

# Osmocote®

Scotts controlled release fertiliser with proven reliability and performance in many crops all over the world

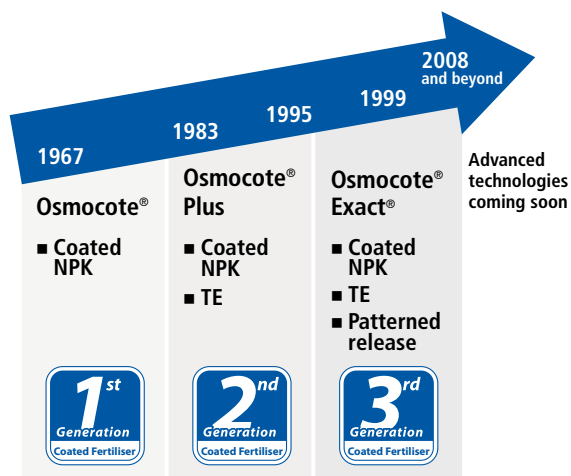


## Patented Osmocote technology

Osmocote consists of a patented biodegradable resin-coating technology that ensures the controlled release of the encapsulated fertilisers. Each prill contains a complete balance of N-P-K nutrition. When water penetrates the Osmocote coating, the nutrients dissolve inside the prill, and then are released through the coating for a controlled delivery of nutrition that promotes healthy plant growth.

## Precise control with the widest range

Scotts have developed a wide range of Osmocote controlled release fertilisers to suit a diverse range of needs, from our origins with the original Osmocote to our third generation in fertiliser technology with Osmocote Exact and beyond.



## Osmocote® Exact®

NPK FERTILISER WITH TRACE ELEMENTS AND EXACT CONTROLLED RELEASE PATTERNS

### Osmocote Exact – Hi-Start / Standard / Lo-Start

The unique patterned release technology of every Osmocote Exact prill ensures the release of nutrients is exactly what your crop needs.



Hi-Start gives an extra boost up front for plants that feed heavily earlier in the season.

Standard formulas provide a constant source of nutrition throughout the plants' life cycle.

Lo-Start is formulated for plants that need increasing amounts of nutrition later in the growing cycle.

### Osmocote Exact Special

Scotts have formulated a small range of Osmocote Exact products that offer high potassium formulas suitable for controlled growth of fast growing crops. Also suitable for crops where compact growth is required, or situations with high levels of N in the water. Also useful with long growing flowering crops such as Cyclamens Primulas and Violets.

### Osmocote Exact Mini

The Osmocote Exact Mini formulation allows for easy application of our third generation range in punnets or small containers under 20 mL.



## Osmocote® Plus

NPK CONTROLLED RELEASE FERTILISER WITH TRACE ELEMENTS

### Osmocote Plus Special

A proven range of specialised products including low phosphorus (suitable for Australian natives) and an Azalea blend.



### Osmocote Plus Potted Colour

A balanced NPK with a four-week fast start component combined with a longer-term release for extended retail shelf life.



## Osmocote® Standard

NPK CONTROLLED RELEASE FERTILISER

Osmocote, Scotts original controlled release fertiliser, is useful for landscaping, large container and nursery stock. Use with Micromax trace element mix for complete plant nutrition.



### Osmocote Special

Original Osmocote with a range of NPK formulas to suit specific growing conditions.

### Osmocote Mini

Osmocote Mini has been specially developed for propagation by seed or cutting in cell trays, punnets or small containers under 20 mL. One gram contains approximately 250 granules, ensuring even distribution.


### Osmocote Start

Osmocote Start's mini prill has been specifically developed for short-term cultivation (4-8 weeks approx.) of flower and vegetable seedlings, cuttings and short-term plants.



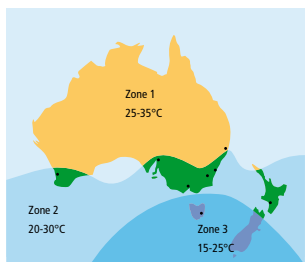
## An Exact science

### Tailoring nutrient release to the growth pattern of your crop

 Osmocote Exact is the only fertiliser that offers different release patterns to match plants' feeding requirements. Each pattern delivers a complete range of nutrients and trace elements at a rate and time appropriate to seasonal temperatures and specific plant requirements.

The major environmental factor controlling the nutrient release from Osmocote Exact is media temperature which is influenced by your geographic location, or zone, and the seasons. Choose the appropriate Hi-Start, Lo-Start or Standard release pattern from the zone/season table below.

### Zone and season selector



Geographical location, or zones, and the seasons influence the rate of nutrient release from Osmocote Exact.

|        | Zone 1   | Zone 2   | Zone 3   |
|--------|----------|----------|----------|
| Summer | Lo-Start | Lo-Start | Standard |
| Autumn | Standard | Standard | Hi-Start |
| Winter | Standard | Hi-Start | Hi-Start |
| Spring | Standard | Hi-Start | Hi-Start |



Hi-Start

### Osmocote Exact Hi-Start

Fast growing plants, such as deciduous shrubs, need more nutrition at the start to achieve optimal growth. Osmocote Exact Hi-Start is recommended as it provides a higher release of nutrients during the first half of cultivation, after which the release decreases.



Standard

### Osmocote Exact Standard

Some plant groups, such as evergreens, benefit from an even release of nutrients throughout the longevity. Osmocote Exact Standard is recommended as it provides this. It is also suitable where a wide range of plant species are grown and the convenience of using only one fertiliser is desired.



Lo-Start

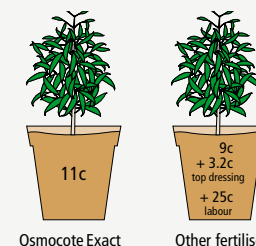
### Osmocote Exact Lo-Start

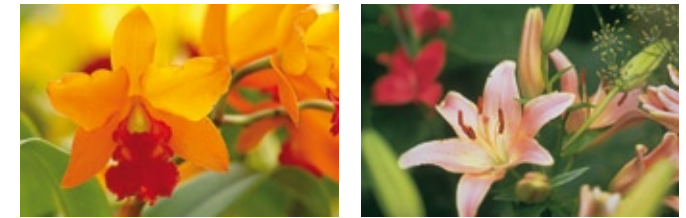
Ideal for potting in high mid-summer temperatures. Some plants prefer a relatively low release of nutrients during the first stage of cultivation, gradually increasing in the course of time, Osmocote Exact Lo-Start is recommended for this purpose. Consider matching Osmocote Exact Lo-Start with a starter fertiliser such as Osmoform Premix to give early growth.

### ► Scotts Fact

Cost chain analysis shows that a full rate of Osmocote costs 11 cents per 200mm pot when applied correctly. An inferior fertiliser might cost you 9 cents per pot, but as their release is often unreliable, top dressing may be needed. You can add another 3.2 cents plus the cost of labour to apply it.

Grower assessed trials have shown Osmocote Exact produces more saleable plants and significantly higher income.





## Osmocote topdress application rates

The following table provides suggested rates as a general guide for the topdress application of all Osmocote, Osmocote Plus and Osmocote Exact products. If dibbling, reduce rate by 1g/L equivalent. (N.B. 3-4 month Osmocote products are not suitable for dibble application.)

► Step 1: Select the pot or NZ planter bag size ► Step 2: Apply the appropriate rate of fertiliser

| Pot size in litres | Pot size in mm | NZ Planter bag size* | 3-4 mths grams (rate=4g/L) | 5-6 mths grams (rate=5g/L) | 8-9 mths grams (rate=6g/L) | 12-14 mths grams (rate=7g/L) |
|--------------------|----------------|----------------------|----------------------------|----------------------------|----------------------------|------------------------------|
| 0.4L               | 100mm          | 3/4PB                | 1.6g                       | 2g                         | 2.4g                       | 3g                           |
| 1L                 | 150mm          | 2PB                  | 4g                         | 5g                         | 6g                         | 7g                           |
| 2L                 |                | 3PB                  | 8g                         | 10g                        | 12g                        | 14g                          |
| 3L                 |                | 5PB                  | 12g                        | 15g                        | 18g                        | 21g                          |
| 4L                 |                | 6.5PB                | 16g                        | 20g                        | 24g                        | 28g                          |
| 5L                 | 200mm          | 8PB                  | 20g                        | 25g                        | 30g                        | 35g                          |
| 7L                 |                | 12PB                 | 28g                        | 35g                        | 42g                        | 49g                          |
| 8L                 | 250mm          | 18PB                 | 32g                        | 40g                        | 48g                        | 56g                          |
| 12L                | 300mm          | 28PB                 | 48g                        | 60g                        | 72g                        | 84g                          |
| 24L                | 400mm          | 40PB                 | 96g                        | 120g                       | 144g                       | 168g                         |
| 35L                |                | 60PB                 | 140g                       | 175g                       | 210g                       | 245g                         |
| 50L                | 500mm          | 95PB                 | 170g                       | 205g                       | 240g                       | 275g                         |
| 75L                |                |                      | 220g                       | 255g                       | 290g                       | 325g                         |
| 100L               |                |                      | 270g                       | 305g                       | 340g                       | 375g                         |
| 150L               |                | 150PB                | 370g                       | 405g                       | 440g                       | 475g                         |
| 200L               |                | 250PB                | 470g                       | 505g                       | 540g                       | 575g                         |
| 400L               |                |                      | 870g                       | 905g                       | 940g                       | 975g                         |

\* New Zealand Planter bag litre equivalence is approximate only.

## Osmocote mixing application rates

The following table provides suggested rates as a general guide for the application of all Osmocote, Osmocote Plus and Osmocote Exact products.

► Step 1: Select the crop ► Step 2: Apply the appropriate rate of fertiliser

| Application            |  | Osmocote Start      | Osmocote Exact Mini | 3-4 mths            | 5-6 mths            | 8-9 mths            | 12-14 mths          | 16-18 mths           |
|------------------------|--|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|
| Nursery stock          | Sensitive (Kalmia, Pieris, Azalea)                   | -                   | -                   | 3 kg/m <sup>3</sup> | 4 kg/m <sup>3</sup> | 5 kg/m <sup>3</sup> | 6 kg/m <sup>3</sup> | 8 kg/m <sup>3</sup>  |
|                        | General (Conifers, most trees & shrubs)              | -                   | -                   | 4 kg/m <sup>3</sup> | 5 kg/m <sup>3</sup> | 6 kg/m <sup>3</sup> | 7 kg/m <sup>3</sup> | 9 kg/m <sup>3</sup>  |
|                        | Phosphorus sensitive (Proteaceae, some Grevillea)    | -                   | -                   | -                   | -                   | 4 kg/m <sup>3</sup> | 5 kg/m <sup>3</sup> | -                    |
| Flowering pots         | Annuals (Potted colour); Herbaceous perennials       | -                   | -                   | 3 kg/m <sup>3</sup> | 4 kg/m <sup>3</sup> | 6 kg/m <sup>3</sup> | -                   | -                    |
|                        | Pot chrysanthemum, Poinsettia                        | -                   | -                   | 4 kg/m <sup>3</sup> | 5 kg/m <sup>3</sup> | 6 kg/m <sup>3</sup> | -                   | -                    |
| Foliage                | Rapid growth   | -                   | -                   | 4 kg/m <sup>3</sup> | 5 kg/m <sup>3</sup> | 6 kg/m <sup>3</sup> | 8 kg/m <sup>3</sup> | 10 kg/m <sup>3</sup> |
|                        | Acclimatisation (Supplement with Peters fertilisers) | -                   | -                   | 3 kg/m <sup>3</sup> | 4 kg/m <sup>3</sup> | 5 kg/m <sup>3</sup> | 6 kg/m <sup>3</sup> | 8 kg/m <sup>3</sup>  |
| Bedding plants         |  | 1 kg/m <sup>3</sup> | 1 kg/m <sup>3</sup> | -                   | -                   | -                   | -                   | -                    |
| Vegetable young plants |  | 1 kg/m <sup>3</sup> | -                   | -                   | -                   | -                   | -                   | -                    |
| Large containers > 50L |  | Potting             | -                   | -                   | -                   | 4 kg/m <sup>3</sup> | 5 kg/m <sup>3</sup> | 7 kg/m <sup>3</sup>  |

Refer to product labels for specific application rates.

**Osmocote Exact**

NPK FERTILISER WITH TRACE ELEMENTS AND EXACT CONTROLLED RELEASE PATTERNS

| Osmocote Exact             | Analysis      | Longevity  | Code  |
|----------------------------|---------------|------------|-------|
| Osmocote Exact Standard    | 16+4+10+1.5Mg | 3-4 mths   | 8802  |
| Osmocote Exact Lo-Start    | 15+4+9+1.5Mg  | 5-6 mths   | 8803  |
| Osmocote Exact Standard    | 15+4+9+1.5Mg  | 5-6 mths   | 8804  |
| Osmocote Exact Hi-Start    | 15+4+9+1.5Mg  | 5-6 mths   | 8808  |
| Osmocote Exact Lo-Start    | 15+4+9+1.5Mg  | 8-9 mths   | 8809  |
| Osmocote Exact Standard    | 15+4+9+1.5Mg  | 8-9 mths   | 8814  |
| Osmocote Exact Hi-Start    | 15+4+9+1.5Mg  | 8-9 mths   | 8819  |
| Osmocote Exact Lo-Start    | 15+4+9+1.5Mg  | 12-14 mths | 8821  |
| Osmocote Exact Standard    | 15+4+9+1.5Mg  | 12-14 mths | 8822  |
| Osmocote Exact Lo-Start    | 15+4+9+1.5Mg  | 16-18 mths | 8824  |
| Osmocote Exact Special     | Analysis      | Longevity  | Code  |
| Osmocote Exact Hi K        | 11+5+15+1.2Mg | 5-6 mths   | 8835  |
| Osmocote Exact Hi K        | 11+5+15+1.2Mg | 8-9 mths   | 8836  |
| Osmocote Exact Mini        | Analysis      | Longevity  | Code  |
| Osmocote Exact Mini (10kg) | 16+3.5+9.1+TE | 3-4 mths   | 8850A |
| Osmocote Exact Mini (25kg) | 16+3.5+9.1+TE | 3-4 mths   | 8850E |

**Osmocote Exact gives you more fertiliser and more plants for your money**

Osmocote Exact can cost a little more than the mediocre brands, though in comparison the real value of Osmocote Exact is apparent.

Look at the table below. With a difference of just \$3.18 per cubic metre, you need only produce one more healthier plant for sale in every 222 to justify Osmocote Exact.

Many commercial growers suffer losses of between 5% and 15% of their crop each season. It is generally accepted that Osmocote Exact users produce more saleable plants.

Imagine increasing significantly the number of saleable plants in your crop using Osmocote Exact. That must be a worthwhile investment.

| Osmocote Exact   | Competitor                                      |
|--|---|
| 5kg of Osmocote Exact per m <sup>3</sup>   | 5kg of Competitor per m <sup>3</sup>            |
| \$115 for Osmocote Exact   | \$90 for competitor                             |
| 25kg bag   | 22.7kg bag                                      |
| 25kg bag = \$23 per m <sup>3</sup> applied   | 22.7kg bag = \$19.82 per m <sup>3</sup> applied |
| Difference is \$3.18 per m <sup>3</sup>  |   |
| Each cubic metre contains 222 x 8 inch (200mm) pots each worth \$7.50. Osmocote Exact cost difference is less than one plant, but it can help you produce a greater number of saleable plants. |   |

N.B. The above example has been calculated on estimates as at time of printing. Prices are subject to change.

**► The Scotts GROE program**

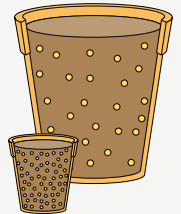
To optimise product selection and crop performance, Scotts GROE (Grower Recommendation for Osmocote Exact) computer program can provide more specific recommendations on products and application rates. Please request a GROE information form from your Scotts Distributor or call Scotts Australia direct on Freecall 1800 789 338, or Scotts New Zealand on (09) 299 6558.

**► Scotts Fact**

**Osmocote mini prills improve distribution in small containers**

Osmocote mini prill products are excellent for use in small volume containers such as bedding plant containers, propagation containers, viticulture and any other container where it is challenging to get uniform controlled release fertiliser distribution because of container size.

Osmocote mini prills are approximately 1/5 the size of a typical Osmocote prill, providing 10 times as many prills per unit weight, resulting in more uniform fertiliser distribution and less distance between prills. This means less distance from the plant root to a prill leading to better availability of fertiliser, assisting in even plant growth and improved crop uniformity. Osmocote Mini, Osmocote Exact Mini and Osmocote Start are all formulated with Osmocote mini prills.



# Osmocote®



## Osmocote Plus

NPK CONTROLLED RELEASE FERTILISER WITH TRACE ELEMENTS

| Osmocote Plus Special        | Analysis      | Longevity | Code   |
|------------------------------|---------------|-----------|--------|
| Osmocote Plus Low P          | 16+1.3+9.1+TE | 8-9mths   | 7656   |
| Osmocote Plus Low P          | 15+1.3+10+TE  | 12-14mths | 7657   |
| Osmocote Plus Azalea Special | 21+2.5+7+TE   | 12-14mths | 5080   |
| Osmocote Plus Potted Colour  | 15+3.5+10+TE  | 3-4mths   | 7613PC |

## Osmocote Standard

NPK CONTROLLED RELEASE FERTILISER

| Osmocote Standard | Analysis       | Longevity | Code |
|-------------------|----------------|-----------|------|
| Osmocote          | 14+6.1+11.6+Ca | 3-4mths   | 7604 |
| Osmocote          | 18+4.8+9.1     | 3-4mths   | 7602 |
| Osmocote          | 16+2.6+14.9    | 3-4mths   | 7661 |
| Osmocote          | 17+4.4+10      | 5-6mths   | 7646 |
| Osmocote          | 16+2.2+14.1    | 8-9mths   | 7650 |
| Osmocote          | 18+4.8+8.3     | 8-9mths   | 7601 |
| Osmocote          | 15+2.2+14.1    | 12-14mths | 7651 |
| Osmocote          | 17+4.3+8.2+Ca  | 12-14mths | 7633 |

| Osmocote Special     | Analysis           | Longevity | Code  |
|----------------------|--------------------|-----------|-------|
| Osmocote Tropical    | 16+2.2+14.1        | 5-6mths   | 7653  |
| Osmocote Tropical    | 16+2.2+12.4        | 12-14mths | 7655  |
| Osmocote Topdress    | 17+3.5+8.3+Fe      | 3-4mths   | 7659  |
| Osmocote Topdress    | 17+3.5+8.3+Fe      | 8-9mths   | 7658  |
| Osmocote Coated Iron | FeSO <sub>4</sub>  | 3-4mths   | 7627  |
| Osmocote K           | 0+0+34.9           | 5-6mths   | 8669  |
| Osmocote N           | 38+0+0             | 8-9mths   | 7676H |
| Osmocote Mini        | Analysis           | Longevity | Code  |
| Osmocote Mini        | 18+2.6+9.1         | 5-6mths   | 7734A |
| Osmocote Start       | 12+4.8+14.1+1.2 Mg | 4-8wks    | 8750E |

### Conducting trials for optimal rates

The correct fertiliser concentration will depend on a number of factors including: feeding frequency, crop type, crop stage, growing media, pot size, leaching fraction and environmental conditions. The suggested application rates above are a general guide.

An effective and optimal rate for your specific conditions can be determined through conducting a rate trial. Remember, underfeeding will necessitate topdressing later, which has high labour costs, so it is important to get your fertiliser rates spot on. Refinement of product choice and rate of application can be made using the Scotts GROE computer program.



Picture shows nursery trial on *Erica melanthera* conducted in Victoria. Demonstrating Osmocote Exact's performance versus a competing CRF. (Left to right) Two plants on the left are competing CRF (8-9 month) the two plants on the right are Osmocote Exact Standard (8-9 month) applied at equivalent rates.



Picture shows nursery trial on Hibiscus Sp. conducted in Darwin during the Summer months. It demonstrates Osmocote Exact's superior performance versus a competitor product and highlights the superior performance of Osmocote Exact Lo-Start in a tropical climate. (Left to right) Osmocote Exact Lo Start, Osmocote Exact Standard, Osmocote Exact Hi Start, Osmocote Plus, four plants to the right are Competitor products CRF (8-9 month) applied at equivalent rates.