



ASTAXANTHIN PARTNERS LTD

Technical Bulletin

Aquasta®

DESCRIPTION

Aquasta® is Astaxanthin Partners Ltd's trade name for its inactivated dried yeast product made from the organism *Phaffia rhodozyma*. Aquasta® provides a natural source of the pigment astaxanthin, which imparts the characteristic red color to the flesh of salmon, trout, and other aquatic species. Astaxanthin Partners Ltd's yeast is specially formulated to maximize bioavailability of the pigment.

APPLICATION

Aquasta® is a free-flowing granular powder that can be readily blended with other feed ingredients to meet formulator's specifications. Aquasta® is available with different concentrations of astaxanthin and this has to be considered to calculate the appropriate inclusion rate. For example, if the astaxanthin content is 10,000ppm, and the target is to obtain 60 mg/kg astaxanthin in the feed, 6 kg of Aquasta® should be incorporated per tonne of feed.

This product is for use as a colouring agent in fish feeds at a rate not to exceed 100 mg/kg astaxanthin in the feed.

TYPICAL ANALYSIS

<u>Description</u>	<u>Amount (%)</u>		
Moisture (vacuum oven)	3.03		
Total Carbohydrate	40.5		
Beta glucans	16.1		
Mannans	10.5		
Protein (N x 6.25)	17.4		
Phosphorus	0.24		
Fat (acid hydrolysis)	37.9		
Ash (acid hydrolysis)	1.11		
Estimated Caloric Value	573 Calories/100g		
Astaxanthin	Minimum 8,000 ppm		
Disrupted yeast (measured by extractability in acetone)	> 85 %		
Total CFU	NMT 10,000/g		
E. Coli	0/g		
Salmonella	0/g		
Total Fungi	NMT 100/g		
<u>Vitamins:</u>		<u>Minerals:</u>	
Vitamin A	1,030 I.U./100g	Calcium	22.9 mg/100g
Thiamine	2.3 mg/100g	Iron	4.4 mg/100g
Riboflavin	0.91mg/100g	Magnesium	35.5 mg/100g
Pantothenate	0.75 mg/100g	Potassium	155 mg/100g
Niacin	2.6 mg/100g		
B ₆ (pyridoxine)	0.31 mg/100g	Arsenic	< 0.6 ppm
Biotin	0.026 mg/100g	Cadmium	< 0.1 ppm
Folic Acid	0.69 mg/100g	Lead	< 0.2 ppm
Choline	328 mg/100g	Mercury	< 0.02 ppm
Vitamin C	250 mg/100g		

<u>Fatty Acids:</u>	<u>Amount (%)</u>	(reported as a percentage of the total identifiable fatty acids present)
C8-0	< 0.1	
C10-0	< 0.1	
C13-0	0.6	
C12-0	< 0.1	
C14-0	0.6	
C14-1	< 0.1	
C15-0	0.4	
C16-0	21.2	
C17-0	0.5	
C18-0	2.9	
C18-1	25.8	
C18-2	42.1	
C18-3	2.1	
C19-0	0.4	
C20-0	0.5	
C20-1	< 0.1	
C20-4	< 0.1	
C20-5	< 0.1	
C21-0	0.1	
C22-0	0.4	
C22-1	< 0.1	
C22-5	0.9	
C22-6	< 0.1	
C24-0	0.7	
C24-1	< 0.1	

<u>Amino Acids:</u>	<u>Amount (%)</u>	(crude protein basis)
Aspartic Acid	7.2	
Threonine	4.0	
Serine	4.0	
Glutamic Acid	8.8	
Proline	3.3	
Glycine	3.9	
Alanine	2.1	
Valine	4.7	
Isoleucine	3.8	
Leucine	6.6	
Tyrosine	2.5	
Phenylalanine	3.6	
Histidine	1.9	
Lysine	4.6	
Arginine	4.0	

PACKAGING

Aquasta® is packaged in 10 and 20 KG boxes contained in a heat-sealed foil bag.

STORAGE AND HANDLING

Shelf life 12 months when unopened packages are stored in a cool, dry place. Avoid unnecessary exposure to air and light. Refrigeration preferred.

DESCRIPTION

Inactive dried yeast product.

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