

# POLYSULPHATE®

0-0-14-19.2S-12.2Ca-3.6Mg



**Polysulphate vs. Other Sulfur Sources:** Polysulphate, ammonium sulfate, elemental sulfur, potassium sulfate, potassium magnesium sulfate and gypsum are distinct sulfur fertilizer sources with different compositions and uses. Let's compare them based on key aspects:

Key Aspect	Polysulphate	Ammonium Sulfate	Elemental Sulfur	Potassium Sulfate	Potassium Magnesium Sulfate	Gypsum
<b>Nutrient Content</b>	Potassium (13-14%) Calcium (12%) Magnesium (3.4-3.6%) Sulfur (18-19%)	Nitrogen (20-21%) Sulfur (24%)	Sulfur (85-99%)	Potassium (50%), Sulfur (17%)	Potassium (21-22%) Magnesium (10-11%) Sulfur (21-22%)	Calcium (23-24%) Sulfur (17-19%)
<b>Solubility in Water</b>	Slow	Very Fast	Slow	Fast	Fast	Very Slow
<b>Bulk Density (lb./ft³)</b>	93-99	60-64	69-94	42-48	82-95	60-90
<b>Application</b>	Fertilizer, soil amendment	Fertilizer	Soil amendment (High application rate)	Fertilizer	Fertilizer	Soil amendment (High application rate)
<b>Plant Availability</b>	Slow, sustained-release of nutrients	Fast-acting, immediate nutrient availability	Slow release of sulfur (Requires soil bacteria for conversion)	Quick release of potassium and sulfur	Quick release of nutrients	Slow release of calcium and sulfur
<b>Crop Suitability</b>	Balanced nutrient package suitable for various crops, low chloride content	General use, may benefit alkaline soils	Focused solely on sulfur supplementation	Focused solely on providing potassium and sulfur	Ideal for crops requiring potassium, magnesium, and sulfur	Focused solely on providing calcium and sulfur
<b>Impact on pH</b>	Generally neutral effect	Generally acidifying pH effect	Reduces soil pH as it converts to sulfuric acid	Generally neutral effect	May slightly raise soil pH	Generally neutral effect
<b>Environmental Impact</b>	Helps mitigate leaching due to slow-sustained release nature	May contribute to acidification	May contribute to acidification	Moderate risk of leaching due to sulfate forms of nutrients	Moderate risk of leaching due to sulfate forms of nutrients	Low risk of nutrient leaching

The choice between Polysulphate® and other sulfur sources is often dependent on specific crop needs, soil conditions, and desired nutrient release patterns. Polysulphate's balanced nutrient profile and slow, sustained-release characteristics might suit scenarios requiring sustained nutrition, while ammonium sulfate, potassium sulfate, and potassium magnesium sulfate's immediate availability of sulfur can be advantageous for quick growth responses in certain situations. Combining Polysulphate with quick release sources can allow for both fast-acting immediate availability as well as season-long sustained supply of sulfur. Always consider soil testing and consulting an agronomist for precise recommendations based on your specific needs.

> Sources: The Sulfur Institute, Western Fertilizer Handbook, Fertilizer Technology and Usage, Agrian Label Search



ICL is the first – and only – producer in the world to mine polyhalite, marketed as Polysulphate®. Polysulphate is a registered trademark of ICL.

For more information visit [www.icl-growingsolutions.us](http://www.icl-growingsolutions.us) or contact our agronomy experts at [NA.AgronomyServices@icl-group.com](mailto:NA.AgronomyServices@icl-group.com)

SA5191  
051324