

## Description

- Origin :** Enzymatic Digest of Casein **KOSHER** is obtained by an enzymatic digestion of casein of Oceanic (NZ or AUS) origin using all **Kosher** components. The product is considered **Kosher Dairy (Kashrus)** certificate supplied to qualified users).
- Regulatory :** 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. 2 of October 2003 (2004/C 24/03 of the Official Journal of the European Union) but can not 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** equivalent to Tryptone USP, but without the pancreatine, 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/g

## 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 : ≤ 6.0%

## Standard packaging

25 kg carton ; other formats inquire.  
 Delivered with Certificate of Analysis,  
 Certificate of Origin, **Kashrus** certificate.

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

	Total amino acids (T)		Total amino acids (T)
Aspartic acid	64	Methionine	24
Threonine	34	Isoleucine	43
Serine	42	Leucine	72
Glutamic acid	174	Tyrosine	20
Proline	84	Phenylalanine	40
Glycine	32	Histidine	27
Alanine	19	Lysine	65
Cysteine	/	Arginine	30
Valine	51	Tryptophan	/

## Molecular weight distribution (Daltons)

Molecular Weight (Da)	% peptides
> 5000	
3000 - 5000	
1000 - 3000	
500 - 1000	
300 - 500	
< 300	

Under revision

## Chemical / Biochemical characteristics

Nitrites : negative  
 Proteoses : positive  
 Indole : negative  
 Tryptophan : positive  
 Undigested proteins : negative  
 Calcium : < 0.02%

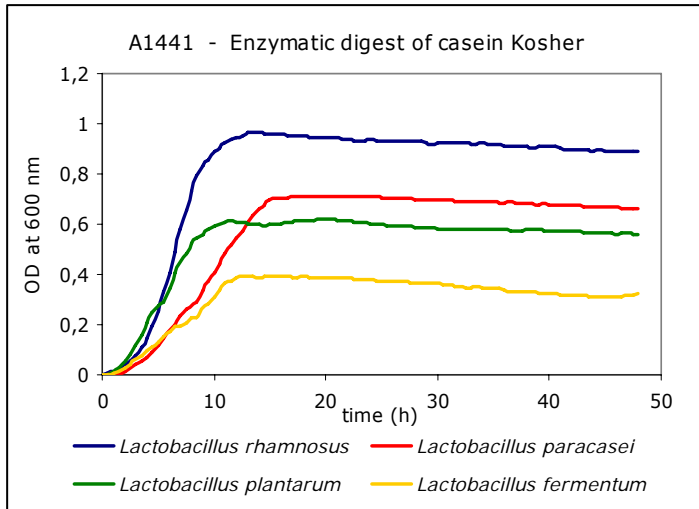
## Sanitary Attestation

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. 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%).

\* Aminogram results subject to updating. Results shown here are typical of A1433, Pancreatic digest of Casein.

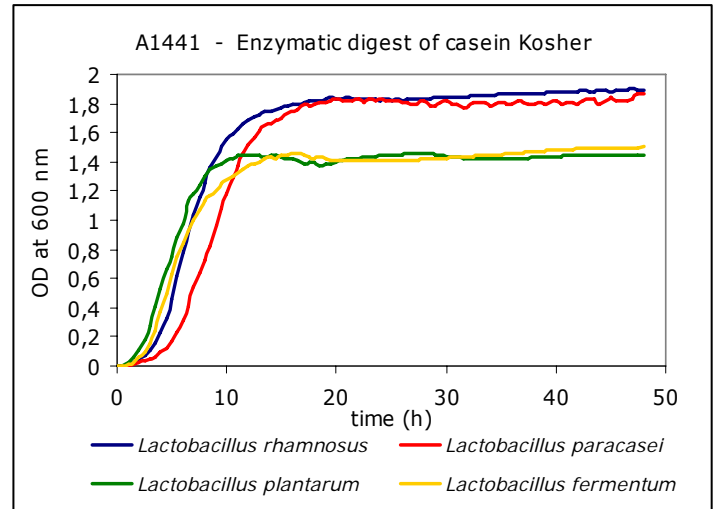
## OBSERVED MICROBIAL GROWTH POTENTIAL :

### Strains of probiotic interest :



#### Test conditions :

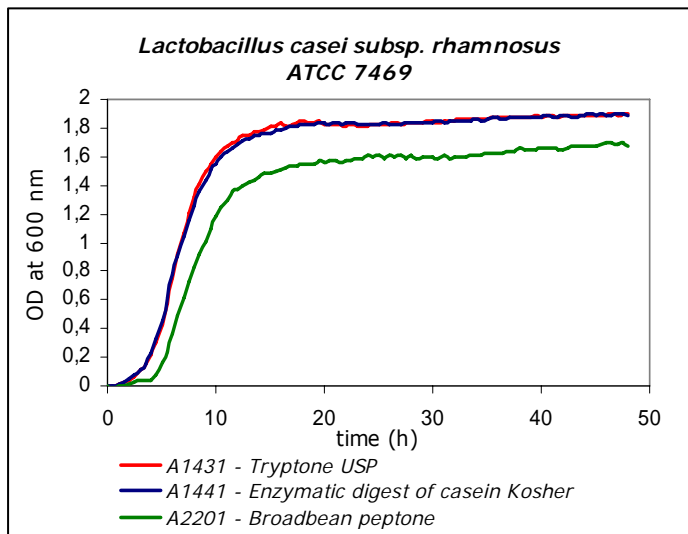
Inoculum  $10^6$  cfu / mL  
Growth medium: 3 % peptone + 0.25 % glucose  
pH 7.3



#### Test conditions :

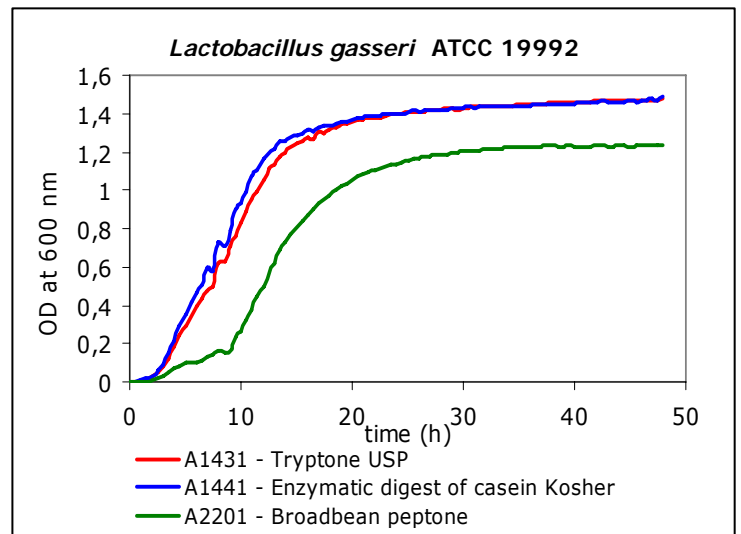
Inoculum  $10^6$  cfu / mL  
Growth medium: modified MRS Medium

### Industrial media formulations / Comparison to standard Tryptone :



#### Test conditions :

Inoculum  $10^6$  cfu / mL  
Growth medium: modified MRS Medium



#### Test conditions :

Inoculum  $10^6$  cfu / mL  
Growth medium: modified MRS Medium

The information presented in this document is submitted in good faith based on internal testing performed at Solabia S.A.S. and represents the best of our knowledge at the present time. It is provided as a guide and no warranty, implied or otherwise is associated with this data, nor is any liability assumed for patent infringement. All data represents typical analyses not to be taken for exact specifications.

End-users are directed to perform proprietary tests to determine suitability and performance for specific applications. The information and results contained in this technical data sheet are susceptible to modification at any time, without warning.

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Kosher available

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