



Respect the past, live in the present, deliver for the future.

Natural Mining Process

Polysulphate was first found almost 200 years ago in the U.K. Only recently has a large-scale deposit been discovered and now mined by ICL approximately 4,000 feet underneath England's North Sea.

Polysulphate is mined using a simple, efficient, sustainable process that results in a 1-to-1 ore to product ratio, creating the lowest carbon footprint of any fertilizer.

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

Granular Polysulphate

Chemical Analysis	Expressed As	Typical	Guaranteed
Potassium	Water soluble K ₂ O	14.1%	14%
Sulfur	S	19.4%	19.2%
Magnesium	Mg	3.7%	3.6%
Calcium	Ca	12.5%	12.2%
Chlorides	Cl		3%
Moisture	H ₂ O	0.4%	1.0% max.

Particle Size Distribution			
Mesh Size			Typical Retained Range (%)
mm	Tyler	US	
4.75	4	4	0-2
4.00	5	5	5-15
2.80	7	7	50-80
2.36	8	8	75-95
2.00	9	10	88-99
1.18	14	16	99




Physical & Chemical Properties	
Bulk Density	93.6 lb/ft ³
pH	Neutral



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POLYSULPHATE®

Multi-nutrient fertilizer
 Innovative, versatile and unique

www.icl-growing-solutions.us

What is Polysulphate?

Polysulphate is a 4-in-1 natural fertilizer containing four essential plant nutrients.



Sulfur

- Essential building block for proteins
- Required for amino acid synthesis
- Necessary for high nitrogen use efficiency

Potassium

- Secures yield and quality
- A co-factor of many enzymes
- Reduces susceptibility to plant diseases and drought
- Essential for efficient use of nitrogen

Magnesium

- Fundamental for photosynthesis
- Central part of chlorophyll molecule

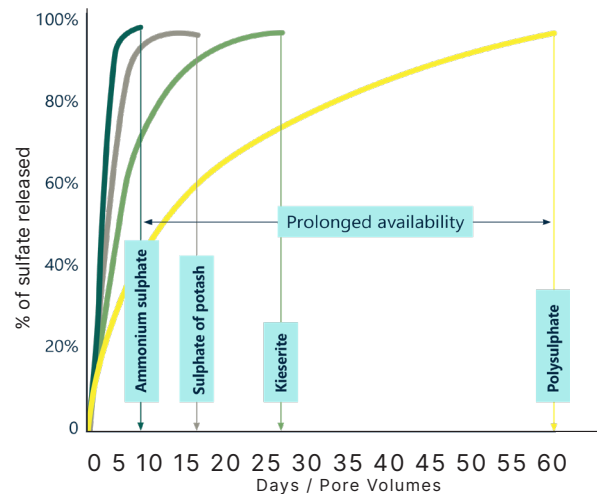
Calcium

- For a strong and healthy crop
- A major building block in cell walls
- Reduces susceptibility to diseases
- Soluble calcium is important for potato skin finish

Season Long Availability

Polysulphate's unique release rate supplies balanced nutrients throughout the growing season to ensure a healthier and more productive crop meeting peak plant nutrient demand, plus reducing the risk of loss through leaching.

Expanded application window gives you the flexibility to apply when your schedule allows.



Release of Sulfate
Polysulphate vs. other sources (granular grades)
University of Nottingham, UK, 2016

Unique Characteristics

- **Nutrient absorption** – Increased nitrogen use efficiency
- **Seed safe** – low chloride fertilizer that is safe to apply to all crop types
- **Storage and transportation** – low hygroscopic fertilizer won't take up and retain excessive moisture, providing superior storage properties
- **High blendability** - compatible with other fertilizers for blending flexibility
- **Organic** – naturally mined without chemical processing so it's safe to use in your organic farming systems; OMRI certified
- **pH neutral** – calcium sulfate creates a slow-release fertilizer, remediates sodic soils, and improves soil structure



POLYSULPHATE®

Agricultural Trial Results

Ask us about our professional agriculture trials. For specific recommendations consult your ICL Growing Solutions Technical Sales Manager.

<h3>Apples</h3> <p>Lyons, NY(2022)</p> <p>↑ 14% Increase good fruit vs defective</p>	<h3>Cotton</h3> <p>Tifton, GA (2020)</p> <p>↑ 42% Yield increase over control (no S)</p>	<h3>Corn</h3> <p>Brooksville, MS (2021)</p> <p>↑ 27% Yield increase over control (no S)</p>	<h3>Potatoes</h3> <p>Entrican, MI (2021)</p> <p>↑ 17.6% Yield increase vs GSP</p>
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