

Product Code:	BULK01CACAO	Technical Data Specification ID:	TDS-BULK01CACAO	Issue:	2
Product Name:	BULK ORGANIC CACAO NIBS (RAW, PERU)			Date:	20/09/2023

PRODUCT INFORMATION

BOTANICAL NAME Theobroma Cacao

VARIETY Criollo, Forastero and Trinitario

COUNTRY OF ORIGIN Peru

BRIEF DESCRIPTION Containing over 300 active substances, including phenyl, ethylamine and serotine, cacao beans are the raw base for chocolate manufacture. Originating from the tropical climates in South America, the Theobroma cacao tree is sacred amongst the Mayans and Aztecs. On its own, the cacao beans are a fine “superfood” as they foster a variety of antioxidants and other nutrients. Produced by organic growers in Peru, cacao beans contain more antioxidants than red wine and 3 more than green tea, cacao beans embody a rich source of minerals. Harvested by hand as pods, the raw beans are selected for the finest quality and fermented to reduce their initial bitterness. After cleaning the dried beans in natural water, they are peeled and their core extracted to be broken into “nibs”. The production process fully preserves the nutritional value of the cacao without any additives.

Our Organic Peruvian Cacao Nibs is certified to EU Organic Standards according to Regulation (EU) 2018/848 and Great British Organic Standards by the Soil Association under the code GB-ORG-05.

INGREDIENTS 100% Organic Cacao Beans

INTENDED USE Ready to eat or as an ingredient

SUGGESTED USE 10-15g per day.

PACKAGING/ NET WEIGHT Food grade plastic bag in carton box/ 5,10,15 or 20kg

SHELF LIFE & STORAGE 24 months from the manufacture date under suitable storage conditions. It should be stored under suitable conditions in a cool and dry place. Keep the cacao nibs far from direct sunlight.

Document Title	Technical Data Specification	Issue: 6	Date: 21/08/2023		Page 1 of 11
QMS Location	\\gsfdc1\Quality\APPROVED QMS DOCUMENTS\9. PRODUCT SPECIFICATION\03 BULK PRODUCT SPECIFICATIONS	Created by		Approved By	
Reason for change	Endangered species of Fauna and Flora Statement added			DOC Number	09-03-1001DOC

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NUTRITIONAL INFORMATION

Nutrition	Per 100g	Units	%RI
Energy	2459/597	kJ/kcal	
Fat	54	g	
of which saturates	33	g	
of which mono-unsaturates	17	g	
of which polyunsaturates	1.8	g	
Carbohydrate	3.6	g	
of which sugar	0.5	g	
Fibre	23	g	
Protein	13	g	
Salt	0.0	g	
Phosphorus	448	mg	64%
Magnesium	279	mg	74%
Iron	2.6	mg	19%
Cooper	0.33	mg	33%
Manganese	3.3	mg	166%

AUTHORISED HEALTH BENEFITS BASED ON MICRONUTRIENTS

Micronutrients in this product contribute to:

- ✓ normal functioning of the nervous system
- ✓ normal muscle function
- ✓ maintenance of normal blood pressure
- ✓ normal energy-yielding metabolism
- ✓ normal function of cell membranes
- ✓ maintenance of normal bones
- ✓ maintenance of normal teeth
- ✓ normal oxygen transport in the body
- ✓ reduction of tiredness and fatigue
- ✓ electrolyte balance
- ✓ normal skin pigmentation
- ✓ normal protein synthesis
- ✓ normal psychological function
- ✓ process of cell division
- ✓ normal cognitive function
- ✓ maintenance of normal connective tissues

We periodically review our nutrition information based on a risk assessment to account for seasonal variability, growing condition and other factors that cause nutrition result to vary. Please find our updated TDS.

The nutritional information provided in this document is based on nutritional testing and on average, as required by regulation (EC) No 1169/2011. The information is not meant to ensure warranty of characteristics. It comes without commitment and is not valid for any claim of warranty and product liability respectively.

ORGANOLEPTIC PROPERTIES

<i>Appearance/Texture</i>	Solid Pieces
<i>Flavour</i>	Characteristic
<i>Aroma</i>	Characteristic
<i>Colour</i>	Dark Brown

PHYSICAL CHARACTERISTICS

Document Title	Technical Data Specification	Issue: 6	Date: 21/08/2023		Page 2 of 11
QMS Location	\\gsfdc1\Quality\APPROVED QMS DOCUMENTS\9. PRODUCT SPECIFICATION\03 BULK PRODUCT SPECIFICATIONS	Created by		Approved By	
Reason for change	Endangered species of Fauna and Flora Statement added			DOC Number	09-03-1001DOC

09-03-1001DOC

Technical Data Specification

Product Code:	BULK01CACAO	Technical Data Specification ID:	TDS-BULK01CACAO	Issue:	2
Product Name:	BULK ORGANIC CACAO NIBS (RAW, PERU)			Date:	20/09/2023

<i>Particle Size (mm)</i>	4-12mm
<i>Foreign Materials</i>	<1% (Measured in 5mm Sieve)
<i>Solubility</i>	N/A
<i>Density</i>	N/A

CHEMICAL CHARACTERISTICS

<i>Moisture</i>	Max. 5%
<i>Ash</i>	N/A
<i>Water Activity</i>	N/A

MICROBIOLOGICAL CHARACTERISTICS

Name	Maximum Limit	UoM
<i>Plate Count</i>	≤100000	cfu/g
<i>Yeast</i>	≤1000	cfu/g
<i>Mold</i>	≤1000	cfu/g
<i>E. Coli</i>	Not Detected	cfu/g
<i>Salmonella</i>	Not Detected	/25g
<i>Bacillus Cereus</i>	≤10000	cfu/g
<i>Listeria</i>	Not Detected	/25g
<i>Clostridium Perfringens</i>	≤1000	cfu/g
<i>Staphylococcus Aureus</i>	≤100	cfu/g
<i>Enterobacteriaceae</i>	≤1000	cfu/g

DIETARY INFORMATION

Diet	Suitable For	Certified?	Comments
Organic	Yes	Yes	
Vegetarian	Yes	Yes	
Vegan	Yes	Yes	
Jewish / Kosher	Yes	Yes	
Muslin / Halal	Yes	No	Suitable but not certified

Document Title	Technical Data Specification	Issue: 6	Date: 21/08/2023		Page 3 of 11
QMS Location	\\gsfdc1\Quality\APPROVED QMS DOCUMENTS\9. PRODUCT SPECIFICATION\03 BULK PRODUCT SPECIFICATIONS	Created by		Approved By	
Reason for change	Endangered species of Fauna and Flora Statement added			DOC Number	09-03-1001DOC

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Product Name:	BULK ORGANIC CACAO NIBS (RAW, PERU)			Date:	20/09/2023

Allegens:-When purchased in bulk size original packaging, manufacturer allergen policy will apply.
When purchased in quantities that need re-packaging, our allergen policies will apply.

Component	Manufacturer			Nuts in Bulk (Applies when bought in small quantities that need re-packaging)		
	In Product	Processed in Same Equipment	Handled on Site	In Product	Processed in Same Equipment	Handled on Site
Cereals containing GLUTEN and products thereof	NO	NO	NO	NO	YES	YES
EGGS or its derivatives	NO	NO	NO	NO	NO	NO
FISH or its derivatives	NO	NO	NO	NO	NO	NO
CRUSTACEANS / SHELLFISH	NO	NO	NO	NO	NO	NO
MOLLUSCS	NO	NO	NO	NO	NO	NO
PEANUTS or derivatives	NO	NO	NO	NO	YES	YES
SOYA BEANS or derivatives	NO	NO	NO	NO	YES	YES
MILK (LACTOSE) or its derivatives	NO	NO	NO	NO	YES	YES
NUTS, tree nuts:	NO	NO	NO	NO	YES	YES
CELERY, including celeriac and its derivatives	NO	NO	NO	NO	YES	YES
MUSTARD, referring to all parts of the plant and derivatives thereof	NO	NO	NO	NO	YES	YES
SESAME SEEDS or derivatives	NO	NO	NO	NO	YES	YES
SULPHITES >10ppm – Sulphite quantity to be given in ppm	NO	NO	NO	NO	YES	YES
LUPIN seeds or derivatives	NO	NO	NO	NO	NO	NO

CONTAMINANTS

Heavy Metals (lead, cadmium, mercury, tin, arsenic)
Mycotoxins (aflatoxins, ochratoxin A, patulin)
Nitrates
Polycyclic Aromatic Hydrocarbons (PAH)

According to Regulation (EC) No 2023/915
According to Regulation (EC) No 2023/915
According to Regulation (EC) No 2023/915
According to Regulation (EU) No 2023/915

Packaging description	Food grade plastic bag in cardboard box					
Pack size	5kg in a bag, 20kg in a box					
Objective Criteria	N/A					
Material Specification						
Primary packaging	Nylon & polyethylene bag					
Print (Litho/Flexo)	N/A					
Colours	Transparent					
Material	Nylon/Polyethylene					
Packaging dimension in mm (L*W*H)	545 x 320 x 50			Thickness	0.1 mm	
Weight of packaging	N/A					
Content of plastic food contact material (%)	100%		Content of metal & rubber (%)	N/A		
Recyclability	100% Recycled					

Document Title	Technical Data Specification	Issue: 6	Date: 21/08/2023	Page 4 of 11	
QMS Location	\\gsfdc1\Quality\APPROVED QMS DOCUMENTS\9. PRODUCT SPECIFICATION\03 BULK PRODUCT SPECIFICATIONS	Created by		Approved By	
Reason for change	Endangered species of Fauna and Flora Statement added			DOC Number	09-03-1001DOC

09-03-1001DOC

Technical Data Specification

Product Code:	BULK01CACAO	Technical Data Specification ID:	TDS-BULK01CACAO	Issue:	2
Product Name:	BULK ORGANIC CACAO NIBS (RAW, PERU)			Date:	20/09/2023

<i>Lamination/Layers</i>	N/A	<i>Coating</i>	N/A
<i>Sealing method</i>	Heat Seal		
<i>Secondary packaging</i>	Carboard Box		
<i>Print (Litho/Flexo)</i>	N/A		
<i>Colours</i>	Brown		
<i>Material</i>	Corrugated cardboard		
<i>Packaging dimension in mm (L*W*H)</i>	285 x 490 x 310	<i>Thickness</i>	7mm
<i>Weight of packaging</i>	1 kg		
<i>Content of plastic food contact material (%)</i>	N/A	<i>Content of metal & rubber (%)</i>	N/A
<i>Recyclability</i>	100% Recycled		
<i>Lamination/Layers</i>	N/A	<i>Coating</i>	N/A
<i>Sealing method</i>	Tape		

Quality, Regulatory & Brand Integrity Compliance

Category	Compliance Criteria	Yes/No/N/A
Good Manufacturing Standards	Compliance Criteria The packaging meets hygiene and traceability requirements Regulation (EC) No. 2023/2006 on good manufacturing practice. FCMS should be manufactured in compliance with general and detailed rules on good manufacturing practice (GMP).	Yes
Paper & board	Quality assurance system, quality control system, and documentation system is established, implemented, and maintained. The packaging supplier is GFSI certified to demonstrate GMP in the manufacturing process.	No
Printed packaging	The packaging is chlorine free (TCF) or elemental chlorine free (ECF) Photo initiators –including benzophenone (4 methyl benzophenone) are not used Acrylamide is not used in printers and board mills	N/A N/A N/A
Packaging chemical migration test	low odor and migration inks and varnishes to ensure migration legislative limits on benzophenone and its derivatives are met ITX is not used as a photo initiator in printed inks Migration tests for packaging materials available.	N/A N/A Yes
Non-intentionally added substances (NIAS)	The packaging migration test include all legislatives chemical and Tinuvin UV absorber, phthalates and monomers – SVHCs Phthalates in plastic foils and bags The packaging is free from impurities that may be non-intentionally added to food-contact packaging material including substances such as contaminants, reaction and degradation products	Yes Yes
Nano particles	The packaging does not contain or consist of engineered nanoparticles	Yes
PVC & PVCD	The plastic material is free from PVC	Yes

Document Title	Technical Data Specification	Issue: 6	Date: 21/08/2023		Page 5 of 11
QMS Location	\\gsfdc1\Quality\APPROVED QMS DOCUMENTS\9. PRODUCT SPECIFICATION\03 BULK PRODUCT SPECIFICATIONS	Created by		Approved By	
Reason for change	Endangered species of Fauna and Flora Statement added			DOC Number	09-03-1001DOC

Product Code:	BULK01CACAO	Technical Data Specification ID:	TDS-BULK01CACAO	Issue:	2
Product Name:	BULK ORGANIC CACAO NIBS (RAW, PERU)			Date:	20/09/2023

Mineral Oil Hydrocarbons	Migration of Mineral Oil Hydrocarbons (MOH), must meet German MOSH Benchmark Levels (send test report) and EU limits on MOAH	Yes
Chemical substance of very high concern (SVHC)	The packaging does not contain or use acrylamides, novolac glycidyl ethers, perfluorooctane sulphonate, phthalates, NOGE, PFOS & PFOAS, PVC and Derivatives, Semi-carbazides, 4-methylbenzophenone	Yes
Additives	The material complies with EU food contact material legislation and does not contain dual additives chemicals e.g., Phosphoric Acid or Sulphur Dioxide	Yes
Recycled plastics	Comply with New Regulation (EU) 2022/16161 on recycled plastic materials and articles intended to come into contact with foods.	N/A
Bisphenol A	Does the packaging material for organic raw material contain Bisphenol in plastics and epoxy resin?	No
Metallized & rubber packaging e.g., foil bags	Packaging material does not contain Bisphenol and meet the limits Bisphenol A (BPA) BADGE, BFDGE, NODGE	Yes
Compostable packaging	The compostable/biodegradable packaging complies with European Standard for Compostable Packaging (EN13432)	N/A

The packaging is in accordance with the EU Legislation:

- Council Directive on Packaging and Packaging Waste 94/62/EC and its consecutive amendments.
- Commission Regulation (EC) No 1935/2004 on Materials and Articles Intended to Come into Contact with Food and its consecutive amendments.
- Commission Regulation (EU) No 10/2011 on Plastic Materials and Articles Intended to Come into Contact with Food and its consecutive amendments.

GMO FREE

This product is not subject to genetic modifications. Process controls are in place to ensure no accidental contamination with genetically modified materials, or materials derived thereafter, can occur. We hereby certify that this product is not subject to labeling under EU Regulations 1829/2003/EC and 1830/2003/EC on genetically modified food and feed.

WADA Statement

We declare that our products do not contain any of the substances mentioned in the Yearly updated "Prohibited List" from the World Anti-Doping Agency.

PESTICIDES

This product complies with the requirements outlined in Regulation (EU) 2018/848 of the European Parliament and of The Council (and consecutive amendments). It also complies with Soil Association strict organic farming standards. During the manufacturing process the product and the packaging materials are not exposed to pesticides or pesticide residues. Pesticides are not stored on site, nor used in the manufacturing or warehousing areas.

IRRADIATION AND ETHYLENE OXIDE

We declare that the product listed above is not treated with ionizing radiation (r2) or ethylene oxide (EtO) for any purposes and as such are free of gamma ray and ethylene oxide residue and complies with the EU regulation 1999/3/EC

BSE STATEMENT

This product is manufactured exclusively from plant source, and does not contain any components from animal origin. It has not been derived from any animal source, and has not come into contact with any components of animal origin.

Document Title	Technical Data Specification	Issue: 6	Date: 21/08/2023		Page 6 of 11
QMS Location	\\gsfdc1\Quality\APPROVED QMS DOCUMENTS\9. PRODUCT SPECIFICATION\03 BULK PRODUCT SPECIFICATIONS	Created by		Approved By	
Reason for change	Endangered species of Fauna and Flora Statement added			DOC Number	09-03-1001DOC

Product Code:	BULK01CACAO	Technical Data Specification ID:	TDS-BULK01CACAO	Issue:	2
Product Name:	BULK ORGANIC CACAO NIBS (RAW, PERU)			Date:	20/09/2023

RESIDUAL SOLVENTS

No residual solvents are used in the manufacturing process.

LEVEL OF UNDESIRABLE SUBSTANCES

The strictly controlled production process of this product ensures that the undesirable substances levels (heavy metals, PAH, mycotoxins, etc.) are below the limits identified by EU legislation (No 2023/915 on maximum levels for certain contaminants in food and consecutive amendments, Commission Regulation No 2073/2005, including the recommendations provided by EFSA on food contaminants).

ANIMAL TESTING STATEMENT

NUTSINBULK confirms that we do not conduct or commission animal testing of any products.

ENDANGERED SPECIES OF FAUNA AND FLORA

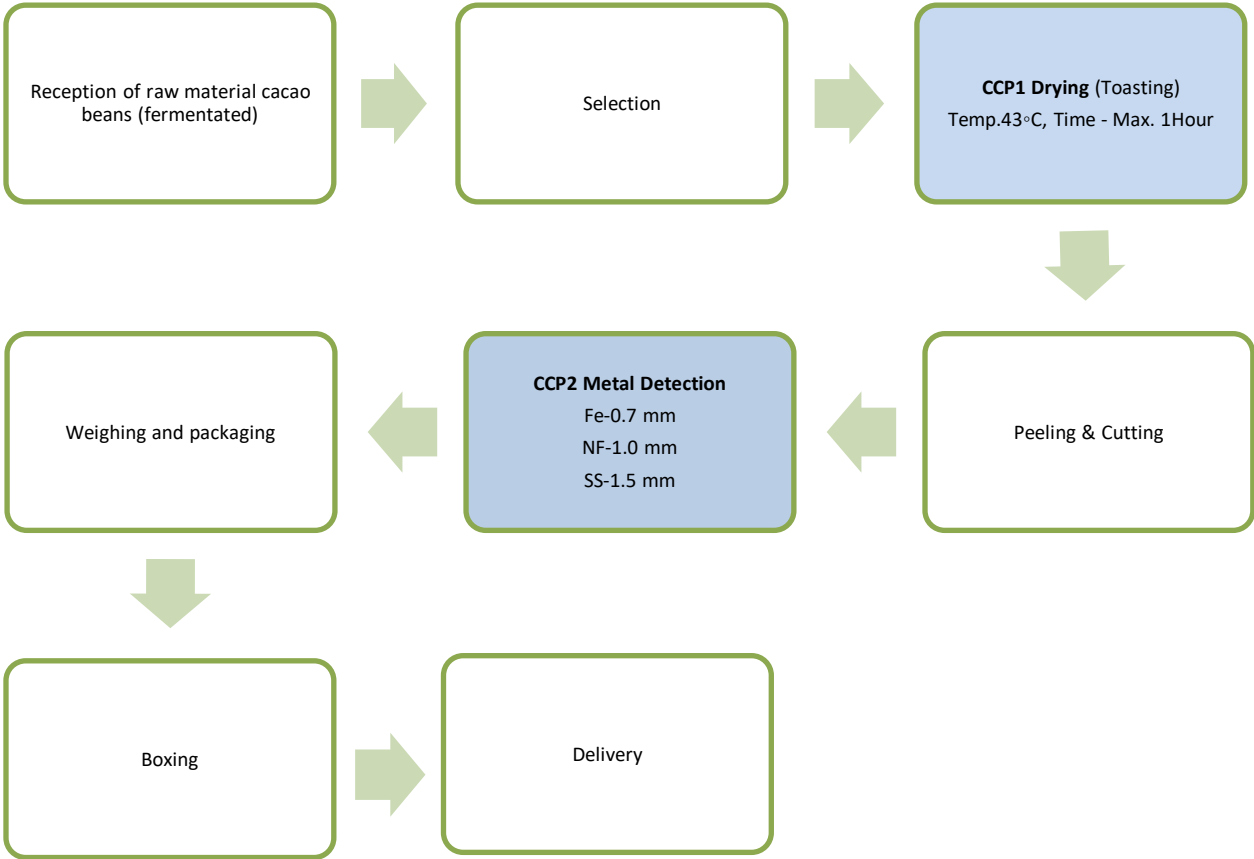
None of our products are listed as banned on the world Convention on International Trade of Endangered Species of Fauna and Flora (CITES).

Document Title	Technical Data Specification	Issue: 6	Date: 21/08/2023		Page 7 of 11
QMS Location	\\gsfdc1\Quality\APPROVED QMS DOCUMENTS\9. PRODUCT SPECIFICATION\03 BULK PRODUCT SPECIFICATIONS	Created by		Approved By	
Reason for change	Endangered species of Fauna and Flora Statement added			DOC Number	09-03-1001DOC

09-03-1001DOC	Technical Data Specification
----------------------	-------------------------------------

Product Code:	BULK01CACAO	Technical Data Specification ID:	TDS-BULK01CACAO	Issue:	2
Product Name:	BULK ORGANIC CACAO NIBS (RAW, PERU)			Date:	20/09/2023

PROCESS FLOW



Document Title	Technical Data Specification	Issue: 6	Date: 21/08/2023		Page 8 of 11
QMS Location	\\gsfdc1\Quality\APPROVED QMS DOCUMENTS\9. PRODUCT SPECIFICATION\03 BULK PRODUCT SPECIFICATIONS	Created by		Approved By	
Reason for change	Endangered species of Fauna and Flora Statement added			DOC Number	09-03-1001DOC

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Product Name:	BULK ORGANIC CACAO NIBS (RAW, PERU)			Date:	20/09/2023

MATERIAL SAFETY DATA SHEET

INGREDIENTS	100% Organic Cacao Beans
HAZARD IDENTIFICATION	Not classed as hazardous
FIRST AID MEASURES	
SKIN	Wash with plenty of water.
INGESTION	Seek medical attention if required.
INHALATION	Remove exposure. Seek medical attention if required.
EYES	Wash out with plenty of water / eye solution. Seek medical attention if irritation persists
FIRE FIGHTING MEASURES	
EXTINGUISHING MEDIA	Use appropriate media relating to other components of fire- CO2
SPECIAL HAZARDS OF PRODUCT	Not Flammable
PROTECTIVE EQUIPMENT FOR FIREFIGHTING	Wear full protective clothing and self-contained breathing apparatus.
ACCIDENTAL RELEASE MEASURES	
SPILLAGES	Treat as any other food material
PERSONAL PRECAUTIONS	No special procedures identified
ENVIRONMENTAL PRECAUTIONS	Minimize contamination of drains, surface and ground waters.
HANDLING AND STORAGE	
HANDLING	Handle under good hygiene procedures as with any food material.
STORAGE	Store away from air, heat and light exposure. Store in original container in cool area, under cover.
EXPOSURE CONTROL / PERSONAL PROTECTION	
BODY PROTECTION	Normal work wear
SKIN PROTECTION	Rubber / PVC gloves

Document Title	Technical Data Specification	Issue: 6	Date: 21/08/2023		Page 9 of 11
QMS Location	\\gsfdc1\Quality\APPROVED QMS DOCUMENTS\9. PRODUCT SPECIFICATION\03 BULK PRODUCT SPECIFICATIONS	Created by	G. Worrall	Approved By	T. Kufa
Reason for change	Endangered species of Fauna and Flora Statement added			DOC Number	09-03-1001DOC

Product Code:	BULK01CACAO	Technical Data Specification ID:	TDS-BULK01CACAO	Issue:	2
Product Name:	BULK ORGANIC CACAO NIBS (RAW, PERU)			Date:	20/09/2023

EYE PROTECTION

Chemical goggles

RESPIRATORY PROTECTION

As it is powder form- respiratory protection may be required

PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE

Powder

AUTO-FLAMMABILITY

No

STABILITY AND REACTIVITY

STABILITY

Stable under normal conditions. Avoid exposure to air, light and humidity.

CONDITIONS TO AVOID

None Identified.

TOXICOLOGY INFORMATION

Not applicable

ECOLOGICAL INFORMATION

This product is ultimately biodegradable.

DISPOSAL CONSIDERATIONS

Dispose of according to relevant local / national guidelines.

TRANSPORT INFORMATION

Non hazardous for air, sea and road freight.

REGULATORY INFORMATION

No data

Document Title	Technical Data Specification	Issue: 6	Date: 21/08/2023		Page 10 of 11
QMS Location	\\gsfdc1\Quality\APPROVED QMS DOCUMENTS\9. PRODUCT SPECIFICATION\03 BULK PRODUCT SPECIFICATIONS	Created by		Approved By	
Reason for change	Endangered species of Fauna and Flora Statement added			DOC Number	09-03-1001DOC

09-03-1001DOC	Technical Data Specification
----------------------	-------------------------------------

Product Code:	BULK01CACAO	Technical Data Specification ID:	TDS-BULK01CACAO	Issue:	2
Product Name:	BULK ORGANIC CACAO NIBS (RAW, PERU)			Date:	20/09/2023

ADDITIONAL INFORMATION

This Product is 100% Natural; it is not considered hazardous.

The information in this document is believed to be true and accurate at the time of creation, however all statements contained in this document are made without warranty. The entirety of the potential methods of use is not within our control and therefore no responsibility or liability will be assumed for use of this product.

Version No:	Review Date:	Reason for the change	Changed by:	Authorized by:
2	20/09/2023	Update into new template		J. Chang

Specification Agreement and Authorization

Please sign and return this page within 14 days of receipt of the specification.

If after a total of 28 days from the receipt of the specification we have not received either the signed acceptance page or discussed and recorded any derogation or deviation from this specification, we will deem that the specification has been accepted.

No further contact regarding formal approval of this specification will be made.

Supplier	Name	Position	Signature	Date
		Technical & Operations Director	I have authorized this form electronically	22/09/2023
Customer	Name	Position	Signature	Date

Document Title	Technical Data Specification	Issue: 6	Date: 21/08/2023		Page 11 of 11
QMS Location	\\gsfdc1\Quality\APPROVED QMS DOCUMENTS\9. PRODUCT SPECIFICATION\03 BULK PRODUCT SPECIFICATIONS	Created by		Approved By	
Reason for change	Endangered species of Fauna and Flora Statement added			DOC Number	09-03-1001DOC