

# Material Safety Data Sheet (MSDS) for FK-506

## I. Identification:

**Product name:** FK-506  
**Product Catalog:** 9974  
**Manufacturer Supplier:** Cell Signaling Technology  
 3 Trask Lane  
 Danvers, MA 01923 USA  
 978-867-2300 TEL  
 978-867-2400 FAX  
 978-578-6737 EMERGENCY TEL

## II. Composition/Information:

**Substance Name:** FK-506  
**Synonyms:** Tacrolimus, Prograf, (-)-FK 506, CCRIS 7124, FR 900506, Fujimycin, L 679934, Protopic, Tsukubaenolide  
**CAS#:** 104987-11-3  
**Mol. Wt.:** 804.02  
**Mol. Formula:** C<sub>44</sub>H<sub>69</sub>NO<sub>12</sub>

## III. Hazard Identification:

### EMERGENCY OVERVIEW:

**Caution:** May cause irritation to eyes, skin, mucous membranes. Potent immunosuppressant. May be harmful if inhaled, ingested or contact with skin, eyes.

**NFPA Rating:** Health: 1 Flammability: 0 Reactivity: 0

## IV. First Aid Measures:

**Inhalation:** If inhaled, remove to fresh air. If breathing is difficult, get medical attention.

**Ingestion:** If swallowed, wash out mouth with water provided person is conscious. Get medical attention.

**Skin exposure:** In case of contact, immediately wash skin with soap and water for at least 15 minutes. Remove contaminated clothing. Wash clothing before reuse.

**Eye exposure:** In case of contact with eyes, immediately flush eyes with water for at least 15 minutes. Get medical attention.

## V. Fire Fighting Measures:

**Flash Point:** Data not available.

**Autoignition Temperature:** Data not available.

**Explosion:** Data not available.

**Fire extinguishing media:** Water spray, dry chemical, alcohol foam, or carbon dioxide.

**Firefighting:** Wear protective clothing and self-contained breathing apparatus to prevent contact with skin and eyes. May emit toxic fumes under fire conditions.

**VI. Accidental Release Measures:** Wear appropriate personal protective equipment. Sweep up material and avoid raising dust. Transfer to a closed chemical waste container for disposal. Wash spill site after material has been picked up for disposal.

## VII. Handling And Storage:

**Storage:** Store in tightly closed container at -20°C.

Avoid inhalation. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.

## VIII. Exposure Controls/Personal:

**Ventilation System:** A system of local and/or general exhaust is required.

**Skin Protection:** Wear compatible chemical resistant gloves and protective clothing.

**Eye protection:** wear protective safety glasses or chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

## IX. Physical And Chemical Properties

**Appearance:** white to off-white powder  
**Odor:** none  
**pH:** data not available  
**Melting Point:** data not available  
**Boiling Point:** data not available  
**Freezing Point:** data not available  
**Volatile Organic Compounds:** no  
**Solubility:** soluble in DMSO or methanol. Not not soluble in water.

## X. Stability and Reactivity:

**Stability:** Stable under normal conditions. Avoid strong oxidizing agents. Protect from light and heat.

**Hazardous decomposition under fire conditions:** May produce toxic gases such as carbon monoxide, carbon dioxide, and nitrogen oxides.

## XI. Toxicological Information:

**RTECS#** KD4200000

**Acute Effects:** LD50 Intraperitoneal. Mouse. >200 mg/kg.

**Chronic Effects:** Not established. May be harmful if inhaled, ingested or absorbed.

**Potential Health Effects:** Not established.

**Inhalation:** May be harmful, may be irritating to mucous membranes and upper respiratory tract.

**Skin:** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes:** May be harmful if absorbed through the eyes. May cause eye irritation.

**Ingestion:** May be harmful if swallowed.

## XII. Ecological Information:

Data not available.

**XIII. Disposal Considerations:** Dispose of in accordance with federal, state, local environmental regulations.

## XIV. Transport Information:

**DOT: Proper Shipping Name:** This substance is considered non-hazardous for transport.

**IATA: Proper Shipping Name:** This substance is considered non-hazardous for air transport.

## XV. Regulatory Information:

**Risk / Safety phrases:**

May be irritating to eyes, skin, and respiratory system.

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Regulatory Information: None.

SARA Listed: No.

Canada (WHMIS): DSL No, NDSL No.

## XVI. Other Information:

This compound is sold only for research use only. It is not for use in humans. To the best of our knowledge, this document is accurate. It is intended to serve as a guide for safe use of this product in a laboratory setting by experienced personnel. The burden of safe use of this material rests entirely with the user. Cell Signaling Technology, Inc., shall not be held liable for any damage resulting from the handling of or from contact with the above product.