

Seed treatments are an important part of crop protection but, because the seeds are treated with pesticides, sowing them needs the same careful approach as spraying pesticides.

Seed treatments are applied to the seed in an enclosed environment away from the field by qualified seed treatment operators and can form part of an environmentally responsible approach to crop protection, targeting the treatment and reducing the need to spray. However, as with all pesticides, they need to be used with care to ensure safety and effectiveness.



## **Read the label before using treated seed - particular attention should be paid to any specific requirements on the seed tag.**

### **What is best practice on use of treated seed?**

Seed treatments, like any pesticide, should be used as part of an Integrated Pest Management system. Measures such as the use of resistant varieties should be considered and treated seed should only be used if analysis of likely pest and disease problems indicates that treatment is necessary to keep them below the economic damage threshold.

### **How should I store and handle it?**

Treated seed must be stored and handled carefully to avoid it coming into contact with people, domestic stock/pets and wildlife at all times.

At the point of delivery ensure bags of treated seed are undamaged and handled carefully to prevent any damage to bags, spillages, or creation of dust.

Always store treated seed securely away from livestock and pets. Do not store in grain or feed stores or in an area where spills could reach drains or watercourses.

Fill the drill from as low a height as possible to reduce abrasion of seed and minimise the amount of dust when emptying bags. Care should be taken to minimise any direct contact with treated seed e.g. do not spread seed to level it in the hopper.

### **Is treated seed hazardous?**

Treated seed has a chemical on the surface and must be handled and used with this in mind, as with other pesticide applications. The seed tag(s) will cover all the safety precautions for the treatment(s) used.

### **What PPE should I use/ wear when handling treated seed?**

The required protective equipment is specified on the seed tag. Where there is no specification, nitrile gloves and a disposable coverall should be worn. Operators should not fill drills or handle treated seed with bare hands.

### **Do drills need modification?**

All pneumatic drills must ensure that exhaust air is incorporated into the soil. This is the norm for cereal drills, however precision vacuum drills such as those used to drill maize have historically vented to the air and will need deflectors added to vent and disperse the air flow into the soil. The outflow section should be 10-30cm above the soil for optimal performance. Deflector kits can be obtained through the agent that supplied the drill. New drills should already be modified.

### **Where should drills be filled?**

Drills must be filled on hard standing or in the field to be drilled. This will allow any seed spilt to be quickly and easily collected, or buried in the field if small. **DO NOT FILL OVER VEGETATION** where it will be difficult to gather spilt seeds.

## **What should I do with spillages?**

Spillages should be dealt with as soon as they happen.

Where small quantities of treated seed are spilt in the field then the seed can be buried completely to avoid ingestion by wildlife, livestock or pets.

For larger quantities (e.g. damaged bags) sweep or gather up spilt seed (avoiding direct contact with hands) and use as originally intended, if not contaminated. Any remaining seed which cannot be used (e.g. because of soil contamination) should be disposed of by a licenced waste contractor.

Keep a spill kit with the drill. This should comprise a spade, a spare bag with seed label to save seed recovered and a collection sheet for use when calibrating the drill.

## **How should I deal with treated seed cleaned out of the drill?**

Small amounts of treated seed cleaned out of the drill, for example when changing varieties or at the end of the season, should be buried in the original field or disposed of by a licenced waste contractor.

## **What about treated seed left on farm at the end of the season?**

Aim to minimise the amount of seed remaining on farm after drilling each year. However where seed remains undrilled, for example due to poor weather, this should be stored in dry conditions and away from extremes of temperature. This should retain germination sufficiently to be used the following year. Many seed merchants offer a germination test service to check if the seed is suitable for use the following season, as will organisations such as NIAB.

Alternatively treated seed may be sown at normal rates in a sacrifice area of land and subsequently removed by cultivation or spraying.

Where neither of these is appropriate, disposal should be through a licenced waste contractor.

## **Who should I contact to take surplus seed away?**

Licensed waste contractors should be able to dispose of treated seed and they should be your first point of contact. You should ensure bags remain in good condition and information specifying the seed treatment used should remain attached to the bag. In some instances the seed supplier may be able to take back unopened bags of surplus treated seed. They should be contacted as soon as it is apparent that some seed will be surplus to requirements. Licensed waste contractors can be found on the Environment Agency waste directory database at: <http://tinyurl.com/ovddecy>

## **How should I dispose of empty seed bags?**

Most bags used to supply treated seed are "one trip" designed specifically to transport and store the original seed packed. These bags should only be reused if you need to store any surplus seed originally from that bag.

Care must be taken in handling the treated seed to minimise the dust left in the bag. Emptied bags should be disposed of through licensed waste contractors.

## **What about seed treated with clothianidin, imidacloprid or thiamethoxam?**

Following the recent EU restrictions on these insecticide seed treatments it should be noted that some products containing these active substances can still be used on some crops, e.g. winter cereals sown between July and December. Sugar beet, as a non-bee attractive crop, is not affected by these restrictions.

## **Who should I contact for further information?**

Further information is available from either your seed merchant or the supplier of your seed treatment service. Further best management practice/stewardship information is available directly from the chemical manufacturers.

The advice in this Guide has been prepared after consultation with a range of industry and stakeholder organisations who are members of The Voluntary Initiative Steering Group.

The Voluntary Initiative is a programme of measures promoting responsible pesticide use.

[www.voluntaryinitiative.org.uk](http://www.voluntaryinitiative.org.uk)

