



# Inoculant Storage and FAQ

## Storage of Pioneer® Brand inoculant

For optimum quality, store at less than 20°C and keep out of direct sunlight.

1174, 1127 are stable under optimum storage conditions for three years from production. 11G22, 11C33 and 11CFT are stable under optimum storage conditions for two years from production.

## Storage of mixed Pioneer® Brand inoculants

The table below shows the stability of mixed Pioneer® brand inoculants (i.e when water has been added to the bottle)

|                                 | 1174 and 1127 | 11G22, 11C33 and 11CFT |
|---------------------------------|---------------|------------------------|
| Not refrigerated                | 3 Days        | 2 Days                 |
| Stored in refrigerator at night | 7 Days        | 5 Days                 |
| Frozen                          | 1 Year        | 1 Year                 |

Defrost at room temperature or in tepid water. DO NOT DEFROST IN THE MICROWAVE.

## Pack size

| Pack Size                                    | 1174 | 1127 | 11G22 | 11C33 | 11CFT |
|--|------|------|-------|-------|-------|
| 50 Tonne Bottle.<br>(Treats 50 wet tonnes)   | ✓    | ✓    | ✓     |       | ✓     |
| 250 Tonne Bottle.<br>(Treats 250 wet tonnes) | ✓    | ✓    | ✓     | ✓     | ✓     |

## Why use a silage inoculant?

A quality silage inoculant will improve silage quality by delivering a faster, more efficient fermentation.

Silage making relies on the conversion of plant sugars to acid. The acid decreases the pH and preserves the forage.

The first step in the silage making process is to create oxygen-free (anaerobic) conditions through compacting and sealing the forage. Anaerobic bacteria are present in small numbers on all plant material. Once oxygen-free conditions have been achieved, these bacteria begin to multiply and convert plant sugars to fermentation acids. As fermentation acid levels increase, the pH drops preserving the forage as silage.

There is a variety of naturally occurring bacteria that can be present in silage.

They produce a range of fermentation acids. A lactic fermentation is the most desirable because minimal energy is lost during the fermentation process and lactic acid produces palatable, high feed value silage.

Just as cows differ in their ability to produce milk from grass, different bacterial strains vary in their ability to produce lactic acid. The most desirable strains are those that can convert sugar to lactic acid with minimal energy and drymatter loss. Pioneer® brand inoculants contain bacteria that have been specially selected to give a faster, more efficient fermentation. The bacterial strains in Pioneer® brand inoculants are unique and patented. They are supported by statistically significant data from trials conducted under controlled research conditions.



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Pioneer® brand inoculants can:

- Give a faster and more efficient fermentation.
- Increase silage energy content (feed value).
- Decrease protein breakdown.
- Improve silage digestibility.
- Increase drymatter recovery.
- Reduce heating, spoilage, shrinkage and run-off.
- Lift palatability giving higher drymatter intakes.
- Give more milk or meat production per tonne of forage ensiled.
- Reduce silage heating and spoilage at feed-out time.
- Pioneer® brand inoculants are non-toxic, non-corrosive and are not genetically modified.

## Why shouldn't I apply the cheapest product, aren't all inoculants the same?

Silage inoculants appear similar simply because they contain the same genus/species information on the label (eg. *Lactobacillus plantarum*). However just like two cows differ in the efficiency with which they convert grass to milk, bacteria differ in their ability to improve silage fermentation quality.

Most cheap products:

- Lack animal performance data
- Lack technical personnel that really understand silage and back up the product
- Are derived from a buying strategy of sourcing the lowest-cost unproven bacterial strains
- Lack quality standards and label bacterial counts guarantees.

Pioneer® brand inoculants are extensively researched, quality inoculants from a company you can trust.

## Will I still get a benefit from using inoculant if harvest conditions are ideal?

Pioneer® Brand inoculants have been tested under ideal harvest management conditions. Trial results show that Pioneer® brand inoculants increase silage quality and decrease losses even when environmental and crop harvest conditions are excellent. While silage inoculants are designed to make good silage better – and not bad silage good, the potential gains of using a silage inoculant may be even greater when harvest conditions are less than ideal.

