



Australian Mineral Fertilisers Handy Hints

Using AMF Microbes, Micro-STIX2 Polymer Oil and Easy Rhiz Rhizobia

1. Using Micro-STIX2 with AMF Microbes

Use **Micro-STIX2** oil to coat AMF beneficial microbes onto seed, and to extend the options for seeding and increase microbe survival. **Seed can be coated up to 60 days before use, and be used for wet or dry seeding.**

- Best to store **Micro-STIX2** in a dark place, *above 15°C and below 30°C*.
 - Do NOT freeze. If solid – warm above 15°C.
 - **DO NOT ADD ANY WATER to Micro-STIX2 - as the water will prematurely activate the Microbes.**
- When mixing microbes with **Micro-STIX2**, pour enough oil with the microbe powder to make a paste (thick gravy consistency) and dissolve well. Then add the remainder of the oil to meet recommended rates (*eg for Cereals = 4-6L/t, oily Lupins = 2L/t*) and **mix well**.
- If applying **Easy Rhiz** - combine at this stage.
- There will be some settling, so keep the mix well agitated (or shake) when applying to seed.
- Apply to the seed at recommended rates, avoid over wetting - may affect seed flow.
- Seed can be stored for up to 60 days (*below 30°C*) and seeding can be done *wet or dry*.

DO NOT ADD ANY WATER TO THE MICRO-STIX2 MIX AT ANY STAGE!

2. Using Micro-STIX2 with Easy Rhiz

Note – The Easy Rhiz Rhizobium Protecting Agent Soluble Powder is only to be used when applying microbes in water. Do NOT use Protecting Agent with Micro-STIX2.

- Store **Easy Rhiz** glass vials in Fridge (not freezer).
- When ready to use - remove vials from fridge and allow to warm to Room Temperature.
- Remove cap from Vial, and break up inoculum in the vial -
 - o eg with clean screw driver.
- Add some **Micro-STIX2** oil (so vial is about half full) -
 - a) Mix until inoculum is a paste.
 - b) Tip paste into Mixing drum (eg clean 20Litre bucket).
 - c) Wash out vial with more Micro-STIX2 (pour into Mixing Drum).
 - d) If applying with WMF Soil Microbes combine at this stage -
 - (see Tech Sheet - AMF Microbe Application & Seed Coating).
- Make up to correct volume with **Micro-STIX2**.
 - o Mix well.
- Before and during application of Inoculum/Microbes in **Micro-STIX2** -
 - o AGITATE WELL :
 - As Inoculum / Microbes can Settle Out!

NOTE -DO NOT ADD ANY WATER AT ANY STAGE – if using Micro-STIX2

Other Notes:

ENSURE ALL GEAR IS CLEAN

Note – very important that the all equipment and tanks are clean of residual synthetic chemicals and fungicides before using AMF Microbes. If necessary, wash with suitable boom clean or Lemon scented dishwashing liquid (1 teaspoon per 20L bucket, 1Litre per 5000L tank).

3. Storing Micro-STIX2 oil

- ❑ **Micro-STIX2** has a long shelf life - *if stored correctly*.
 - keep out of direct sunlight and avoid extreme temperatures.
- ❑ **Micro-STIX2** is a product that contains *natural vegetable waxes* that *may solidify* below 15°C.
 - If the product *does solidify*, simply warm to above 15°C - 30°C;
 - and the oil waxes will dissolve.
- ❑ At various times of the year (*autumn into winter*), ambient temperature is likely to drop below 15°C o/n (particularly in storage sheds) - so it is best to wrap 200L drums with an electric blanket; – this saves having to wait around for the oil to warm up on the day of application.

4. Storing AMF Microbe powders

Store **AMF Microbe Blends** (*except for Easy Rhiz products*) in a cool dark spot (eg cupboard in shed) below 30°C. **AMF Microbes Blends do not need to be refrigerated.** Store **Easy Rhiz** glass vials in Fridge (not freezer).

- ❑ Keep product dry, **always** keep lid tightly closed, unless retrieving material and then close immediately.
- ❑ Microbes stored incorrectly can go hard or lumpy - which will make them harder to use.

5. Using water with AMF Microbes

Water can also be used to coat Microbes onto seed (refer to AMF Microbe Tech Sheet) –
Note: Micro-STIX2 cannot be used in conjunction with water!

- ❑ When using **water** to mix with AMF microbe powder, the microbes become *activated* and therefore the solution must be used **within 24 hours**.
 - i.e. Seed needs to go in the ground (or for foliar application applied) fairly quickly after mixing.
- ❑ Remember - *adding water immediately activates the microbes* - not suitable for dry seeding.
- ❑ If using as a foliar, spray AMF Microbes out when soil is moist, avoid applying on hot days.
 - can be sprayed, if raining, or heavy dew.

6. Fertiliser

- ❑ AMF fertiliser products are biologically-based, and at delivery have a low dust load. They are not hygroscopic, but do require **dry** storage.
- ❑ Avoid **overhandling** - too much *augering* and *driving over* product will damage the fertiliser prill and *increase dust load*.