

Castor Seed – Technical Overview

Introduction

This document outlines general parameters typically considered for castor seed sourcing and supply.

Values and specifications vary based on origin, season, sourcing conditions, and seed variety. All specifications listed are indicative in nature and provided for reference purposes only.

Typical Parameters Referenced

Seed Grade

High Grade (Premium): Mature, clean, dried, uniform in size, shape, and colour; free from living and dead insects and foreign matter

Standard Grade: Clean, wholesome seeds with minor variations in size and colour; acceptable foreign matter content within specified limits

Oil Content

Range: 40% – 60% (oil extraction basis)

Typical commercial range: 47% – 52% (basis for seed valuation)

Oil content varies by cultivar, growing conditions, and harvesting season

Moisture Content

Optimal storage range: 8% – 12% dry basis

Maximum acceptable for trading: 12% – 14% dry basis

Higher moisture content affects storage stability and processing efficiency

Foreign Matter

Husk and damaged seeds: 2% – 3.5% maximum (depending on grade)

Sand, silica, and inert matter: 0.5% – 1.0% maximum

Living insects: Nil (acceptable only dead insects within negligible limits)

Seed Physical Characteristics

Parameter	Specification
100 Seed Weight	25 – 32 grams (varies by variety)
Seed Size	Typically 8 – 9 mm diameter (sieve classification)
Colour	Light brown to dark brown (variety-dependent)
Density/Bulk Density	2.56 – 2.66 g/cm ³ (physical density); affects storage and handling
Thousand Kernel Weight	250 – 320 grams

Additional Quality Parameters

- **Germination:** Not always specified in commercial trading; relevant for seed multiplication
- **Free Fatty Acid Content (Oleic Acid):** Indicates seed freshness and storage condition
- **Seed Uniformity:** Important for processing efficiency and oil extraction rates

Packaging Format

- **Bulk:** Supplied in standard storage containers (bags, jute sacks, or bulk bins)
- **Specifications:** Typically 50 kg or 90 kg bags for standardized trading
- **Storage Conditions:** Cool, dry warehouse environments; protection from moisture and insect infestation

Supply Context

Castor seed is supplied through sourcing and trading arrangements based on:

- **Origin:** Specific growing regions (India, Africa, South America, etc.)
- **Variety/Cultivar:** Different varieties exhibit different oil contents and characteristics
- **Harvest Season:** Timing affects moisture, quality parameters, and market availability
- **Processing Agreements:** Processing and value addition are not implied in raw seed supply

Supply contracts typically specify minimum quality thresholds and buyer-defined requirements for specific end-use applications.

Availability of Specifications

Confirmed specifications and quality parameters are shared upon formal inquiry and are subject to:

- **Certificate of Analysis (CoA):** Provided by suppliers detailing oil content, moisture, foreign matter; and other tested parameters
- **Quality Inspection Reports:** Third-party testing results available upon request
- **Lot-Specific Documentation:** Each shipment is documented separately with actual measured parameters

Standard testing methodologies align with agricultural commodity standards including Indian Bureau of Indian Standards (BIS), NCDEX commodity specifications, and international agricultural trade practices.

⚠ DISCLAIMER (MANDATORY)

This document is indicative and non-binding.

Actual specifications are confirmed at the time of supply and documented separately through formal quality certificates and inspection reports.

This overview provides general reference information about typical castor seed quality parameters in commercial supply arrangements. It does not constitute a product specification, guarantee, or contractual obligation.

Buyers are advised to:

- Request detailed certificates of analysis from suppliers prior to procurement
- Conduct independent quality assessment and testing as required
- Define specific quality parameters in formal supply agreements
- Verify compliance with applicable food safety, agricultural, and regulatory standards for intended use

For supply-specific information, detailed quality parameters, or formal specifications, please contact the supplier directly for comprehensive documentation and agreements.