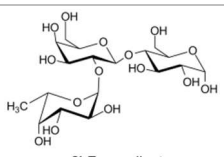


## Specifications 2'-Fucosyllactose Powder

### 1) Product description and composition

<b>Synonyms</b>	2'-FL 2'-fucosyl-D-lactose Fuc- $\alpha$ -1,2-Gal- $\beta$ -1,4-Glc $\alpha$ -L-Fuc-(1- $\rightarrow$ 2)- $\beta$ -D-Gal-(1- $\rightarrow$ 4)-D-Glc
<b>Formula</b>	C <sub>18</sub> H <sub>32</sub> O <sub>15</sub>
<b>Chemical structure</b>	 2'-Fucosyllactose
<b>Molecular weight</b>	488.44 g/mol
<b>CAS No.</b>	41263-94-9

### 2) Analyses

Parameter	Specifications	Method
<b>Appearance (Colour)</b>	white to ivory-coloured	visual
<b>Appearance (Form)</b>	spray-dried powder	visual
<b>Solubility in water</b>	min. 500 g/L (ambient temperature)	visual
<b>Appearance in Solution</b>	clear, colourless to slightly yellow	visual
<b>GMO detection</b>	negative	qPCR
<b>2'-Fucosyllactose</b>	≥ 90 % (%DM)	HPAEC-PAD
<b>Lactose</b>	≤ 5 % (Area)	HPAEC-PAD
<b>3-Fucosyllactose</b>	≤ 5 % (Area)	HPAEC-PAD
<b>Difucosyllactose</b>	≤ 5 % (Area)	HPAEC-PAD
<b>Fucosyl-Galactose</b>	≤ 3 % (Area)	HPAEC-PAD
<b>Glucose</b>	≤ 3 % (Area)	HPAEC-PAD
<b>Galactose</b>	≤ 3 % (Area)	HPAEC-PAD
<b>Fucose</b>	≤ 3 % (Area)	HPAEC-PAD

Parameter	Specifications	Method
Water Content	≤ 9.0 %	Karl-Fischer titration
Protein content	≤ 100 µg/g	Nanoquant (modified Bradford)
Total Ash	≤ 0.5 %	ASU L 06.00-4 (a)
Arsenic	≤ 0.2 mg/kg	ASU L 00.00-135 – ICP-MS (a)
Cadmium	≤ 0.1 mg/kg	ASU L 00.00-135 – ICP-MS (a)
Lead	≤ 0.02 mg/kg	ASU L 00.00-135 – ICP-MS (a)
Mercury	≤ 0.5 mg/kg	ASU L 00.00-135 – ICP-MS (a)
Aflatoxin M <sub>1</sub>	≤ 0.025 µg/kg	DIN EN ISO 14501
<b>3) Microbiology</b>		
Parameter	Specifications	Method
Standard Plate Count	≤ 10000 cfu/g	ISO 4833-2
Yeast and Mold	≤ 100 cfu/g	ISO 21527-2
Coliform	absent in 11 g	ISO 4832
<i>Enterobacteriaceae</i>	absent in 11 g	ISO 21528-2
<i>E. coli</i>	absent in 11 g	ISO 7251
<i>Salmonella</i>	absent in 125 g	ISO 6579
<i>Cronobacter sakazakii</i>	absent in 100 g	ISO/TS 22964
<i>Staphylococcus aureus</i>	≤ 10 cfu/g	ISO 6888-1
<i>Bacillus cereus</i> , presumptive	≤ 100 cfu/g	ISO 7932
Mesophilic sulphite-reducing Clostridium	≤ 100 cfu/g	ISO 15213
Endotoxins	≤ 100 EU/g	Ph. Eur. 2.6.14
Shelf life	<b>2 years from production date</b>	

**Caution! Product is extremely hygroscopic! Please store dry and in an airtight container!  
Achtung! Produkt ist extrem hygroskopisch! Bitte trocken und luftdicht verschlossen lagern!**