

# SAFETY DATA SHEET

## DualOx™

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** DualOx™  
**GENERAL USE:** Chemical and biological oxidation of petroleum products

**MANUFACTURER:**

Redox Tech, LLC  
200 Quade Drive  
Cary, NC 27513  
919-678-0140

**EMERGENCY TELEPHONE:**

Within USA and Canada: 1-800-424-9300  
+1 703-527-3887 (collect calls accepted)

### 2. HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW:** May have a slight sulfur odor. Non-hazardous liquid  
May react in the presence of a reducing agent and water to produce hydrogen sulfide.  
Contact with eyes will likely cause irritation and should be rinsed immediately.  
Should be no irritation upon contact with skin.  
Ingestion may cause diarrhea

### 3. COMPOSITION INFORMATION ON INGREDIENTS

All components are non-hazardous (Dilute hydrogen peroxide, magnesium sulfate heptahydrate)

### 4. FIRST AID MEASURES

**EYES:** Immediately flush with water for 15 minutes. See a medical doctor if irritation persists.

**SKIN:** Rinse with water. Irritation is unlikely, but if irritation occurs or persists, seek medical attention.

**INGESTION:** Dilute by drinking 1-2 liters of water. Do not induce vomiting. It may induce diarrhea. If diarrhea persists, seek medical attention.

**INHALATION:** Liquid product not for inhalation.

## 5. FIRE FIGHTING MEASURES

**EXTINGUISHING MEDIA:** Deluge with water

**FIRE/EXPLOSION HAZARDS:** Product is non-combustible but it may release noxious sulfur compounds during a fire.

**FIRE FIGHTING PROCEDURES:** Use flooding with plenty of water, carbon dioxide or other inert gasses. Wear full protective clothing and self-contained breathing apparatus. Deluging with water is the best method to control combustion of the product.

**FLAMMABILITY LIMITS:** non-combustible

**SENSITIVITY TO IMPACT:** non-sensitive

**SENSITIVITY TO STATIC DISCHARGE:** not available

## 6. ACCIDENTAL RELEASE MEASURES

Confine and collect spill. Transfer to an approved DOT container and properly dispose. Do not dispose of or rinse material into sewer, stormwater or surface water.

## 7. HANDLING AND STORAGE

**HANDLING:** Avoid contact by using water repellent protective gloves and safety glasses

**STORAGE:** Use first in, first out storage system. Avoid contamination of opened product. Avoid contact with reducing agents.

**COMMENTS:** Use gentle mechanical agitation to avoid producing mist and small droplets

## 8. EXPOSURE CONTROLS – PERSONAL PROTECTION

**All components are non-hazardous**

**ENGINEERING CONTROLS:** None are required. If active ventilation is used, it should be gentle as to not create dust.

### PERSONAL PROTECTIVE EQUIPMENT

**EYES and FACE:** Safety goggles

**RESPIRATOR:** Not required

**PROTECTIVE CLOTHING:** None necessary

**GLOVES:** rubber, latex or neoprene

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Odor:	none to slight sulfur
Appearance:	clear liquid
Auto-ignition Temperature	Non-combustible
Boiling Point	100 C
Melting Point	NA
Density	1.02 gram/cc
Solubility	completely water soluble
pH	6-8

## 10. STABILITY AND REACTIVITY

**CONDITIONS TO AVOID:** reducing agents.

**STABILITY:** product is stable

**POLYMERIZATION:** will not occur

**INCOMPATIBLE MATERIALS:** reducing compounds may result in noxious hydrogen sulfide production

**HAZARDOUS DECOMPOSITION PRODUCTS:** may produce hydrogen sulfide in presence of reducing agents, and sulfur oxides at elevated temperatures.

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

A: General Product Information

Acute exposure may cause mild skin and eye irritation. Gastrointestinal absorption may cause acute magnesium poisoning. Symptoms include flushing, sweating, low blood pressure, depression of reflexes, flaccid paralysis, hypothermia, circulatory collapse, and depression of CNS and heart function. Excessive long-term ingestion of this product may cause also cause magnesium poisoning with symptoms described above.

B: Component Analysis - LD50/LC50

No information available.

B: Component Analysis - TDLo/LDLo

TDLo (Oral-Man) 183 mg/kg/4 hours-intermittent: Gastrointestinal: hypermotility, diarrhea;  
LDLo (Intraduodenal-Woman) 5344 mg/kg

### Carcinogenicity

A: General Product Information

No information available.

B: Component Carcinogenicity

Product is not listed by ACGIH, IARC, OSHA, NIOSH, or NTP.

### Epidemiology

No information available.

**Neurotoxicity – No information available**

## 12. ECOLOGICAL INFORMATION

### **Ecotoxicity**

No information available.

### **Environmental Fate**

No potential for food chain concentration

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Material is not considered hazardous, but consult with local, state and federal agencies prior to disposal to ensure all applicable laws are met.

## 14. TRANSPORT INFORMATION

NOTE: The shipping classification information in this section (Section 14) is meant as a guide to the overall classification of the product. However, transportation classifications may be subject to change with changes in package size. Consult shipper requirements under I.M.O., I.C.A.O. (I.A.T.A.) and 49 CFR to assure regulatory compliance.

### **US DOT Information**

Shipping Name: Not Regulated

Hazard Class: Not Classified

UN/NA #: Not Regulated

Packing Group: None

Required Label(s): None

### **50<sup>th</sup> Edition International Air Transport Association (IATA):**

Not Regulated

### **INTERNATIONAL MARITIME DANGEROUS GOODS (IMDG)**

Material is not regulated under IMDG

## 15. REGULATORY INFORMATION

### **UNITED STATES**

### **SARA TITLE III**

SECTION 311 Hazard for Immediate health Hazard

SECTION 312 No Threshold Quantity

SECTION 313 Not listed

**CERCLA** NOT REGULATED UNDER CERCLA

**TSCA** NOT REGULATED UNDER TSCA

**CANADA (WHIMS):** NOT REGULATED

## 16. OTHER INFORMATION

HMIS:

Health	1
Flammability	0
Physical Hazard	0
Personal Protection	E

E: Safety Glasses, gloves and dusk mask