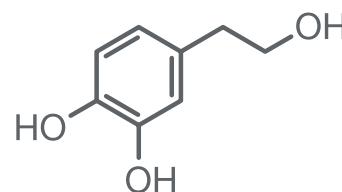


# 1-HT<sup>®</sup> hydroxytyrosol CI

## POWDER LYOPHILIZED



### Description

- **1-HT<sup>®</sup> hydroxytyrosol CI - Powder** is a biologically produced pure hydroxytyrosol which is freeze-dried with chicory root soluble (chicory inulin) yielding a fine white to off-white powder containing 25% hydroxytyrosol and 75% chicory root soluble (chicory inulin) with neutral odor.
- **1-HT<sup>®</sup> hydroxytyrosol CI - Powder** is manufactured by a simple fermentation process in compliance with Good Manufacturing Practice (GMP).
- The hydroxytyrosol is a phenolic phytochemical, considered to be one of the most powerful natural antioxidants.

Parameter	Limit	Unit	Method <sup>1</sup>	Frequency
Hydroxytyrosol (purity ≥98%)	≥ 25.0	g / 100 g	HPLC	Each batch
Inulin (chicory root) - excipient	≤ 75.0	g / 100 g	By weight	Each batch
Dry matter (d.m.)	≥ 98.5	g / 100g	ISTISAN 1996/34 MET B	Each batch
Moisture	≤ 1.5	g / 100 g	ISTISAN 1996/34 MET B	Each batch
pH (0.5 M hydroxytyrosol in water)	4.0 - 5.0	-	pH meter	Each batch
Arsenic	< 0.1	mg / kg	ICP-MS	Each batch
Lead	< 0.1	mg / kg	ICP-MS	Each batch
Mercury	< 0.1	mg / kg	ICP-MS	Each batch
Cadmium	< 0.1	mg / kg	ICP-MS	Each batch
Cobalt	< 0.1	mg / kg	ICP-OES	Each batch
Ethyl acetate	< 250	mg / kg	GC-MS Head space	Each batch

<sup>1</sup> Acknowledged or similar validated method

### Microbiological Parameters

Parameter	Limit	Unit	Method <sup>1</sup>	Frequency
Total aerobic plate count	< 10	cfu / g	AOAC 990.12	Each batch
Yeast and mold count	< 10	cfu / g	AOAC 997.02	Each batch
<i>Enterobacteriaceae</i>	Negative	/ 10 g	AOAC 2003.01	Each batch
Coliform	Negative	/ 10 g	AOAC 991.14	Each batch
<i>Escherichia coli</i>	Negative	/ 10 g	AOAC 991.14	Each batch
<i>Salmonella species</i>	Negative	/ 25 g	ISO 6579-1:2017	Each batch
GMO	Negative	-	Q-PCR	Each batch

<sup>1</sup> Acknowledged or similar validated method

#### NOVA MENTIS Ltd.

c/o NovaUCD  
Belfield Innovation Park  
D04 V2P1 - Belfield - County Dublin  
IRELAND

Tel +353 (1) 5846073  
E-mail [info@novamentis.eu](mailto:info@novamentis.eu)  
Web [www.novamentis.eu](http://www.novamentis.eu)

## Key features of a unique product

- Biologically produced and highly controlled process (GMP)
- Hydroxytyrosol purity: ≥ 98%
- No batch-to-batch or seasonal variations
- Highly water soluble
- Odorless
- GMO free
- “Free-From”: Animal Fat, Lactose, Gluten, Sugar and Endotoxin
- ORAC assay: > 64,000 μmol TE (Trolox®™ Equivalent) / g of **1-HT® hydroxytyrosol**

## Main Sectors of Application

**Animal Feed**

**Pet Food**

Additional Information			
<b>Brand</b>	<b>1-HT® hydroxytyrosol CI - Powder Lyophilized</b>	<b>Appearance</b>	Off-white powder
		<b>Behaviour</b>	Free flowing and hygroscopic
<b>Product name</b>	Hydroxytyrosol lyophilized (25% hydroxytyrosol - 75% inulin (chicory root))	<b>Taste</b>	Slightly bitter
		<b>Odor</b>	Odorless
<b>CAS No.</b>	10597-60-1 hydroxytyrosol	<b>Solubility in water</b>	Approximately 50 g / L at +25° C (+77° F)
<b>CAS No.</b>	9005-80-5 inulin		
<b>Packaging</b>	A net quantity of 50 g (1.76 oz) <b>1-HT® hydroxytyrosol - Powder</b> is packed in a nitrogen-flushed, 3-layered sachet. A total of 8 sachets are packed in a cardboard case, providing a total net quantity of 400 g (14.10 oz).		
<b>Recommended conditions</b>	Transport preferably in a dry space between +15° to +25° C (+59° - +79° F). Storage. Once the product has reached customer facilities, store in a refrigerator between +4° to +8° C (+39° to +46° F). Once opened, protect the powder from oxidizing atmosphere.		
<b>Shelf Life</b>	3 years from date of production under recommended storage conditions.		
<b>Feed Processing Conditions</b>	<b>1-HT® hydroxytyrosol</b> added to DI water was stable at pasteurization (+85° C / +185° F for 10 minutes) and sterilization (121° C / 248° F for 30 minutes) conditions. <b>1-HT® hydroxytyrosol</b> is stable in different feed matrices during storage at room temperature.		
<b>Safety precautions</b>	<b>1-HT® hydroxytyrosol</b> is a fine powder and can cause dust explosions when mixed with air (typical for powder). Comprehensive instruction will be available from the Material Safety Data Sheet supplied.		
<b>Certificate and Compliance</b>	<b>1-HT® hydroxytyrosol</b> is manufactured in the EU, under GMP industrial standards in an FDA and EU approved plant. <b>1-HT® hydroxytyrosol</b> is HALAL certified (915687-IR-9102).		