Polysulphate

Standard grade for fertilizer production

AICL Fertilizers
Multi-nutrient advantages

The new, versatile, multi-nutrient and easy alternative for your downstream products

S  
46.5% SO$_3$  
(18.6% S)

K  
13% K$_2$O  
(10.8% K)

Mg  
5.6% MgO  
(3.4% Mg)

Ca  
16.5% CaO  
(11.8% Ca)

Polysulphate is a multi-nutrient fertilizer containing four fully soluble and available plant nutrients: sulphur (S), potassium (K), magnesium (Mg) and calcium (Ca). These essential nutrients can be incorporated into any finished fertilizer product or range.

In modern agriculture, there is a growing need for NPK fertilizers as well as other key nutrients. Existing NPK fertilizers can be extended with the addition of S, K, Mg and Ca found in Polysulphate.

Polysulphate provides added value by replacing any fertilizer filler with valuable plant nutrients. Use Polysulphate as a raw material in your fertilizers to better meet the needs of crops, perfectly match soil types and suit climatic conditions.
Versatile combinations

• Ideal for NK and NPK granulation to produce NKs and NPKs enriched with sulphur, magnesium and calcium.
• Perfect combination with potash (MOP) for an enhanced potassium fertilizer plus secondary nutrients.
• Excellent in combination with lime, as an improved soil amendment with extra nutrients.

High effectiveness

• Provides 4 key crop-boosting nutrients in one: sulphur, potassium, magnesium and calcium.
• Excellent source of sulphate, which can be combined with nitrogen to ensure optimum availability of sulphur with nitrogen.
• Supplies crops with extended sulphur availability due to its unique prolonged release pattern.
• Suits chloride-sensitive crops due to low chloride content.
• Increases crop output as key nutrient needs, including calcium, are met.
Use Polysulphate to add value to downstream products

Ask our experts to assist in adapting your downstream product formulations with Polysulphate

Traditional NPK

NPK + Polysulphate
- Better value with extra S, Mg and Ca in the formula
- No filler is needed
- Cost-effective
- Higher yields with better quality performance
**Unique properties**

- Polysulphate helps granulation and increases output due to the presence of calcium and sulphate in the product.
- Polysulphate is a harmless, unreactive raw material and is not included in the category of “dangerous goods or harmful substances”.
- Polysulphate is pH neutral; therefore no ammonia is released when included with ammonium products, unlike those that include MgO.
- Good environmental credentials – low carbon footprint, natural fertilizer.
- EU-registered fertilizer. No additional regulatory requirements.

**Easy-to-use Polysulphate**

- Compatible with all main raw materials: ammonium nitrate, urea, superphosphates, MOP, SOP – both in handling and storage.
- Polysulphate provides an alternative source and supply for the nutrients contained in SOP and kieserite.
Polysulphate®: delivering prolonged nutrient supply

Sustained supply of sulphate from Polysulphate vs. other sources to perfectly match crop needs

Polysulphate provides prolonged multi-nutrient release to power crop yield and quality

Crops benefit from slower release of potassium from Polysulphate

ICLF lab, R&D Netherlands, 2016
NPKs with Polysulphate® outperform generic NPKs

Different letters within columns indicate statistically significant differences (error bars for SD)

Wheat dry matter weight (g/pot)

Control
Generic 15-4-14
12-8-10 with Polysulphate

+10% increase
+18% increase

Control 12-8-10 with Polysulphate
Generic 15-4-14
15-15-15 with Polysulphate

NPKs with Polysulphate®

* Center for Fertilization and Plant Nutrition
Mined in the UK, ICL is the first – and only – producer in the world to mine polyhalite, marketed as Polysulphate®.