

Natupulse® TS 5M

Active ingredient

Endo-1,4-beta-D-mannanase (EC 3.2.1.78), produced by *Thermothelomyces thermophilus*

PRD-No.

30846336

Articles

50841950	20 kg bag in box
----------	------------------

Specification

Content	min. 40,000 TMU*/g
---------	--------------------

* TMU = Thermostable endo-mannanase-unit

Other chemical and physical data

Formulation	powder
Bulk density	approx. 0.4 g/cm ³

This product has excellent flow properties and is free of dust.

Stability

The product should be stored in a cool and dry place (below 20 °C). In unopened original packaging, the product can be kept for 24 months.

Application

The product improves the nutrient digestibility and performance of monogastrics fed diets containing raw materials with a high β -mannan level (eg. soybean meal, guar meal etc.). The use of Natupulse® TS 5M is recommended for pelleted feed up to 90 °C (194°F) pelleting temperature and for use in premix. At pelleting temperatures above 85 °C (185 °F), it is recommended to test for mannanase retention as pelleting conditions vary greatly.

Definition of activity

One mannanase unit (TMU) is defined as the amount of enzyme that produces reducing carbohydrates having a reducing power corresponding to one μ mol mannose from locust bean gum (0.3 g/100 ml buffer solution) in one minute under the assay conditions of 50.0 +/-0.1 °C and pH 3.5.

Dosage recommendation

Standard recommended dose rate is 800 TMU/kg* feed, which is 20 g Natupulse® TS 5M per metric ton of complete compound feed for all pig and poultry.

* Especially with regard to animal species approved, national regulations may vary and need to be considered prior to products use. In case of doubts or need for more detailed recommendations please contact your local BASF representative.

Note

Enzymes are biologically active substances. The product should be processed with all due care and attention to occupational hygiene following the instructions in the safety data sheet.

This document and any information provided herein does not constitute a legally binding obligation of BASF and has been prepared in good faith and is believed to be accurate as of the date of issuance. Unless expressly agreed otherwise in writing in a supply contract or other written agreement between you and BASF:

- a) To the fullest extent not prohibited by the applicable laws, BASF EXPRESSLY DISCLAIMS ALL REPRESENTATIONS, WARRANTIES, CONDITIONS OR GUARANTEES OF ANY KIND, WHETHER EXPRESS OR IMPLIED, WRITTEN OR ORAL, BY FACT OR LAW, INCLUDING ANY IMPLIED WARRANTIES, REPRESENTATIONS OR CONDITIONS OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, SATISFACTORY QUALITY, NON-INFRINGEMENT, AND ANY REPRESENTATIONS, WARRANTIES, CONDITIONS OR GUARANTEES, ARISING FROM STATUTE, COURSE OF DEALING OR USAGE OF TRADE AND BASF HEREBY EXPRESSLY EXCLUDES AND DISCLAIMS ANY LIABILITY RESULTING FROM OR IN CONNECTION WITH THIS DOCUMENT OR ANY INFORMATION PROVIDED HEREIN, including, without limitation, any liability for any direct, consequential, special, or punitive damages relating to or arising therefrom, except in cases of (i) death or personal injury, (ii) BASF's or its agents and assistants willful misconduct, fraud or fraudulent misrepresentation or (iii) any matter in respect of which it would be unlawful for BASF to exclude or restrict liability under the applicable laws;
- b) Any information provided herein can be changed at BASF's sole discretion anytime and neither this document nor the information provided herein may be relied upon to satisfy any obligations you may have to undertake your own inspections and evaluation;
- c) BASF rejects any obligation to, and will not, automatically update this document and any information provided herein, unless required by applicable law; and
- d) You are responsible for confirming that you have retrieved the most current version of this document from BASF.
- e) This document or any information provided herein must not be used for purposes of pharmaceutical registrations.

February 2024