NEW

Revystar®

Fungicide

TECHNICAL NOTE

Revystar compatibility technote

BASF

We create chemistry

NEW

Revystar®

Fungicide

TECHNICAL NOTE

Physical Compatibility Mixes for Revystar®

Revystar Fungicide is physically compatible with a range of herbicides, insecticides and fungicides. If unsure of any intended spray tank mixes, always consult your BASF representative prior to mixing Revystar with other products.

As formulations of other manufacturer's products are beyond the control of BASF, and the quality of water may vary with location, all mixtures should be tested for physical compatibility using the "jar test method" prior to mixing commercial quantities. Details on "How to conduct a Jar Test" are contained later in this Technote, and in more detail on BASF's "How to Conduct a Jar Test" Technote.

Known Physical Compatibility Mixes for Revystar in Canola

Herbicides	Insecticides
Gesaprim* + Hasten* Clethodim 240EC Verdict*	Talstar* Versys

Known Physical Compatibility Mixes for Revystar® in Cereals (Wheat, Barley & Oats), where registered:

Herbicides	Insecticides	Nutrients
Axial* Paradigm* Intervix® Topik* Velocity* Frequency® MCPA + Ally* Amicide* 625 Atlantis* OD Tordon* 242	Versys® Transform* Alphacypermethrin 100EC	Easy-N* Zinc 9% EDTA Coptrel* 500

Mixing Order

Revystar Fungicide is an emulsifiable concentrate (EC) formulation. When using in a tank mix with other products, the following mix order should be observed;

1. Half fill the spray tank with water. Maintain constant agitation;
2. Add solid formulation types such as water dispersable granule (WDG/WG), wettable powder (WP), water soluble granule (SG) formulated products first and allow dispersion
3. Add simple liquid formulations such as soluble concentrate (SL) or liquid suspension formulations such as suspension concentrate (SC) formulations
4. Add any liquid formulations for dispersion such as emulsifiable concentrate (EC) and liquid formulation emulsions such as micro-emulsions (ME) formulations
5. Add any water-soluble salts
6. Add any adjuvants as required
7. Add any foliar fertiliser as required
8. Add remaining water

N:B: Correct mixing order reduces the risk of products interacting in a way that may reduce their efficacy or affect the stability of the tank mix.

The addition of multiple products to the spray tank is challenging. Most companies will only recommend a two-way mix at best, as each time a different product is introduced into the mix, the complexity and factors affecting the solutions ability to stay in suspension are reduced.

Take your time, introduce new additions slowly and add in a specific order (as per Mixing Order section on previous page), to ensure each product can be adequately mixed through the solution, according to their solubility and formulation type.

Bringing most products into contact with each other in a concentrated form will increase the risk in a problematic interaction between products. Small Batch mixing with low water volumes is risky.

Jar tests to assess physical compatibility: If you are unsure about the ability to mix certain products it is always a good idea to contact the representatives of the manufacturers of the products that you are intending to mix for further information and advice. In addition, it is advisable to conduct a jar test to confirm physical compatibility.

A jar test can only tell you if the products are physically compatible (able to be mixed and sit in a tank or vessel together without any sediment or jelling). **It is important to note that a Jar Test will not tell you if there are problems with biological compatibility, where one product may interfere with the biological activity of another.** Mixing order is critical to ensure that tank mixed products perform to their full potential (see Mixing Order section on previous page). Understanding formulation type and adjuvant type are important in getting the mixing order right.

If there is any doubt about potential compatibility of products intended for a tank mix, contact manufacturers of the products and always conduct a jar test before preparing a spray tank mix. It can and will save you time and money in the long-term.

Testing for Chemical Physical Compatibility:

Jar test – water volume: To simulate a tank-mix, mix the intended products together in smaller volumes before performing the actual tank mix in the sprayer.

The simplest way is to divide everything by 100.

E.G. 100 litres per hectare (L/ha) becomes a 1.0 L volume in the jar. Always use the same water source that is going to be used for spraying.

Jar test – Chemical Product rates for the jar test should also be based on the field rate divided by 100. E.G. a Product rate of 2 L/ha, or 2000 mL per hectare becomes 20 mL per test, a rate of 500 mL/ ha becomes 5 mL per test, etc.

Adjuvants take a little more thought, as they are usually mixed at a rate per 100 L.
For example, 2000 mL per 100 L of water with a liquid AMS becomes 20 mL per litre.

Medical syringes are ideal to measure small volumes. Syringes can be purchased from pharmacies and are available in different sizes; 3 mL and 20 mL are good common sizes to provide the volume variation required.

Dry products require scales: Good quality portable scales provide the ability to accurately measure quantities in the 10–20 gram range.

Conducting a jar test, the mixing order should be the same as the Mixing order sequence section laid out earlier in this technote.

Shaking the jar gently after mixing will simulate agitation.

When introducing dry products (e.g. Wettable Granules (WG's)) they should be fully dispersed in the solution before the next product is introduced. You may want to use a separate mixing container to dissolve dry products.

Waiting for products to fully disperse takes time, so be patient.
After the mixing is complete, leave the jar standing and assess at 5 and 30 minutes.

Possible results of the jar test:

1. The whole mixture appears consistent in appearance. This is the best result a jar test can produce. The mixed solution is stable. The planned tank mix should be able to be mixed without any Physical Compatibility issues.
2. The jar contains thick layers or banding in the profile. This indicates that the solution is not stable without agitation. If some shakes of the jar makes the solution consistent again for a short period (a couple of minutes or so) before layers start to form slowly again, it can be assumed that constant agitation should overcome the problem. However, if the banding returns quickly (after a few seconds to 30 seconds), it is a strong indication that there will be a problem with the tank mix that even good agitation may not be able to overcome.
3. There is sediment or particles or early signs of coagulation on the bottom of the jar. This indicates strongly that the mix is not physically compatible, or that the mixing procedure was not right. Re-check the Mixing Order and if still not compatible, do not proceed.

For more information about Revystar scan this QR code or contact your local BASF representative on 1800 558 399