



Solufeed *Superior* Fertilizers

***Not-hazardous-for-transport
variants of established acidic
fertilizers for use in hard water
Vigil v.2 and Fleury v.2***

Uses

Highly effective soluble fertilizers especially recommended for problematic hard waters where the performance ordinary products may be adversely affected.

Original *Superior* products sold successfully for 11 years but were classified as hazardous for transport and this made them difficult to distribute. These v.2 products are not classified as hazardous for transport, but retain their acidifying capability, contain no urea and have a very similar analysis to the original products.

Note that unlike the original products, these v.2 products cannot be mixed with calcium nitrate in the same stock tank.

Benefits

- Mostly nitrate nitrogen for immediate availability.
- Zero ureic nitrogen - suitable for a wide range of crops and growing media.
- Acidic formulation:
Will reduce water pH for growers with hard water.
- Rapidly and completely soluble.
- Fully chelated balanced mix of trace elements.
- Suitable for a wide range of crops from pot plants to soft fruit.
- Made exclusively by Solufeed using the unique *Pekacid*[™] raw material.
- Low hazard in use, handling and storage.

Background information

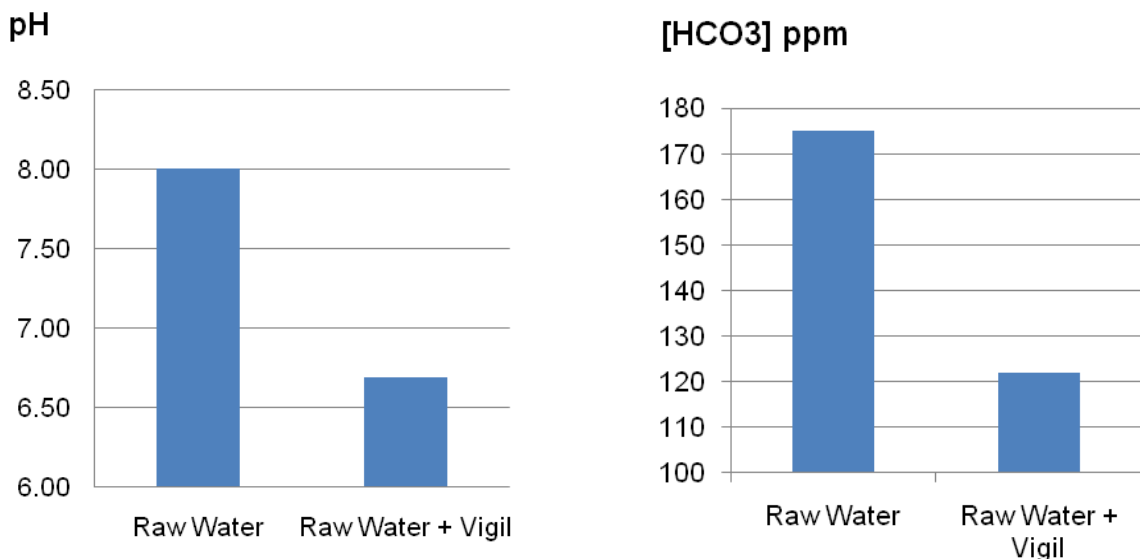
Solufeed *Superior* v.2 fertilizers are used in the same way as other soluble fertilizers. The normal method is to make up a 10% stock solution (1 kg of Solufeed *Superior* dissolved in 10 litres of water) which is further diluted 1:100 giving a final dilution of 1 gram of Solufeed *Superior* per litre of irrigation water.

For Hard Water areas

Hard water usually contains high levels of calcium and/or magnesium ions together with bicarbonate (HCO_3) ions; the pH is usually high.

The calcium in hard water is beneficial for growing plants but the associated alkalinity means that most plants do not respond well to fertilizer and can be prone to trace element deficiencies. Some commercial growers invest in equipment to treat hard water with concentrated mineral acids that will reduce the bicarbonates and reduce pH to improve growing performance.

Using acidic Solufeed *Superior* fertilizer will neutralize ~50 mg/litre of the bicarbonates in the water and will reduce pH thereby improving conditions for plant growth. This is demonstrated by the results of a trial conducted in North Yorkshire, UK. Here the pH and bicarbonate levels in raw water and the same water plus Solufeed *Superior* Vigil (at normal rate of use) were compared.



Currently there are two Solufeed *Superior* v.2 fertilizers – Vigil v.2 and Fleury v.2

Name	Analysis	Example uses	Example crops
Vigil.v2	16:10:18+3MgO+TE	Starter fertilizer. Also a balanced blend suitable for many situations	Pot plants up to bud formation (1:100) Rooted cuttings (1:200) Starter feed for fruit & veg (1:100)
Fleury v.2	13:10:28+2MgO+TE	Finishing fertilizer, balanced to encourage flowers and fruit rather than foliage	Pot plants from bud formation (1:100) Finishing feed for fruit & veg (1:100)

For Soft Water areas

Soft water is unlikely to be alkaline and normally contains low levels of bicarbonates (HCO_3). Do not use acidic Vigil v.2 or Fleury v.2 in water with bicarbonate levels of less than 150 ppm because the fertilizer may over-acidify the water.

Analysis

EC FERTILIZER	Vigil		Fleury	
	% (w/w)	ppm 10% solution diluted 1:100	% (w/w)	ppm 10% solution diluted 1:100
Total nitrogen (N)	16.0	160	13.0	130
Nitrate (NO ₃) nitrogen	8.8	88	8.8	88
Ammoniacal (NH ₄)	7.2	72	4.2	42
Phosphorus as P ₂ O ₅ (P)	10.0 (4.4)	100	10 (4.4)	100
Potassium as K ₂ O (K)	18.0 (14.9)	180	28.0 (23.2)	280
Magnesium as MgO (Mg)	3.2 (2.0)	32	1.9 (1.2)	19
Boron (B)	0.025	0.25	0.025	0.25
Copper (Cu) <small>chelated by EDTA</small>	0.01	0.1	0.01	0.1
Iron (Fe) <small>chelated by EDTA</small>	0.18	1.8	0.18	1.8
Manganese (Mn) <small>chelated by EDTA</small>	0.06	0.6	0.06	0.6
Molybdenum (Mo)	0.005	0.05	0.005	0.05
Zinc (Zn) <small>chelated by EDTA</small>	0.08	0.8	0.08	0.8
pH 1% solution	2.98		2.94	
EC @ 1 g/l (mS/cm)	1.50		1.49	

Directions for use

Prepare a stock solution by dissolving 1 kg Solufeed *Superior* v.2 fertilizer in 10 litres of water and then further dilute 1:100 for the final fertigation solution applied to the crop.

Mixing with other fertilizers

Solufeed *Superior* v.2 fertilizers can be mixed with many other fertilizers without problem. However, it is not possible with these not-hazardous-for-transport v.2 products to mix with calcium nitrate in concentrated solution.

General information

Packaging: 20 kg polythene bags, 50 per standard pallet

Harmonised tariff No. 31052000

Technical service: For further information, assistance and access to The Solufeed Advisory Service, please contact Solufeed at the address below.

Precautions

Not classed as hazardous

Detailed health and safety information may be found on the relevant Material Safety Data Sheet (MSDS) available on request from the address below.

Important

The information in this document has been prepared carefully and is provided in good faith. The application, use and processing of any material together with regulatory compliance is the absolute responsibility of the Buyer. All technical information or other advice provided by the Seller in any form is given without warranty to the full extent provided by law.

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Certificate No. FS 573717



Solufeed Ltd
The Depot
Chichester Road
Sidlesham Common
Chichester
West Sussex PO20 7PY
Tel: +44(0)1243 554090
enquiries@solufeed.com
www.solufeed.com