests suggest this product can be used in the place of standard Tryptone USP when applications call for the elimination of porcine pancreatin. Results may differ depending on individual laboratory conditions and for other genera, species and strains.



# Certifications profile:

Produced under **ISO 9001 v 2015** certification



Manufacturing site and quality system open to audits by qualified customers\*.

CoA available online: use product code A144600 + lot number - <a href="https://www.solabia.com/coa">https://www.solabia.com/coa</a>

Allergen considerations: YES GMO issues: NO (casein)

Halal certification: Yes

Kosher certification : Yes (U)

Orthodox Union; New York, NY USA. Rabbi Menachem Adler, Administrator



HFFIA; The Hague, Netherlands. Inquire with Solabia for more information

V. 02/2021

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