Fertilising
Pulses
with FertilizerpluS products
Guidelines for balancing your nutrient strategy with FertilizerpluS

FertilizerpluS is a range of high quality granular fertilisers produced by ICL. All products are Polysulphate® based.

ICL Fertilizers has done extensive research into how best to grow legume crops around the world. Our trials have found that application of sulphur can improve the uptake of nitrogen, help with root nodulation and with added magnesium and calcium we have seen an increase in root development.

For good uptake of nitrogen from the soil your pulse crop needs adequate potassium and sulphur. However, most soils within the UK and the rest of Europe are now deficient in sulphur since the Clean Air Act and subsequent reduction in depositions from atmospheric pollution.

Pulse crops treated with sulphur from the ICL FertilizerpluS collection of high quality products, which contain Polysulphate®, have shown yield and quality improvements at harvest.

FertilizerpluS recommendations

- Polysulphate applied at 150 kg/ha at drilling for peas and beans.
- Polysulphate applied at 100 kg/ha at the beginning of the season for clover.
- ICL PKpluS applied at drilling to meet the crop demands for phosphate, potassium and sulphur for peas and beans.
- ICL PotashpluS can be used as a replacement for MOP with the added benefit of extra magnesium, calcium & sulphur for soils with high P and low K indexes.

* Remember to consider the extra potassium from Polysulphate in your fertiliser calculations
Estimated nutrient offtakes (removal) by pulses

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Offtake kg/t</th>
<th>Offtake kg/ha</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Vining Peas</td>
<td>Dried Peas</td>
</tr>
<tr>
<td>P₂O₅</td>
<td>1.5</td>
<td>9</td>
</tr>
<tr>
<td>K₂O</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>MgO</td>
<td>3</td>
<td>2.5</td>
</tr>
</tbody>
</table>

Fertilizerplus product analysis

- Polysulphate (14% K₂O, 6% MgO, 17% CaO, 48% SO₃)
- Potashplus (37% K₂O, 23% SO₃, 2.8% MgO, 8% CaO)
- PKplus (various grades, tailor-made)

Expected benefits of balanced crop nutrition with Fertilizerplus products

- Improved yields
- Better quality of grain proteins
- Improved baking, malting and feed quality
- Increased nitrogen use efficiency (NUE)
Mined in the UK, ICL is the first – and only – producer in the world to mine polyhalite, marketed as Polysulphate.

**Phosphate** - needed to stimulate root development and for improved flower formation, seed production and to build proteins and other compounds essential for plant structure, seed yield and genetic transfer.

**Potassium** - secures yield and quality, transport of sugars and stomatal control. It reduces susceptibility to diseases and impact of drought and is essential for good nitrogen use efficiency.

**Magnesium** - fundamental for photosynthesis as it is integral to chlorophyll. It is also important in development of a healthy root system.

**Sulphur** - an essential constituent of proteins and oil production also critical for building dry matter. Essential for nitrogen use efficiency.

**Calcium** - for strong and healthy crops. It is a major building block in cell walls and reduces susceptibility to diseases. Along with phosphate, calcium is very important in the development of the root system.

Mined in the UK, ICL is the first – and only – producer in the world to mine polyhalite, marketed as Polysulphate.

Follow us on
- fertilizers.sales@icl-group.com
- twitter.com/fertilizerpluS
- YouTube.com/c/Polysulphate-fertilizer
- Facebook.com/ICLFertilizerpluS

www.polysulphate.com
Polysulphate is a registered trademark of ICL.

For specific recommendations or more information consult www.polysulphate.com/contact/ for your contact in your region.