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BT innovation

# Technical Data Sheet – AgrarElast

## Product description

The AgrarElast is a 1-component, permanent elastic adhesive and sealant for heavily loaded joints in the agricultural construction sector. AgrarElast serves as seal for microbiologically and acid-contaminated areas.

## Product properties

::: 1-component joint sealant
::: Easy to process
::: Stable paste and with only little shrinkage during hardening
::: Resistant to sewage, salts, fertilizer,
fermentation acids (lactic acid, acetic acid, butyric acid) and inorganic / organic acids (e.g., citric acid)
::: Approved system with primers A(sphalt) / B(eton)
::: Solvent- and isocyanate-free
::: Weathering and UV resistant
::: Can be combined with other Elast products

## Areas of application

::: Sealant for microbiologically contaminated joints
::: For areas with composting and fermentation
::: Joints with acid contact
::: Manure, slurry, silage (JGS) and biogas plants
::: Silos, warehouses, tanks, solid dung slabs, etc.

## Product data and delivery form

5004273 AgrarElast, 600 ml tubular bar


## Surface Preparation

The substrate must be dry, firm and load bearing, as well as free from dust, grease, oils and other separating materials. Loose sintered layers, mortar residues and cement slurry must be removed. Smooth surfaces and asphalt have to be grinded. In order to avoid a 3-flank adhesion to the joint bottom, insert a suitable joint filling line or a strip of polyethylene into the joint. The cleaned surfaces are pretreated with primer A(sphalt) on bituminous substrates or with primer B(eton) on concrete and other common base materials (metal, glass, plastics, paints). Please pay attention to the ventilation times (at least 15 min respectively 30 min) and the open time of the primers (max 4 or rather 6 h, all at 25 °C). The joint filling cord / strip polyethylene can be inserted in the joint either before or after applying the primer.

## Processing

AgrarElast is applied directly using a cartridge gun for tubular bags. It is recommended to mask the edges of the joint with adhesive tape. The AgrarElast sealant must be introduced into the joint free of voids and bubbles. A good bond to the joint flanks can be produced by pressing on and smoothing. Smoothing agents are neutral liquid soaps / detergents. The adhesive tape should be removed immediately after smoothing.
For the joint sealing of manure, slurry, silage (JGS) and biogas plants, the approval Z-74.62-176 must be observed.
When used as an adhesive, AgrarElast is evenly applied onto the pre-treated substrate surface and distributed by means of a toothed scraper to a layer thickness of 1 to 2 mm. Full-surface pressing ensures a void-free and bubble-free bond. The gluing with AgrarElast over a large surfaces requires a moisture-permeable substrate.
In case of doubt of the substrate preparation and processing, we recommend a preliminary test

## Post-treatment

Until a stable skin has been formed, AgrarElast must be protected from water / moisture.
For subsequent painting, we recommend preliminary tests due to the large number of paint systems.

## Repair of old joints

The existing old joint sealant has to be removed completely and the joint flanks have to be grinded. Then the substrate can be pretreated with primer and the joint can be filled with AgrarElast.
If the old joint sealant is AgrarElast with only a few damaged areas, then these damaged areas must be removed. The joint flanks of the intact sealing have to be pretreated with the primer B(eton), before the gaps can be refilled with AgrarElast.

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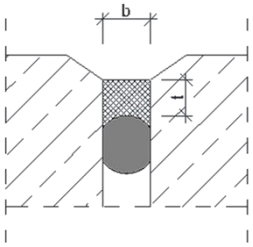
## Consumption and minimum joint dimensions

For the joint sealing in manure, slurry silage (JGS) and biogas plants attention must be paid to the required joint width and depth of approval Z 74.62-176. In all other cases ensure that the joint design is sufficiently wide (≥5 mm) and sufficiently deep (≥ 10 mm and ≥ ½width).

Consumption: 1 ml / cm³
Volume [ml/m]=b×t×100 (values in cm)




In manure, slurry silage (JGS) and biogas plants the joint dimensions of approval Z 74.62-176 must be observed.

## Notes

AgrarElast is moisture curing, which means high air temperatures and high humidity in the ambient air accelerate the hardening process (thus reducing the open time), while low temperatures and low moisture slow it down. At wide joints, the hardening slows down in deeper joint areas. Uncured material can be removed from tools and equipment with solvent. Hardened material must be removed mechanically.

## Storage

12 months shelf life in unopened original tubular bags.
Store cool and dry.
Protect from frost.

## Packaging

600 ml tubular bags – 15 bags / carton
(45 cartons / pallet)

## Occupational Safety

Observe the health and safety instructions in the safety data sheets of the AgrarElast and the primers.

## Technical properties

| | |
|---|---|
| Color | Black |
| Consistency | pasty |
| Processing | 1-component material<br>(Reacts with air humidity to a soft-elastic, rubber-like material) |
| Density | 1,3 – 1,5 g/cm³ |
| Open time | ca. 15 min (skin formation time)** |
| Curing | ca. 3 mm / 24 h** |
| Processing temperature | +5°C to +35°C<br>(material temperature) |
| Substrate temperature | +5°C to +35°C (substrate temperature)<br>+3°C above the dew point |
| Volume changes (EN ISO 10563) | Ca. 4 % |
| Hardness | ca. 55 (Shore A Type)<br>measured after 4 weeks ** |
| Tensile strength | ca. 2,3 N/mm² |
| Tolerable deformation | ≈ 12,5 %, |
| Elongation at break | Ca. 110 % |
| Temperature resistance | -40°C to +100°C (briefly to+220°C) |

** at 23°C, 50% rel. humidity


The information in this data sheet has been provided with care based on our experience and the respective known state of science and technology, but is not binding. They must be adapted to the respective building object, intended use and the particular local loads. Given this, we ask for understanding that we limit our liability for the information provided in this data sheet and do not assume any liability in case of intent, gross negligence or breach of the instructions. In any case, the accepted rules of technology must be complied with.

Issue 12/19 – This data sheet has been technically revised. Previous issues are not valid, if a new issue has been technically revised, this issue loses its validity. Please make sure that you are in possession of the latest issue.