



MATERIAL SAFETY DATA SHEET

IDENTIFICATION:

- Product Name	ZEAXANTHIN PURIFIED CONCENTRATE
- Carotenoid Profile	85% Zeaxanthin, 9% Lutein, 4% Epoxides
- Description	Free flowing homogeneous powder extracted from Marigold Flowers (Tagetes erecta)

PHYSICAL CHARACTERISTICS

- Appearance	Red Orange powder
- Density	0.6 to 0.68 g/cm ³
- Moisture	less than 25%
- Solubility	
* Water	Insoluble
* Solvent	Acetone, chloroform
- pH	6 to 8

FIRST AID and HEALTH HAZARDS

Skin Contact	Wash thoroughly with Soap and Water. Do not use solvents
Eye contact	Rinse with tap water for 10 minutes. Open eyelids forcibly. Consult a physician if irritation occurs
Inhalation	Move the affected person outside
Ingestion	Safe when ingested in reasonable quantities
Overexposure can result in	Skin irritation Keratitis and conjunctivitis Respiratory problems if prolonged inhalation

FIRE AND EXPLOSION DATA

- Flash Point	Negative, closed cup method
- Autoignition temperature	200 to 220°C
- Explosion hazard	Dust Explosion hazard
- Suitable Extinguishing Media	Water, Dry Powder, Foam, Carbon dioxide,

ACCIDENTAL RELEASE MEASURES

- Spillage Carefully sweep and recover the material; transfer it to a closed container for disposal. Do not dust. People in charge of the cleaning operation must use respiratory protection equipment
- Environment Protection Do not allow to enter drains or waterways
- Disposal Dissolve or mix material with a combustible solvent and incinerate in a chemical incinerator equipped with an afterburner and scrubber. Observe all local, state and federal laws

HANDLING AND STORAGE

- Technical Measures Store the material in a dry, cool place
Avoid dust formation
Mixing it with other powders can produce a static charge. Ground all equipment
Maintain adequate air circulation in handling areas keeping relative humidity below 50%
Wear suitable protective clothing, goggles and Gloves

TOXICOLOGY

- Acute Toxicity $LD_{50} > 5000\text{mg/kg}$
- Mutagenicity Not mutagenic
- Reproduction hazards Not teratogenic

STABILITY AND REACTIVITY

- Stability The material is chemically stable under normal handling, mixing and storage conditions. The active ingredients degrade under prolonged exposure to exposed to light, high temperatures or oxygen
- Materials to avoid Oxidizing agents, compounds rich in oxygen, acids, bases, metal salts, reduction agents
- Conditions to avoid Do not expose to light, heat or oxygen
- Hazardous Decomposition None