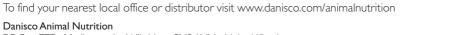
Betafin SI for Pigs - Quick Reference Guide

Application	Suitable for low-humidity conditions and home mixing. Crystalline product, containing 96% betaine and 1% calcium stearate for product flowability.
Economic benefits	 Lower feed costs More uniform pigs Higher quality end product from increased carcass yield Contributing to food safety Proven value in antibiotic growth promoter free nutrition
Recommendations for use	Add Betafin to the standard feed formulation Betafin can be added to the feed formulation for improved pig growth and feed conversion. This is particularly applicable where the potential for high lean growth is limited by low energy intake and/or increased maintenance energy costs.
	Reformulation For reduced feed costs and maintained pig growth and feed conversion: Energy - reduce the digestible energy (DE), metabolisable energy (ME) or net energy (NE) of the total feed by up to 5% Methionine - replace the reduced amount of methionine with an equimolar amount of Betafin Choline - replace all added choline with a bio-equivalent amount of Betafin
Inclusion rate	Add to the standard feed formulation Piglets: 2kg per tonne (0.2%) of finished feed. Monitor feed intake, growth and digestive disturbance. Growing and finishing pigs: 1.25kg per tonne (0.125%) of finished feed. Monitor growth, feed efficiency and efficiency of lean deposition. Lactating sows: 2kg per tonne (0.2%) of finished feed. Monitor piglet weaning weight and subsequent litter size.
	Reformulation Energy reduction: I-I.25kg per tonne (0.I-0.I25%) of finished feed. Energy reduction and methionine/choline reduction: I-I.25kg per tonne (0.I-0.I25%) of finished feed. Methionine and/or choline reduction: replace the reduced amount of methionine with an equimolar addition of Betafin SI. Replace all added choline with a bio-equivalent amount of Betafin SI.
Storage stability	24 months when stored in original packaging. Betafin S1 is water attracting (hygroscopic) in nature and so must be stored in unopened bags and protected from humidity to maintain shelf life.
Processing stability	Heat stable up to 200°C (390°F).
Packaging	25kg multi-wall paper bags, polyethylene lined.
Related services	 Betafin in-feed laboratory analysis - confirms that Betafin has been accurately included in the feed for maximum profit Choline and methionine in-feed laboratory analysis - measures the level of choline and methionine in the feed. This helps to calculate the amount of choline and methionine that can be replaced by Betafin in pig diets



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