

# "Yaeyama chlorella powder" Product standard sheet

Updated date : February 21, 2024

No. 1

## General information

Issued by	euglena Co., Ltd.	Address	G-BASE Tamachi, 29-11 Shiba, Minato-ku, Tokyo 108-0014, Japan
		Responsible person	Quality Assurance Section, Production Engineering Development Department
		Classification	Food raw material
Product name		Yaeyama chlorella powder	
Common name		chlorella(Scientific name), chlorella powder	
Use		Food material	
Manufacturer		Yaeyama Shokusan Co., Ltd.	
Location		287-14 Shiraho Ishigaki-city Okinawa 907-0242 Japan	
Location of manufacturing facility		287-14 Shiraho Ishigaki-city Okinawa 907-0242 Japan	Factory name: Yaeyama Shokusan Co., Ltd. Ishigakijima Factory
Contact company		euglena Co., Ltd.	
Person in charge		Department:	Quality Assurance Section, Production Engineering Development Department
Address		Location:	G-BASE Tamachi, 5-29-11 Shiba, Minato-ku, Tokyo 108-0014, Japan
		Phone:	+81-3-3453-4907(Representative)
		E-mail:	<a href="mailto:material_quality@euglena.jp">material_quality@euglena.jp</a>
Distributor			
Person in charge		Department:	
		Position:	
		Name:	
Address		Location:	
		Phone:	
		E-mail:	
Delivered to			
Person in charge		Department:	
		Position:	
		Name:	
Address		Location:	
		Phone:	
		E-mail:	

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## Package information

Product name		Yaeyama chlorella powder	
Form of packaging	Form of load	Corrugated carton	
	Inner content	10 kg	(Management range: 10.05 kg)
	Date of expiration and example of indication	Date of expiration: 6 years (72 months) Example of indication: 6 years	
	Lot indication (Reading instruction)	10001 (Five digits, meaning: 1st lot in 10th period) Numbers: Left 2 digits, manufacturer's fiscal year at packing (10th period is from Oct. 2017 to Sep. 2018) Next 3 digits: Lot number (production order in the fiscal year)	
	Inner1	Size	805 mm × 475 mm × 50 μm
		Material composition	Polyethylene
		Weight of package	70 g
	Inner2	Size	790 mm × 500 mm × 75 μm
		Material composition	Polyethylene
		Weight of package	70 g
Outer	Size	230 mm × 230 mm × 340 mm	
	Material composition	Corrugated carton	
	Weight of package	480 g	Sealing method: Craft tape
Others (availability of desiccating agent/number etc.)	Desiccating agent: Not added Other deoxidants & additives: Not added		
Remarks	Product is enclosed in inner1, and inner2 is located between inner 1 and outer.		

## Label and Outer package



Front



Back



Left



Right

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## Production flow chart

Manufacturing Process	Equipments	Descriptions
1 Pre culture Seed culture	Flask Microscope Culture tank	Propagate and cultivate seed strains of the Yaeyama Chlorella strain. Checking seed stock for quality control. Culturing good quality chlorella seed under the germfree condition.
2 Main culture	Open pond	Culturing enlarged chlorella seed stock in an open pond.
3 Harvest	Pump Centrifugal	Recovering chlorella culture. Centrifuging recoverd chlorella culture.
4 Cooling	Cooling tank	Cooling concentrated culture by centrifugation below 15 degrees C.
5 Sterilization	Blanching unit	Over 130 degrees C and 1 second
6 Dry out	Spray dryer	Over 160 degrees C
7 Shifter	Shifter	50 mesh, 5 magnets (over 6,000 gauss)
8 Filling and Weighing	Scale	Filling with 10±0.05 kg Sampling for the sanitary test
9 Packing	Deaerator Sealer	Packaging after deaerated. Printing Lot No. and an expired date on the corrugated carton.
10 Storage		Storing at temperature without control in the warehouse until shippng.

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## Product specification

Product name	Yaeyama chlorella powder
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	Content	Specification	Analysis example	Method	Frequency	Analytical lab.
Quality spec.	Appearance and properties	No strange taste, odor, or foreign matter	No strange taste, odor, or foreign matter	Sensory inspection	Each lot	Yaeyama shokusan Co., Ltd. Quality control dept
	Used part	Single-celled				
	Flavor	Flavor specific to Chlorella	Flavor specific to Chlorella	Sensory test	Each lot	Yaeyama shokusan Co., Ltd. Quality control dept.
	Foreign element	Not detected	Magnet	5 magnet bars over 6000 gauss		
	Grain distribution	Below 50 mesh	50 mesh through	Seive in-process		
	Moisture	Below 7 [g/100g]	4.4 [g/100g]	Infrared water-content meter		
	Protein	56 or more [g/100g]	65.2 [g/100g]	combustion method		
	Ash	Below 10 [g/100g]	5.9 [g/100g]	Ashing method		
	Sodium	Below 300 [mg/100g]	66.0 [mg/100g]	Atomic absorption spectrometry		
	Iron	10 or more [mg/100g]	27.3 [mg/100g]	o-phenanthroline absorption photometry		
	Total chlorophyll	1.8 or more [g/100g]	3090 [mg/100g]	Alkaline pyridine extraction method		
	Chlorella extract	10 or more [g/100g]	12.8 [g/100g]	Chlorella food quality standard		
Safety spec.	Existing pheophorbide	Below 60 mg	13.50 [mg/100g]	*99th Kanshoku		
	Total pheophorbide	Below 80 mg	44.90 [mg/100g]	*99th Kanshoku		
	Heavy metals(as Pb)	Below 20 ppm	Negative	Sodium sulfide method		
	No. of bacteria	Below 3,000/g	Less than 3,000/g	PFACP method		
	Coli form bacteria	Negative	Negative	BGLB method		
Remark	There is a possibility to change the specification value in the future.					

Storage condition & warranty period		
Sealed	Warrenty period	6 years from production
	Storage condition	Avoid high temperature, high humidity and direct sunlight
After opening	Warrenty period	Use after opening as soon as practicable
	Storage condition	Avoid high temperature, high humidity and direct sunlight
Factors of quality deterioration	Decomposition of chlorophyll by sunlight may cause fading of the powder, but it does not affect the quality.	
Caution		

<b>Note</b>
Analizations conducted for each lot are only items described in "Quality spec." and "Safety spec.".
If you request other analization items, you need to pay for the fee of tests.

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## Reference information

Product name		Yaeyama chlorella powder			
Content	Reference	Analysis example	Method	Frequency	Analytical lab.
Bulk specific gravity	0.45 ~ 0.55 [g/cm <sup>3</sup> ]	0.45~0.55	Bulk density filliting method	Each lot	Yaeyama shokusan Co., Ltd. Quality cotrol dept
Lipid	7 ~ 20 [g/100g]	12.7 [g/100g]	Acid hydrolysis method	Once a year	Japan Food Research Laboratories etc.
Dietary fiber	5 ~ 18 [g/100g]	14.6 [g/100g]	Enzymatic-gravimetric method		
Available carbohydrate	0 ~ 4.5 [g/100g]	1.5 [g/100g]	Calculation based on food labeling standard		
Energy	360 ~ 440 [kcal/100g]	402.0 [kcal/100g]			
Arsenic(as As)	Not detected (below 2 ppm)	Not detected	Chlorella food quality standard		
Vitamin B2	2 ~ 9 [mg/100g]	5.17 [mg/100g]	HPLC		
Note					

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## Other additional information

Product name	Yaeyama chlorella powder
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	Content	Detail	presence of certificate	Paper name or remarks
Other additional information	Product name	Yaeyama chlorella powder	NO	
	Raw material processed area	Ishigaki-city, Okinawa, Japan	YES	Certificate of origin
	origin Raw material	Chlorella	NO	
	Country origin material	Japan (Okinawa)	NO	
	Classification of food/food additive	Food	NO	
	Blending ratio	Yaeyama chlorella powder 100%	NO	
	Secondary raw material or carry-over	Nothing	No	
	Allergic substance(27items)	Nothing	YES	Certificate of allergic substance
	Genetic recombination(GMO)	Not covered	YES	Certificate of GMO
	Bovine etc. source material(BSE related)	Nothing	YES	Certificate of BSE
	Pesticide remnant	Nothing	YES	ANALYSIS CERTIFICATE
	Proof of conformity with direct packaging material	Conformity	YES	Examination transcript
Other certificate	HALAL, Kosher	YES	<ul style="list-style-type: none"> <li>• HALAL CERTIFICATE</li> <li>• KOSHER CERTIFICATE</li> </ul>	

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Revision record		
Edition number	Date	Description
	Auther	
First	April 1, 2017 Yoshino	Changed Yaeyama syokusan company fom to euglena company's (no change in specification values etc.)
Second	April 5, 2018 Matsui	Changed address, label and outer package.
Third	May 7, 2018 Kanayama	Changed date of expiration to 6 years from 3 years.
Fourth	November 14, 2018 Matsuzaki	Changed responsible person in charge and added page of No. 6.
Fifth	April 19, 2019 Matsuzaki	Change in Quality assurance manager.
Sixth	January 14, 2020 tatara	No.1_Inquiry destination name, No.4 quality standard significant figures changed
Seventh	January 5, 2021 shiotsuki	Added No.1_contact person name and No.4 quality standard test method
Eighth	February 19, 2021 shiotsuki	No.1_Responsible person's name, Contact person's name, No.3 Process control added, No.4 Quality standard value changed
Ninth	March 4, 2021 shiotsuki	No.3_Process control partly modified, No.4_Quality standard value and analysis example partly modified
tenth	July 6, 2023 Gotoh	No.2_Correction of inner package size.
eleventh	February 21, 2024 Gotoh	No.5_Corrected the analysis section on the Reference Information. No.2_Exterior photo update.

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