



FERTILISERS FOR RECREATIONAL AREAS (PARKS, LAWNS, & HOME GARDENS)

Incitec Pivot Fertilisers does not market a range of home garden fertilisers in small packs of less than 25 kg for sale through nurseries, hardware stores and supermarkets. The company's products are primarily intended for use in agriculture and are sold through rural merchants. They are sometimes purchased through such outlets for use in recreational areas, i.e. park lands, sporting fields, lawns and home gardens.

This Fact Sheet has been prepared with such uses in mind. It provides basic details on the label information on fertilisers, and the analyses of commonly used products.

PLANT NUTRIENTS

Apart from air and water, plants draw nutrients from the soil via their root system. These nutrients, however, are not always present in adequate supply. The soil may be infertile to start with, or fertile topsoil may have been lost or removed during land development, exposing less fertile subsoil, and through soil erosion. Further drains on soil fertility occur when grass clippings and edible produce are removed.

It is often necessary to apply fertiliser to make up for shortfalls in the soil's ability to supply one or more of these nutrients. Ongoing applications are then necessary, to maintain fertility, and to replace nutrients that are lost and removed in plant growth. The three primary nutrients in fertiliser programs are nitrogen (N), phosphorus (P) and potassium (K). These nutrients may be applied individually but are more commonly applied as complete NPK fertilisers.

FERTILISER LABELS

Fertiliser labels show the nitrogen, phosphorus, potassium, and sulphur (S) analysis, in that order. Further information is provided on calcium (Ca) and magnesium (Mg), followed by the micronutrients (trace elements), if present. In addition, the concentration of various impurities will also be declared, plus any relevant Warning Statements. Agricultural fertiliser labels do not carry detailed "Use Directions". Separate Fact Sheets are available detailing fertiliser programs for lawns and home gardens.

HEAVY METAL IMPURITIES

The concentrations of cadmium (Cd), lead (Pb) and mercury (Hg) are shown on the product label. These are present as impurities in the raw materials from which fertiliser is made, e.g. ores and acids. The levels present are mostly of no concern. Warning Statements are required if their concentrations exceed typical background level present in agricultural soils, i.e. 1 mg/kg Cd, 20 mg/kg Hg and 0.2 mg/kg Hg.

Cadmium, which is present as an impurity in phosphate rock, attracts most attention. It can accumulate in soils where phosphorus is applied regularly at high rates. This in turn can lead to

elevated cadmium concentrations in farm produce, e.g. root and leaf vegetables. While consumption of such produce is not harmful in the short term and will not result in sudden illness, long term consumption over a lifetime may potentially affect health, e.g. renal (or kidney) failure.

Incitec Pivot SuPerfect® (Single Superphosphate) has a higher cadmium content than other P fertilisers marketed by Incitec Pivot, such as DAP. SuPerfect is primarily intended for use on pasture. SuPerfect may be used on lawns and playing fields but is not recommended for and should not be used where vegetables are or may be grown.

COMMONLY USED FERTILISERS

The analyses of some of the more commonly used fertilisers in recreational areas are shown in the following table. Fertilisers that are comparatively high in phosphorus are generally used when planting flowers and vegetables, and when establishing a lawn. Fertilisers that are comparatively higher in nitrogen and potassium are used on established lawns, and on shrubs and fruit trees.

Table 1: Incitec Pivot Fertiliser Product Analyses

Product	Analysis			
	% N	% P	% K	% S
Straight Fertilisers				
Granular Urea	46			
DAP	18	20		1.6
SuPerfect®		8.8		11.0
Muriate of Potash			50	
NPK Planting Fertilisers (Vegetables, Flower Beds)				
Complete Mix 1 (All States)	7.6	9.5	9.6	8.6
Croplift® 800 (NSW, Vic & SA)	7.9	10.5	10.0	6.8
CK 800 (Qld)	8.1	10.4	10.0	7.5
Grower 11 (NSW)	9.6	14.5	9.5	4.6
NPKS 11-15-14-1 (NSW, Vic)	11.0	14.9	14.0	1.1
CK 55 (Qld)	13.5	15	12.5	1.2
NPK Lawn and Tree Fertilisers				
Complete Mix 3 (NSW, Vic, SA)	10.5	5.0	10.3	16.8
Complete Mix 7 (NSW, Vic)	14.6	3.0	7.1	17.2
Multigro (NSW, Vic)	13.1	4.5	7.2	15.4
No 17 Lawn Food (S) (NSW)	9.1	3.8	4.9	17.7
CK 88 (Qld)	15.1	4.4	11.5	13.6
Granulock® Blue (All States)	12.0	5.2	14.1	6.0

The above NPK fertilisers are Blends, except for Granulock® Blue.



SAFETY DIRECTIONS

Refer to the Safety Data Sheet (SDS) for more detailed safety advice. Before use, read the Product Label and the SDS. Use safe work practices and avoid contact with the eyes and skin. Avoid ingestion and inhaling dust. Protective clothing, eyewear and dust masks should always be used when dealing with this product. Observe good personal hygiene, including washing hands after use. Avoid loss of fertiliser to waterways.

WARNING

This document contains information of a general nature. Before using fertiliser seek independent agronomic advice. Fertiliser programs may need to be varied depending on the plants being grown, climatic and soil conditions, application methods, irrigation, agricultural and livestock management practices, the soil's fertility, and cultural practices. ('Unforeseen Elements')

Fertiliser may burn and/or damage crop roots or foliage. Foliar burn to the leaves, fruit or other plant parts is most likely to occur when fertilisers are foliar applied at high concentrations and/or on a regular basis, different products are mixed and sprayed together at cumulatively high rates, the water is of poor quality, or the spray is applied under hot dry conditions, e.g. in the heat of the day.

Fertiliser and supplements may affect animal health. Seek independent advice before using any supplements in livestock rations.

DISCLAIMER

As Unforeseen Elements are beyond the control of Incitec Pivot Limited, in no event Incitec Pivot Limited and its related bodies corporate be liable or accept any responsibility whatsoever for any direct, indirect, punitive, incidental, special or consequential damages (including but not limited to loss of revenue, crops and livestock), in respect of the illness, injury or death of a person, damage to property (including of a third party), or any other loss whatsoever arising out of or connected with the use or misuse of this fertiliser, or its transport, storage, handling or application. Where Incitec Pivot Limited and its related bodies corporate's liability cannot be lawfully excused, it and its related bodies corporate's liability shall be limited to the replacement of, or cost of the fertiliser supplied. The buyer accepts and uses this product subject to these conditions.

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