

Report ID	Report Date: 16/10/2014 Sample Code: 2342(1).140903/309 Pages: 3
Client ID	Company: "PHYTOPHYL" N.G.STAVRAKIS Address: SHIMATARI VIOTIA 32009 -GREECE Tel.: +30 2262 058670 Fax: +30 2262 058735 email: nista@otenet.gr
Sample ID	Product: Hydrolyzed protein Sampling: From client Labelling from Client: Entomella 50SL Batch No 5014016 Pr. date 28/8/14 Quantity: 1kg x 5 items Sample condition: good Preservation: Room Temperature Sample Received: 3/9/2014 Dates of Analysis: 9/9/2014 – 6/10/2014



*The results below are referred to the sample (with sample code: 2342.140903/309) as it is.

	Test Parameters	Results	RL*	Method
1	Total nitrogen (% w/w)	8.61	0.10	AOAC 2001.11
-	Protein equivalent (% w/w) ⁽²⁾	53.8	--	AOAC 2001.11
2	Urea nitrogen	8.15	0.10	AOAC 959.03 (in house)

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-	Equivalent urea (% w/w)	17.5	--	--
3	Nitrogen ammoniacal (% w/w)	0.42	0.2	EN 15475:2009 (in house)
-	Equivalent ammonium salts as NH₄Cl (% w/w)	1.57	--	--
4	Chlorine salts as NaCl (% w/w)	1.2	0.2	ISO 457:1983 (in house)
5	Amino-acids index	0.9	--	Modified AOAC 965.31
6	Dry matter	78.4	0.1	ISO 2920:2004 (in house)
7	Insoluble in water	0.17	0.05	CIPAC MT 10.2 (modified)
8	pH (25⁰C)	6.68	--	CIPAC MT 75.3
9	Density 20⁰C (g/100ml)	1.346	--	CIPAC MT 3.3.2
10	Appearance	syropy liquid	--	Macroscopic examination
11	Color	Deep reddish- brown	--	Macroscopic examination
12	Odor	Characteristic of protein hydrolysis	--	Sensory evaluation
13	Persistent foaming	<1ml (after 1min)	--	CIPAC MT47.1 5.0g sample was weighed and added to CIPAC standard water C (5% w/v), at 25 ⁰ C
14	Viscosity (cSt)	1148	--	OECD Test guideline 114 Cannon-Fenske 500 Viscometer, 40 ⁰ C
15	Explosive properties Oxidizing properties Flashpoint Autoflammability	The product is not flammable. Flashpoint & autoflammability can not be estimated.	--	Theoretically and experimentally approach ⁽²⁾
16	Dilution stability	Dilution factor: 4 Any material has separated after standing for 24 h at 30 ⁰ C	--	CIPAC MT 41.1 CIPAC standard water C was used (25% w/v), at 30 ⁰ C
17	pH / Acidity (% w/w H₂SO₄) Solution 2% Solution 6% Solution 10%	6.67 / 0.035 6.57 / 0.045 6.48 / 0.056	0.005	CIPAC method M T 191. Deionized water was used (pH 5.8-6.2)

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18	Physical compatibility			ASTM E1518 – 05
	Perfekthion 40 EC /BASF (Dimethoate 40% w/v)	Compatible		
	Fastac 10 SC / BASF (Alphacypermethrin 10% w/v)	Compatible	--	
	Decis 2,5 EC / Bayer (deltamethrin 2,5% w/v)	Compatible		
19	Karate 10 CS / Syngenta (L-cyhalothrin 9,43% w/w)	Compatible		
	Surface Tension (mN /m), 20⁰C, 1g/L	70.6	--	Reg. 440/2008/EC Deionized water was used

*RL: Reporting Limit

Notes:

- (1) Protein equivalent is determined according to the equation: Protein (%w/w) = N (w/w) x 6.25
- (2) Flash points are obtained by measuring the lowest temperature at which the vapour/air mixture over a substance, usually an organic liquid, will ignite. Although the sample is an aqueous solution and obviously it is not expected to be flammable, a preliminary test was performed in correspondence with the Pendky-Martens closed tester method. The temperature of the sample was gradually increased up to boiling point. No indication of ignition was observed. For the same reasons no autoflammability is expected. The product contains 20-22% w/w approximately water (mass loss at 105⁰C)
- (3) The formulation is not anticipated to have explosive or oxidizing properties

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