

**MATERIAL SAFETY DATA SHEET****MANUFACTURER IDENTIFICATION**

Manufacturer's Name:
Oxford Biomedical Research, Inc.
2165 Avon Industrial Dr.
Rochester Hills, MI 48309

Telephone Number: (248) 852-8815
Toll Free: (800) 692-4633
Facsimile: (503) 852-4466
Trade Name: Cellular Glutathione Peroxidase Assay Kit
Catalog Number: FR 17

HAZARDOUS COMPONENT(S) IDENTIFICATION

Hazards identified with this product are associated with the following Assay Kit component(s):

Component Name: *tert*-Butyl Hydroperoxide Solution, 70%
Chemical Name: *tert*-Butyl Hydroperoxide
Common Name(s), Synonyms: *tert*-Butyl Hydroperoxide Solution, 70% in water
Molecular Formula: C₄H₁₀O₂
CAS No.: 75-91-2
EC No.: 200-915-7

PHYSICAL AND CHEMICAL CHARACTERISTICS

Water solubility: Yes
Appearance: Colorless liquid
Odor: N/A
Storage conditions: Store tightly capped in refrigerator (2-8°C) in the dark.
Vapor pressure: 62 mm @ 45°C; 174 mm @ 60°C
Specific gravity: 0.937
Vapor density: 2.07

PHYSICAL HAZARDS

Reactivity: Stable under storage conditions. Will react violently with acids.
Reactivity in water: No
Incompatible with: Strong reducing agents, organics, finely powdered metals, strong acids and bases.
Conditions to avoid: Heat, may be shock-sensitive. Contact with combustible material may cause fire.
Hazardous decomposition products: Carbon monoxide, carbon dioxide.
Hazardous polymerization: N/A
Other warnings: Strong oxidizer, corrosive, combustible liquid.

HEALTH HAZARDS

Primary route of entry: Readily absorbed through skin or inhaled.
Toxicity data: Oral-Mouse LD₅₀: 320 mg/Kg
Inhalation-Mouse: LC₅₀: 350 ppm/4h
Health hazards: Acute effects: Harmful by inhalation, ingestion, or skin absorption.

Destructive to skin, eyes, mucous membranes and respiratory tract. Causes burns. Irritant. Chronic effects: Mutagenic. Possible risk of irreversible effects.

FIRST AID MEASURES

If swallowed and person is conscious, wash out mouth with water. Seek immediate medical advice. In case of contact with eyes or skin, flush with plenty of water for at least 15 minutes and seek medical advice. Dispose of contaminated clothing and shoes. If inhaled, move to fresh air and seek medical advice.

FIRE AND SPILL MEASURES

Extinguisher media: Carbon dioxide, dry chemical or foam.

Unusual fire/explosion hazards: Vigorously supports combustion. May ignite other material on contact. Container explosion possible under fire or heat conditions. May be shock-sensitive.

If material is released or spilled: Evacuate area. Shut off sources of ignition.

Clean up of spill site: Wear protective clothing (chemical resistant gown, gloves, rubber boots, and eye protection), wear self-contained breathing apparatus. Absorb on sand or vermiculite and place in containers out of doors. Ventilate the spill site and wash with water.

Waste disposal methods: Dispose of waste in accordance with all Federal, State and local regulations. Destruction of product by a qualified facility recommended.

PRECAUTIONS FOR SAFE HANDLING AND USE

Respiratory protection: Wear appropriate NIOSH/MSHA-approved respirator.

Ventilation: Chemical fume hood.

Personal protective equipment: Chemical resistant laboratory coats, gloves and face shield recommended.

Work practices: Safety shower and eye bath required. Avoid prolonged or repeated exposure.

PRECAUTIONS FOR SAFE HANDLING AND USE

Respiratory protection: N/A

Ventilation: Suggested.

Personal protective equipment: Laboratory coat, gloves and eye protection recommended.

Work practices: Follow standard good laboratory practices. Safety shower and eye bath required.

The information contained in this MSDS is believed to be correct to the best of our knowledge. However, we make no warranty, expressed or implied, with respect to such information. The information may not be all-inclusive. The user should make an independent determination of the suitability of the information based on all sources available and adopt appropriate safety precautions. Oxford Biomedical, Inc. shall not be held liable for any damage resulting from contact or handling of this product.