

TECHNICAL DATA SHEET – Bacvir Digest Ruminants

Natural feed additive – Rumen stability, detoxification and digestive improvement in ruminants

1. Product Description

Bacvir Digest Ruminants is a natural additive based on activated and micronized clinoptilolite , designed to improve rumen stability, optimize fiber and protein digestion, and support digestive health in ruminants.

Its action is based on:

- Ammonium (NH_4^+) uptake in the rumen
- Adsorption of mycotoxins and heavy metals
- Rumen pH regulation
- Improved digestive efficiency
- Reduction of nitrogen and ammonia excretion into the environment

Certified product for organic livestock farming (ECOCERT).

2. Chemical and Mineralogical Composition

Mineralogical Composition (XRD – Aristotle University of Thessaloniki)

Component	%
Clinoptilolite	90%
SiO_2	5%
Mica	3%
Feldspar	2%

Chemical Composition (XRF – National Technical University of Athens)

Component	%
SiO_2	64.55%
Al_2O_3	12.87%
TiO_2	1.15%
Fe_2O_3	1.65%
CaO	3.72%
MgO	0.91%
Na_2O	2.01%
K_2O	2.57%

Component	%
LOI (Loss on Ignition)	10.57%

3. Physical Properties

Property	Worth
Apparent density	0.85–1.1 g/cm ³
Particle size	50–300 µm
Surface area	25–45 m ² /g
CEC	120–160 meq /100g
pH	7.5–9.5

4. Benefits and Mechanism of Action (*sense taula*)

In the rumen:

Ammonia capture, SARA prevention, improved fiber digestion, optimization of nitrogen metabolism, adsorption of mycotoxins and heavy metals.

In the digestive tract:

pH stabilization, diarrhea reduction, improved fecal consistency, mucosal protection.

In the production environment:

Reduction of NH₃ , lower fecal moisture, better air quality.

5. Applications and Dosages

Species / System	Dosage
Dairy cattle	0.5–1% (1.5% at risk of SARA)
Fattened cattle	0.5–1% (1.5% in high grain)
Sheep and goats	0.3–0.8% (1% in stress)
Calves	0.5–1% (double dose for 7 days in cases of diarrhea)

Grades:

- Compatible with automated systems
- Mix well

6. Safety and Toxicity

- No acute toxicity (OECD 420)
- Cell viability >90% (ISO 10993-5)

- Non-cytotoxic
- Absorbs >99% of Pb, Cd, Cr and Cu in 2 hours
- It does not release metals
- GHS Classification: *Unclassified*

7. Presentation and Storage

- Micronized powder
- 25 kg bags and 1100 kg Big Bags
- Store in a cool, dry place, away from moisture and direct sunlight

8. Manufacturer Contact

info@bacviranimalsafety.com

Manufactured by **Bacvir Animal Safety SLU**

Digestive health and sustainability in ruminant production
