

Safety Data Sheet (SDS / MSDS)

Nano Curcumin

Prepared in accordance with GHS Rev. 8 / OSHA HazCom 2012

SECTION 1: Identification

Product Name	Nano Curcumin
Recommended Use	Raw material ingredient for nutraceutical/supplement and cosmetic formulation.
Manufacturer/ Supplier	Ochnology Solution Pvt. Ltd.
Address	B-153, Sector-4, Defence Colony, Dehradun, Uttarakhand, India - 248001
Contact	projects@ochnology.com, bd@ochnology.com +91 9286823642/43

SECTION 2: Hazards Identification

Nano Curcumin is a nano-formulated derivative of curcumin, a naturally occurring compound from turmeric (*Curcuma longa*). It is generally regarded as low-hazard; concentrated curcumin may cause mild skin/eye irritation or sensitization in some individuals, and standard dust-handling precautions apply to the powder form.

GHS Classification:

Signal Word: Not classified as hazardous under standard GHS criteria; concentrated curcumin may cause mild irritation/sensitization in sensitive individuals.

Hazard Statements:

- May cause mild skin or eye irritation on direct, concentrated contact.
- May cause mechanical irritation to the respiratory tract as a fine particulate (powder grade).

Precautionary Statements:

- Avoid unnecessary direct skin/eye contact with concentrated material.
- Avoid breathing dust; use adequate ventilation during powder handling.

SECTION 3: Composition / Information on Ingredients

Component	CAS No.	Approx. %
Curcumin (nano-encapsulated/emulsified)	458-37-7	≥ 95% (of curcuminoid content)
Encapsulation/carrier system (lipid or polymer-based)	Mixture	Balance

SECTION 4: First-Aid Measures

- Eye contact: Flush with water for several minutes; seek medical attention if irritation persists.
- Skin contact: Wash with soap and water; curcumin may cause temporary yellow staining of skin, which is cosmetic and not itself an injury.
- Inhalation: Move to fresh air.
- Ingestion: Not expected to cause harm in typical handling quantities; rinse mouth with water if large quantities are accidentally ingested.

SECTION 5: Fire-Fighting Measures

- Combustible as an organic powder in bulk/dust form; avoid dust cloud formation near ignition sources.
- Use extinguishing media appropriate to the surrounding fire; dry chemical or CO2 preferred for powder fires.

SECTION 6: Accidental Release Measures

- Sweep or vacuum spilled material to minimise dust dispersion.
- Collect in a suitable labelled container; material will stain porous surfaces yellow-orange.

SECTION 7: Handling and Storage

- Store in a cool, dry place away from direct light to preserve curcuminoid stability.
- Keep container sealed between uses.
- Avoid generating dust during transfer; use local exhaust ventilation where practical.

SECTION 8: Exposure Controls / Personal Protection

As an engineered nanomaterial, precautionary exposure controls are recommended during dust-generating operations.

- No specific occupational exposure limit established; general nuisance-dust guidance applies as a precaution
- Respiratory protection: Dust mask (N95) during powder handling
- Eye protection: Safety glasses
- Hand protection: Standard work gloves (recommended to avoid staining)

SECTION 9: Physical and Chemical Properties

Appearance	Yellow-orange powder or liquid dispersion (grade-dependent)
Odour	Slight, characteristic turmeric odour
Particle Size	50 – 200 nm (typical)
Solubility in Water	Improved dispersibility versus standard curcumin extract (nano-formulation)
Moisture Content	≤ 5%

SECTION 10: Stability and Reactivity

- Stable under normal conditions of storage; light and heat sensitive — store away from direct sunlight.
- Avoid strong oxidizing agents.

SECTION 11: Toxicological Information

- Curcumin is a widely consumed food-derived compound with a generally recognized low-toxicity profile at typical formulation-ingredient exposure levels.
- Concentrated material may cause mild skin sensitization in a small subset of sensitive individuals.

SECTION 12: Ecological Information

- Not expected to be hazardous to aquatic life at typical use concentrations; avoid large-scale discharge to waterways.

SECTION 13: Disposal Considerations

- Dispose of per local solid waste regulations; not classified as hazardous waste.

SECTION 14: Transport Information

Not classified as dangerous goods for transport.

SECTION 15: Regulatory Information

- Supplied as a raw material ingredient. Not intended to diagnose, treat, cure, or prevent any disease.
- Buyers are responsible for confirming compliance with applicable food/supplement/cosmetic regulations in their destination market before use in a finished product.

SECTION 16: Other Information

This SDS reflects the product as supplied in raw-material form. Finished-product (supplement or cosmetic) safety assessment and regulatory clearance is the responsibility of the formulator/buyer.

Disclaimer: Information is provided as a general guide based on available data and is subject to revision without notice. Buyers/users should conduct their own risk assessment and confirm suitability for their specific process and application.