



Technical Data Sheet (TDS)

(Nigella Sativa Seeds)

1- Botanical origin identification

Family	Ranunculaceae
Genus	Nigella
Species	Organic N. sativa
Variety	black caraway, black seed, black cumin, fennel flower, nigella, nutmeg flower, Roman coriander, and kalanji
Synonyms	Nigella cretica Mill. Nigella indica Roxb. Nigella truncata Viv.

2- Product availability

Harvest Duration	June – December
Product Available	All year

3- Raw material process

The processing of *Nigella Sativa* Seeds

The operation was done as follows:

- * Preparing the raw material on the production line by the method of classification according to the sizes through the sifters.
- * Sterilizing the product through the process of drawing dust using the fans of the Delta device with a force of fifty horsepower by the PLC system.
- * Going through Sortex device to separate all strange colors and exclude small and white spots from the seeds.
- * Passing through the Magnets stage line to clear any metal objects from the raw material
- * Passing through Sieve Stage to clear any foreign objects from the raw material
- * Then passing through the ventilation stage inside Its house.
- * The last stage automatic packaging

4- Classifications relevant for *Nigella Sativa*

Nigella sativa Plant and seeds. SCIENTIFIC CLASSIFICATION OF THE PLANT(7) Kingdom: Plantae. Subkingdom: Tracheobionata that is, vascular plant. Supervision: Spermatophyte. Order: Ranunculales. Family: Ranunculaceae-Butter cup family. Genera: *Nigella*. Species: *sativa*. Cas Number: 90064-32-7

5- Nigella Sativa - Specification

ORGANOLEPTIC PARAMETERS		CHEM. PHYS. PARAMETERS	per 100g
Shape	Seeds	Relative density	0.85 – 0.95
Colour	Black/ gray	Refractive index	1.464 – 1.475
Odour	spicy, pungent characteristic	Flash point	> 300°C
Flavour	Cummin, spicy	Iodine value	107 – 129 g I ₂ /100g
		Unsaponifiable matter	≤ 3 %
		Peroxide value	< 25 meqO ₂ /Kg
		Acid value	< 25 mgKOH/g

FATTY ACID COMPOSITION		NUTRITIONAL VALUES	per 100g
myristic acid C 14:0	0.1 – 0.4	Energy	3700 kJ / 900 kcal
myristic acid C 16:0	9.0 – 13.0%	Fat, total	100 g
stearic acid C18:0	2.0 – 4.0%	Saturated fatty acids	15.8 %
oleic acid C 18:1	18.0 – 27.0%	Fatty acids	25.1 %
linoleic acid C 18:2	50.0 – 60.0%	Polyunsaturated fatty acids	59.0 %
Alpha linolenic acid C 18:3	0.1 – 2.0%	Cholesterol	0.00 g
arachidic acid C 20:0	0.1 – 0.4%	Protein	0.00 g
eicosenoic acid C 20:1	0.1 – 0.7%	Carbohydrates	0.00 g
eicosadienoic acid C 20:2	2.0 – 3.5 %	sugar	0.00 g
		Roughage	0.00 g
		Salt	< 0.1

VITAMINS	per 100g	MINERALS	per 100g
Vitamin E (mg):	2.66 mg/100g	Iron (mg)	56-59 mg
- Alpha-Tocopherol:	2.10 mg/100g		
- Gamma-Tocopherol:	0.565 mg/100g		

PACKAGING	
Paper bags	10 kg , 25 kg , 50 kg
Containers	350 MT
Storage	Store in a cool and dry place in unopened original packaging, or in a stainless steel tank at max. Store at 15 °C, preferably under nitrogen blanket

6- GMO free Statement:

Product is GMO free.

7- Irradiation Statement:

To produce the product, no irradiated materials were used; product itself was also not irradiated.

8- Animal protection and Vegan Statement:

Product is purely vegetable origin and comes during its manufacture, storage and its transport with no animal materials in contact. Neither our product nor its ingredients have been tested on animals. Likewise, no animal testing will be undertaken at present and in future.

9- Sterility:

Product is free of Candida albicans, Staphylococcus aureus and Pseudomonas aeruginosa bacteria.

10- Allergen free

Product contains no detectable amounts of proteins and consequently has no risk of allergens as defined by the food law. If allergens should be present, we will expressly point out.

11-Heavy metals:

According to our current knowledge our product is free of heavy metals. Preservative free: Our product has been provided according to our current knowledge neither with synthetic preservatives agents, such as formaldehyde and parabens, nor these have been used in the manufacture.

The information contained in this specification is based on data considered to be accurate and reliable as at the date of the specification to the best of the Pure Herbs Company for Import and Export knowledge and belief. It is the user's obligation to determine the safe use of the product for its own applications or suitability for use since the conditions of use, handling, storage and disposal are beyond the supplier's control. The user should therefore take all necessary precautions to ensure the safe and suitable use of the product described in the specification.

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