

INTRODUCING POLY4



Polyhalite is an evaporite mineral comprising a natural combination of four of the six essential macro nutrients that are required for effective plant growth – potassium, magnesium, sulphur and calcium – in addition to a number of helpful micro nutrients.

POLY4 is the trademark name of our polyhalite products which deliver these four nutrients in one simple product. POLY4 is available in granulated, micro-granulated, chipped or powdered form to meet the needs of our customers, taking into account their crop, blending requirements, application method and soil conditions.

WHY USE POLY4?



SUPPLY OF FOUR ESSENTIAL MACRO NUTRIENTS



POTENTIAL TO INCREASE CROP YIELD & QUALITY



EFFICIENT FOR BLENDERS AND GROWERS

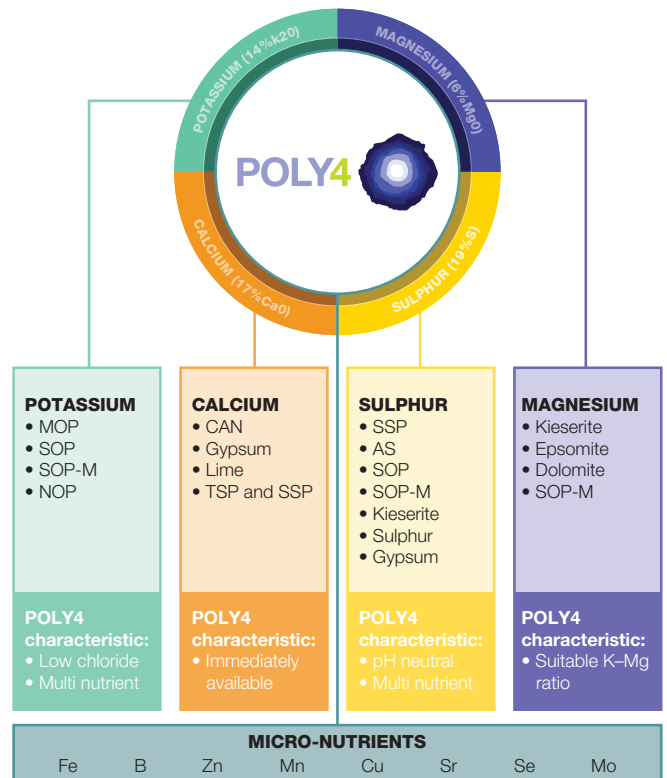


IDEAL FOR CHLORIDE SENSITIVE CROPS

SUITABLE FOR WIDESPREAD USE

Independent research and our global agronomy programme have proven that POLY4 is suitable for widespread commercial farming and is highly effective either as a straight fertilizer or as part of a NPK blend.

Although classified as a 'potash', POLY4's multi-nutrient properties mean that it can be used in fertilizer blends and programmes as a substitute to many common products across the global fertilizer market.





CARBON FOOTPRINT

POLY4's embedded CO₂ emissions (CO₂e) are lower than other common fertilizers

The estimated value of the global warming potential (GWP) of POLY4 is 0.051kg CO₂e per kg of product. This is low compared with other fertilizers and considerably lower than other potassium source fertilizers such as muriate of potash (MOP; 0.13–0.265kg CO₂e/kg), as well as common sulphur source fertilizers such as ammonium sulphate (0.58kg CO₂e/kg).



EFFECT ON SOIL PH & ELECTRICAL CONDUCTIVITY (EC)

POLY4 has no detrimental effect on soil pH or EC

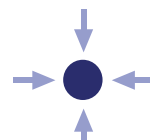
Fertilizers often negatively impact the pH and EC of soil which can limit nutrient uptake and cause crop damage. POLY4 has no negative effect on soil pH which supports optimum nutrient availability. In addition, POLY4 does not increase soil EC to levels which would impede crop yield.



COMPATIBILITY IN BLENDS AND STORAGE LIFE

POLY4 is compatible in blends and can improve product shelf life

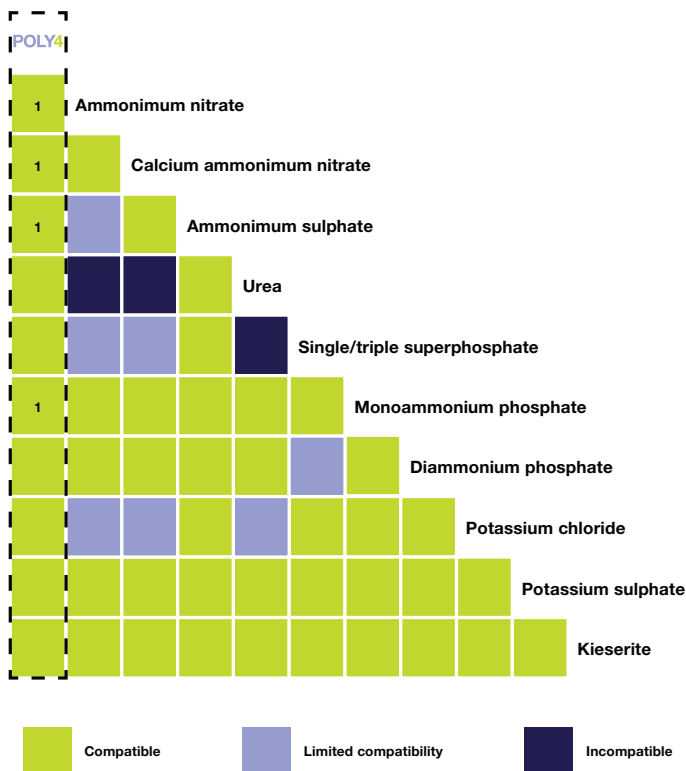
POLY4 is compatible and chemically safe for use with all products, as shown in the matrix below. Incompatible products can result in caking, lowering shelf life, which is undesirable for both blenders and growers.



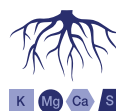
CRUSH STRENGTH & USE IN SPREADERS

POLY4's crush strength is optimal for handling and spreading

A crush strength of more than 3kgf is recommended to ensure that a fertilizer can resist stress at all points in the supply chain. POLY4 has a crush strength of 5.5kgf which is optimal for storage, handling, distribution and field spreading.



1 Minor caking (caking propensity exceeds 60kpa) develops after 17 months storage



NUTRIENT RELEASE

Nutrients are readily available for uptake

Agronomic studies confirm that all nutrients from POLY4 become available to a crop and support plant growth. Nutrient uptake generally increases with higher application rates, particularly on soils deficient in a specific nutrient.



SOLUBILITY

POLY4 is fully soluble and delivers nutrients effectively

POLY4 is a soluble fertilizer suitable for use at all commercial application rates. POLY4 dissolves in water much faster than SOP-M and as quickly as SOP.