



Shandong Tianyin Biotechnology Co., Ltd.

ADD: No.7,Sanying Road, Technology Industrial Zone, Zibo, Shandong, China

MATERIAL SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION OF THE SUBSTANCE

Product Name: Lutein/Marigold Flower Extract

SECTION 2 – COMPOSITION, INFORMATION ON INGREDIENTS

Xanthophyll content: 15g/kg

Hazard Symbols: None

Risk Phrases: None

SECTION 3 – HAZARDS IDENTIFICATION

Emergency Overview: It has no harm to human and animals.

Potential Health Effects and Symptoms: None

Eye: may cause minimal irritation

Skin: Neither irritation nor sensitization is expected.

Inhalation: Safety

Chronic Effects: Safety

SECTION 4 – FIRST AID MEASURES

In case of skin contact, flush with soap and water. In case of eyes contact, flush with flowing water.

If swallowed, get medical aid.

Notes to Physician: None

SECTION 5 – FIRE FIGHTING MEASURES

In case of fire, pls use sandy soil, chemical foam or carbon dioxide.

Unsuitable Extinguishing Media: None

Special Fire Fighting Procedures: None

SECTION 6 – ACCIDENTAL RELEASE MEASURES

In case of accidental release, pls mix with inert material (eg. dry sand) and transfer to sealed container for disposal.

SECTION 7 – HANDLING AND STORAGE

Store in a cool, well-ventilated area. Keep away from ignition sources, heat and flame. Store in cool and dry condition.

SECTION 8 – EXPOSURE CONTROLS, PERSONAL PROTECTION

Exposure Guidelines: Not established for this pigment.

Engineering Controls: Use adequate ventilation

Respiratory protection: Not required

Eye/Face Protection: Not required

Skin Protection: Not required

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Powder Color: Orange
Odor: characteristic flavor of Marigold Flower Viscosity: Not available
Vapor Pressure: Not available Freezing/Melting Point: Not available
Boiling Point: Not available Autoignition Temperature: Not available
Explosion Limits, upper: Not available Explosion Limits, lower: Not available
Solubility in water: Not available Decomposition Temperature: Not available
Molecular Formula: $C_{40}H_{56}O_2$ Specific Gravity/Density: Not available
Molecular Weight: 568.88

SECTION 10 – STABILITY AND REACTIVITY

Chemical Stability: Steady
Conditions to Avoid: Humidity and high temperature

SECTION 11 – TOXICOLOGICAL INFORMATION

Acute Toxicity: No poison
Inhalation: Not available
Ingestion: Not available
Eye: Minimal irritant
Skin: Non-irritant Others:
Not available

SECTION 12 – ECOLOGICAL INFORMATION

Mobility: Not available
Persistence/Degradability: Not available
Bioaccumulation: Not available
Ecotoxicity: Not available
Other Adverse Effects: Not available

SECTION 13 – DISPOSAL CONSIDERATIONS

Method of Disposal: Disposal should be subject to federal, state and local laws.

SECTION 14 – TRANSPORT INFORMATION

UN #: None
UN Shipping Name: None
UN Classification: None
Special Precautions: None
UN Packing Group: None
Marine Pollutant: No
Special Precaution: None
Reported By: None

SECTION 15 – REGULATORY INFORMATION

None

SECTION 16 – OTHER INFORMATION

None

Manufacturer Name: Shandong Tianyin Biotechnology Co., Ltd.