

## TMR stabilization



*Reheating in served dairy cattle rations reduces feed intake, lowers the nutrient levels and increases the risk of illness (mastitis, hoof diseases, fertility problems, postnatal behavior, metabolic disorders, ...).*

*At temperatures above approx. 20 ° C and high air humidity, the oxygen, which is stirred into the feed ration by mixing, can lead to an explosive increase in the natural stock of microorganisms, especially yeasts.*

*The degradation of carbohydrates leads to heating of the feed mixture. Rations with starchy and sugar-rich silages and the addition of molasses and / or water are particularly risk.*

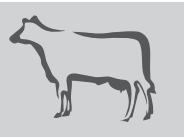
*One speaks of reheating when the feed mixture is 2 ° C higher than the air temperature! As a rule of thumb, every temperature increase of 10 ° C means a daily energy loss of approx. 0.1 MJ NEL / kg DM in the heating area.*

### Hygiene measures from the silo to the feeding table

- ✓ Only uncover as much as necessary, cover edges as tightly as possible
- ✓ Create flat cut surfaces
- ✓ Ensure sufficient feed in the silo, at least 2 m per week
- ✓ Treat the cut surface with LIKRACID Liquid (100 - 500 g / m<sup>2</sup>)
- ✓ Protect from rain
- ✓ Remove loose silage residues with a broom
- ✓ Control of the silo stick and silage temperature, e.g. with stitch thermometer
- ✓ Empty the feed mixer wagon cleanly
- ✓ Clear the feed trough once a day
- ✓ Do not "preload" silage for the next day
- ✓ Check the served ration, do not feed heated feed
- ✓ Mix and serve in cooler hours
- ✓ Addition of **LIKRA TMR-Stabil**, which prevents or slows down the heating of feed mixes

**INFO**

*If sufficient feed cannot be achieved, silage agents with direction of action 2 (improvement of aerobic stability, durability under the influence of air; e.g.: **Likrasil bzw. Sizuba**) should always be used during the harvest.*



## LIKRA TMR-Stabil added to slow down the heating at the feeding table

*In general, organic acids and their salts are used to inhibit the growth of bacteria, mold and yeast. The aim is to inhibit the growth of the microorganisms in the start-up phase and to ensure the initial quality of the feed.*



*The use of acid is unsuitable to put feed, that has already been strongly contaminated with bacteria, back into an apparently fresh state!*

*The effect of the acids is based on a large number of individual influences, but above all on lowering the pH and disrupting the metabolism of germs. The development basis is removed from the germs by the pH value shift.*

**LIKRA TMR-Stabil** is a combination of highly effective preservation acids in powder form. The mix of potassium sorbate, sodium formate and calcium propionate effectively prevents mold and yeast growth in mixed rations.

### Benefits

- ✓ Less reheating in the TMR ration
- ✓ Reduced energy and nutrient losses
- ✓ serving of rations more flexibly
- ✓ Zeitlich flexibleres Vorlegen von Rationen
- ✓ Comfortable and easy to use, not corrosive!

### Recommended use of **LIKRA TMR-Stabil**

#### Mixed feed

1 – 2 kg/t fresh-mass



*When using the farm's own concentrate mixes, **LIKRA TMR-Stabil** can be mixed in during the grinding process. Thereby the activity of the microorganisms is also reduced in the concentrate feed.*