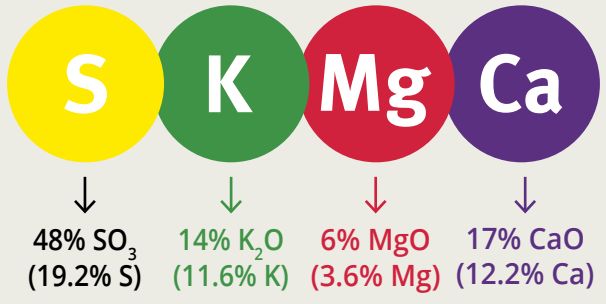




Polysulphate fertilizer



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

Poly  **sulphate**[®]

- ✉ info.polysulphate@icl-group.com
- 🐦 [Twitter.com/Polysulphate](https://twitter.com/Polysulphate)
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www.polysulphate.com

Polysulphate is a registered trademark of ICL.
The above are general rates, for specific recommendations or more information consult www.polysulphate.com/contact.php for your contact in your region.

Fertilizing Potatoes with Polysulphate

ICL 
Where needs take us

Poly  **sulphate**[®]

Main features of Polysulphate fertilizer

- Ideal multinutrient sulphur fertilizer with 48% SO₃ plus potassium (14% K₂O), magnesium (6% MgO) and calcium (17% CaO), all in sulphate form.
- Reduced risk of early season sulphate loss through leaching due to its prolonged nutrient release pattern.
- Fully soluble, with all nutrients available for plant uptake during the growth period.
- Excellent spreading characteristics; spreads evenly and accurately in the field up to 36 m.
- Low chloride, very low salinity index, neutral pH, no liming effect.
- Natural mined mineral (polyhalite) approved for organic agriculture.
- UK produced fertilizer with a low carbon footprint.

Functions of S, K, Mg and Ca in potato crops

- Sulphur is an essential constituent of proteins: it is required for the synthesis of three of the amino acids which make up true proteins. Necessary for high nitrogen use efficiency.
- Potassium secures yield and quality, transport of sugars, stomatal control and is a co-factor of many enzymes. It reduces susceptibility to plant diseases and the impact of drought, and is essential for efficient use of nitrogen.
- Magnesium is fundamental for photosynthesis, being a central part of chlorophyll molecule.
- Calcium for strong and healthy crops; it is a major building block in cell walls and reduces susceptibility to diseases. Soluble calcium is important for skin finish.

Practical guidelines for fertilizing potatoes with Polysulphate fertilizer

- Low-chloride Polysulphate is a sulphate-based source of water soluble potassium, magnesium and calcium, supplying all of the sulphur, magnesium and calcium needed, and a significant proportion of the potash removed at harvest, without affecting the soil pH.
- Potatoes remove very large amounts of potassium at harvest and the proportion not supplied by Polysulphate can be applied as muriate of potash, ploughed or worked into the soil a month or two before planting. This allows unwanted chloride to move down through the soil with rainfall, and away from the roots of the potato plant.
- 400 kg/ha Polysulphate is generally a suitable dressing for potatoes. Incorporate straight Polysulphate into the seedbed before planting, or apply it as a constituent of a fertilizer blend at planting.
- The prolonged release characteristic of Polysulphate means that as the four macronutrients it contains are released they provide a continuing fresh source to the growing crop.

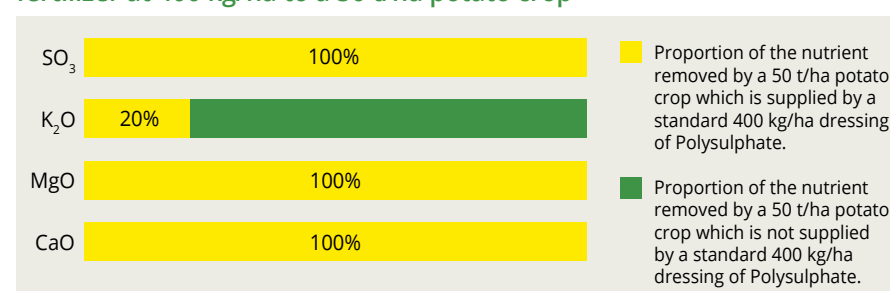


Estimated nutrient offtakes (removal) by potatoes

| Nutrient | Offtakes (kg/t) | Offtakes (kg/ha) |
|------------------|-----------------|-----------------------|
| | Potato tubers | 50 t/ha potato tubers |
| K ₂ O | 5.8 | 290 |
| K | 4.8 | 240 |
| MgO | 0.4 | 20 |
| Mg | 0.25 | 12 |
| CaO | 0.5 | 25 |
| Ca | 0.35 | 17 |

Sources: UK Fertiliser Manual, PDA and UNIFA

Guideline proportions of nutrients supplied by Polysulphate fertilizer at 400 kg/ha to a 50 t/ha potato crop



Expected benefits

- Higher yields
- Good skin finish
- Improved dry matter
- Increased nitrogen use efficiency