RADAD INTERNATIONAL



COCOA NIBS SPECIFICATION SHEET - RADAD

GENERAL INFORMATION	
Product name	Cocoa Nibs (*Theobroma cacao*)
Product description	Broken pieces of roasted and shelled cocoa beans (cocoa kernels), from Forastero and select Trinitario varieties. Used as the main raw material for cocoa mass (cocoa liquor) and other cocoa products
Ingredients	100% roasted cocoa nibs. No sugar, flavouring or other additives
Process	Cleaning and sorting, roasting, cracking, winnowing, grading
Origin	Africa
Intended use	Cocoa processing, chocolate making, cocoa mass and liquor production, flavour systems, bakery, confectionery and specialty applications
HS code	1801.00 (cocoa beans, whole or broken, raw or roasted)
Manufacturer information	Radad International Company Limited, info@radadinternational.com

PHYSICAL AND SENSORY SPECIFICATIONS		
PARAMETER	**SPECIFICATION**	**REF. METHOD**
Appearance	Clean, broken kernels of roasted cocoa beans, free from whole shells and excessive fines	Visual
Colour	Dark brown to reddish-brown	Visual
Odour and taste	Clean roasted cocoa aroma. No off-odours, mould or smoky notes	Sensory
Particle size	3 – 7 mm, min. 80% by weight	Sieve analysis
Shell content	Max. 1.75% (alkali-free basis)	Codex CXS 141-1983
Foreign matter (excluding shell)	Max. 0.5% (stones, dirt and other extraneous matter)	Visual / gravimetric

CHEMICAL SPECIFICATIONS		
ANALYSIS	**SPECIFICATION**	**REF. METHOD**
Moisture content	Max. 3.5%	IOCCC 1 (1952)
Fat content (cocoa butter)	50 – 57%	IOCCC 14 (1972)
Protein	11 – 14%	Kjeldahl
Ash	Max. 5%	Gravimetric
pH (cocoa liquor made from the nibs)	5.2 – 6.0	IOCCC 15 (1972)
Theobromine	0.9 – 3.0%	HPLC
Total polyphenols	Approx. 5 – 8%	Folin-Ciocalteu

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MICROBIOLOGICAL SPECIFICATIONS		
PARAMETER	**SPECIFICATION**	**REF. METHOD**
Total plate count	Max. 10,000 cfu/g	ISO 4833-1
Yeast and mould	Max. 500 cfu/g Max.	ISO 21527-2
Enterobacteriacea	100 cfu/g	ISO 21528-2
e E. coli	Not detected in 25 g	ISO 16649-3
Salmonella	Not detected in 25 g	ISO 6579-1

CONTAMINANTS	
PARAMETER	**SPECIFICATION**
Aflatoxin B1 + B2 + G1 + G2	< 4 µg/kg (ppb)
Aflatoxin B1	< 2 µg/kg (ppb)

PACKAGING, STORAGE AND SHELF LIFE	
Packaging	25 kg corrugated cartons with inner polyethylene bag, complying with international standards
Storage temperature	15 – 22 °C
Relative humidity	Max. 65%
Storage conditions	Clean, dry, odour-free environment. Rotate stock (first in, first out)
Shelf life	24 months after production date under recommended storage conditions

ALLERGEN DECLARATION		
Allergenic foods and derivatives	**Present by nature or added**	**Potential cross-contact**
Celery and products thereof	No	No
Cereals containing gluten and products thereof (barley, rye, oat, wheat such as spelt and khorasan wheat)	No	No
Crustaceans and products thereof	No	No
Eggs and products thereof	No	No
Fish and products thereof	No	No
Lupin and products thereof	No	No
Milk and products thereof (including lactose)	No	No
Molluscs and products thereof	No	No
Mustard and products thereof	No	No
Peanuts and products thereof	No	No
Sesame seeds and products thereof	No	No
Soybean and products thereof	No	No
Tree nuts and products thereof (almonds, Brazil nuts, cashews, hazelnuts, macadamia nuts, pecans, pistachio nuts, walnuts)	No	No
Sulphur dioxide and sulphites (naturally present or added)	No	No

GMO DECLARATION

No genetically modified organisms (GMOs) or transgenic breeding raw cocoa beans were used in the production of this product.