



**VOLUNTARY CERTIFICATION SYSTEM  
"NATIONAL QUALITY CENTER"  
Registered in the Unified Register  
of Voluntary Certification Systems of the Federal  
Agency for Technical Regulation and  
Metrology of the Russian Federation (Rosstandart RF)**

**TEST LABORATORY  
OF THE LIMITED LIABILITY COMPANY "ALLIANCE-CONSULT"  
(LLC "ALLIANCE-CONSULT")  
room 15, premise V, 60 Dmitrovskoe highway, Moscow 127474 tel. +7 (499) 39-408-39  
CERTIFICATE No. POCC RU.31112.ИЛ.00016 is valid until 19.06.2020**

**TEST PROTOCOL No. ПФТ01/112017-725 of 07.12.2017**

Place of testing:	Test laboratory LLC "ALLIANCE-CONSULT"
Applicant:	Limited Liability Company "Aral", 4/5 Chernavskikh street, Bobrovsky village, Sysert district, Sverdlovsk region, Russian Federation 624019
Name of product:	Gammarus extract labeled "Aral"
Manufacturer:	Limited Liability Company "Aral", 4/5 Chernavskikh street, Bobrovsky village, Sysert district, Sverdlovsk region, Russian Federation 624019
Technical regulations:	TR TS 021/2011 "On Food Safety", TR TS 029/2012 "Safety Requirements of Food Additives, Flavorings and Processing Aids", TR TS 022/2011 "Food Products in Terms of Labeling"
Tested according to the requirements:	TR TS 021/2011 "On Food Safety", TR TS 029/2012 "Safety Requirements of Food Additives, Flavorings and Processing Aids", TR TS 022/2011 "Food Products in Terms of Labeling"
Date of sample receipt:	23.11.2017

### TEST RESULTS

Name of indicator	Unit of measurement	Test assessment reference	Actual value of indicator	Reference indicator value
1	2	3	4	5
Toxic elements				
Lead	mg/kg	GOST 30178-96	0.016	Not more than 10,0
Arsenic	mg/kg	GOST 26930-86	0.008	Not more than 12,0
Cadmium	mg/kg	GOST 30178-96	0.003	Not more than 2,0
Mercury	mg/kg	GOST 26927-86	0.001	Not more than 0,5
Pesticides				
HCCH ( $\alpha$ , $\beta$ , $\gamma$ - isomers)	mg/kg	MR 2142-80	Non-detected	Not more than 0.2
DDT and its metabolites	mg/kg	MR 2142-80	0.004	Not more than 2,0
Heptachlor	mg/kg	MR 2142-80	Non-detected	Not more than 0,002
Aldrin	mg/kg	MR 2142-80	Non-detected	Not more than 0,002
Microbiological indicators				
QMAFAnM	CFU/g	GOST 10444.15-94	$2,3 \times 10^3$	Not more than $5 \times 10^4$
CGB (coliforms)	in 0.1 g	GOST 31747-2012	Non-detected	Not allowed
S. aureus	in 1.0 g	GOST 31746-2012	Non-detected	Not allowed
E. coli	in 1.0 g	GOST 30726-2001	Non-detected	Not allowed
Pathogenic microorganisms, incl. salmonella	in 10 g	GOST 31659-2012	Non-detected	Not allowed
Mould	CFU/g	GOST 10444.12-88	< 10	Not more than 100
Physical and chemical indicators				
Mass fraction:				
- main component (chitosan)	%	P 4.1.1672-03	60,6±0,1	"
- moisture	%	P 4.1.1672-03	< 12	-
Mass fraction of ions of heavy metals:				
- copper	µg/g	GOST P 51637-2000	2,2±0,05	-
- zinc	µg/g	GOST P 51637-2000	0,1 ±0,05	-
Viscosity	mPa*s	GOST 33768-2015	24.25	-
Deacetylation degree	%	Chitin and chitosan: preparation, properties and application. Edited by K.G. Skryabin, G.A. Vikhoreva, V.P. Varlamov. - M.: Nauka, 2002. 366 p	80,4±0,04	
Appearance		light beige or yellow powder		

#### CONCLUSION:

The tested samples comply with TR TS 021/2011 "On Food Safety", TR TS 022/2011 "Food Products in Terms of Labeling"

Test operator

S.V. Vavilin

Manager

A.S. Gusarov



*This test report applies only to samples that have been tested*