



# BLEND S

**FACT SHEET**  
April 2017

- **Over 500 “Range Blends” to meet varying crop, soil and climatic conditions;**
- **“Custom Blends” available on firm order to meet individual farmer needs.**

## **Why are Blends used?**

A blend (or fertiliser mixture) is one in which two or more different dry fertiliser products have been physically mixed together.

Blends allow fertiliser suppliers to source a limited range of fertilisers for use as blend ingredients, yet provide a wide range of blended products of varying nutrient content.

Australian agriculture is diverse, embracing tropical and temperate regions, irrigated and rain-grown crops, and a wide variety of crops, pastures and soil types. Cultural practices and fertiliser application methods also vary. Consequently, a wide variety of fertilisers are required.

Without blends, farmers would have to use compounds. These require long production runs, so only a limited range of products can be offered. Compounds typically cost more than blends. Incitec Pivot Fertilisers only markets the one imported NPK compound fertiliser, and that is Nitrophoska Special.

Blends provide convenience. If blends were not available, farmers would often need to go over their land a number of times to apply the nutrients they require in fertiliser programs.

Blends are more variable in their analyses than compounds, and do show some variation around the stated analysis. They are, however, cost competitive, and allow a choice of products.

Incitec Pivot fertilisers has over 500 different blends on its product range to service farmer needs in South Australia, Tasmania, Victoria, New South Wales, Queensland and the Northern Territory.

Custom blends are also available on request, tailored to individual farmer needs.

Incitec Pivot blends are available from strategically placed distribution centres throughout eastern and southern Australia, from Cairns in north Queensland to Port Lincoln in South Australia, and south to Tasmania.

## Blend Ingredients

The blend ingredients most commonly used by Incitec Pivot Fertilisers are listed below:

### *Incitec Pivot Blend Ingredients:*

Product	Common Name	N	P	K	S
Urea		+			
Gran-am	Ammonium Sulfate Sulfate of Ammonia	+			+
DAP	Diammonium phosphate	+	+		
MAP	Monoammonium phosphate	+	+		
SuPerfect	Single Superphosphate (SSP)		+		+
Muriate of Potash	Potassium chloride (MOP)			+	
Sulfate of Potash	Potassium sulfate (SOP)			+	+

These supply nitrogen (N), phosphorus (P), potassium (K) and sulfur (S).

Other nutrients, such as boron (B), copper (Cu) and zinc (Zn), can also be added where required.

Molybdenum (Mo) can be incorporated into pasture topdressing fertilisers, e.g. SuPerfect Potash Blends.

## Compatibility

Not all ingredients are physically and chemically compatible with one another.

Segregation during handling is minimised by choosing blend ingredients that are evenly sized and closely matched in their sizing with other blend ingredients. Fine powders and dusts, e.g. Molybdenum Trioxide, are not used.

Other ingredients may react with each other, or when mixed together may rapidly absorb moisture from the air. Urea and ammonium nitrate fertilisers such as Cal-Am, for example, are incompatible in dry blends. The resultant blend has a depressed Critical Relative Humidity, and will quickly turn to slush.

## Addition Rates

There are minimum and maximum limits to the concentrations at which ingredients can be used in blends, for regulatory, safety and operational reasons.

Most blending sites use volumetric (screw) blenders, with two different sized hoppers, large hoppers for the major ingredients, and small hoppers for the Trace Elements.

At low addition rates, the blending equipment (screw augers) will not operate properly.

Maximum limits also apply to Trace Elements fed through the small hoppers.