

The experts at DLG TestService certify silage additives and feed preservatives according to the product-specific DLG quality standards. In addition to the criteria specified for this effectiveness test, further product properties can be tested and certified. Silage additives and feed preservatives that pass the tests are awarded the DLG quality seal.

All DLG-certified farm inputs are subject to constant monitoring. Consistent product quality is ensured by regular repeat tests or analyses. In addition, samples are taken from the manufacturer or from retailers.

#### Information and registration: dlg-testservice.com/en/fi

#### DLG test criteria

### Silage additive category 1 (improvement of the fermentation process)

- Active ingredient composition and compliance with the declaration
- · Osmotolerance and water capacity of the bacteria
- · Laboratory silo tests against untreated samples:
  - Difficult-to-ensile fodder
  - Medium to easy-to-ensile fodder with a low dry matter content
  - medium to easy-to-ensile fodder with a high dry matter content
- · Dry matter, dry matter losses and fermentation losses
- pH value (acidification process)
- Fermentation acid pattern of the silage (lactic, acetic, propionic and butyric acid)
- Silage content of NH<sub>3</sub> nitrogen total nitrogen and alcohols
- Aerobic stability of the silage after 49 days of ensiling

## Silage additive category 2 (improvement of aerobic stability)

- Active ingredient composition and compliance with the declaration
- · Osmotolerance and water capacity of the bacteria
- · Laboratory silo tests against untreated controls
- · Dry matter, dry matter losses and fermentation losses
- pH value (acidification process)
- Fermentation acid pattern of the silage (lactic, acetic, propionic and butyric acid)
- Silage content of NH3 nitrogen total nitrogen and alcohols
- Aerobic stability of the silage after 49 days and 90 days of ensiling
- · Mould and yeast contamination of the silage

Additional test "Silage additive for early silo opening"

Aerobic stability of the silage after 14 days of ensiling

#### Further DLG test criteria

### Silage additive category 3 (reduction of the fermentation liquid run-off)

- Active ingredient composition and compliance with the declaration
- · Osmotolerance and water capacity of the bacteria
- · Laboratory silo tests against untreated controls
- Dry matter, dry matter losses and fermentation losses
- Fermentation liquid quantities after 3, 7, 14 and at the end of the experiment
- pH value of the silage
- Fermentation acid pattern of the silage (lactic, acetic, propionic and butyric acid)
- Silage content of NH<sub>3</sub> nitrogen, total nitrogen and alcohols

# Silage additive category 4 (Secondary effect: improvement of feed intake, digestibility, meat production value, milk production value)

- Active ingredient composition and compliance with the declaration
- · Osmotolerance and water capacity of the bacteria
- · Proof of the secondary effect in:
  - Feed intake trials
  - Digestion tests
  - Feeding trials

#### Silage additive category 5 (special effects)

- Active ingredient composition and compliance with the declaration
- · Osmotolerance and water capacity of the bacteria
- · Laboratory silo tests against untreated controls
- Dry matter, dry matter losses and fermentation losses

- · pH value (acidification process)
- Fermentation acid pattern of the silage (lactic, acetic, propionic and butyric acid)
- Silage content of NH<sub>3</sub> nitrogen total nitrogen and alcohols
- Aerobic stability of the silage after 49 days of ensiling
- · Clostridium endospores in the silage

### Silage additive category 6 (improvement of the methane yield in biogas plants)

- Active ingredient composition and compliance with the declaration
- Osmotolerance and water capacity of the bacteria
- Laboratory silo tests against untreated samples to check the:
  - Methane yield through reduction of fermentation losses analogously
  - Methane yield by improving aerobic stability analogously
- · Specific yield of methane

### TMR (Total Mixed Ration)/ PMR (Partial Mixed Ration) stabilisers

- Active ingredient composition and compliance with the declaration
- · Osmotolerance and water capacity of the bacteria
- Laboratory silo tests with typical mixed ration against untreated sample and positive sample
- pH value (acidification process)
- · Aerobic stability of the silage after 72 hours of ensiling
- · Mould and yeast contamination of the silage
- · Loss of fresh matter
- Condensation

**DLG TestService** is one of the leading international testing and certification organisations in the fields of tractors, agricultural technology and farm inputs. The DLG's own testing and evaluation standards are practice-oriented and are developed by neutral commissions. In addition to tests according to DLG standards, extensive testing and certification services for quality assurance, according to national and international standards and regulations, as well as customer-specific tests for research and development purposes complete the range of services. The DLG test marks are well known on the market. They stand for neutral, independently verified product quality. They build trust and form the basis for purchasing decisions made by practitioners. **dlg-testservice.com**