

# SAFETY DATA SHEET



Conforms to regulation (EC) no. EU 453/2010

## SECTION 1 - IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1 Product Identifier

Product Name: Oxosol 306 Oxidizer

Product Number: LS-231

### 1.2 Relevant Identified Uses of the Substance/Mixture and Uses Advised Against

Investigational research by professional users

### 1.3 Details of the Supplier of the Safety Data Sheet

#### Manufacturer

National Diagnostics  
305 Patton Drive  
Atlanta, GA 30036  
(404) 699-2121  
(800) 526-3867  
info@nationaldiagnostics.com

### 1.4 Emergency Telephone Number

#### ChemTel Inc.

Contract number MIS8894340  
1-800 255-3924 (United States, Canada, Puerto Rico & US Virgin Islands)  
01-800-099-0731 (Mexico)  
400-120-0751 (China)  
000-800-100-4086 (India)  
1-300-954-583 (Australia)  
0-800-591-6042 (Brazil)  
+1-813-255-3924 (All other regions)

## SECTION 2 - HAZARDS IDENTIFICATION

### 2.1 Classification of the Substance or Mixture

#### Classification according to Regulation (EC) No. 1272/2008 [EU-GHS/CLP]

H226 - Flammable Liquids (Category 3)  
H312 - Acute Toxicity-Dermal (Category 4)  
H315 - Skin Corrosion/Irritation (Category 2)  
H332 - Acute Toxicity-Inhalation (Category 4)

### 2.2 Label Elements

#### GHS LABEL ELEMENTS AND CLASSIFICATION

##### GHS Label Elements



#### WARNING

H226 - Flammable liquid and vapor.  
H312 - Harmful in contact with skin.  
H315 - Causes skin irritation.  
H332 - Harmful if inhaled.  
P210 - Keep away from heat/sparks/open flames/hot surfaces---no smoking.  
P260 - Do not breathe dust/fumes/gas/mist/vapors/spray.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P302+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse SKIN with water/shower.  
P332+P313 - IF SKIN irritation occurs: Get medical advice/attention.

### 2.3 Other Hazards

None found.

## SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixture

#### Chemical Names/Description

Xylene and scintillators.

#### Component List

Component	% Comp.	CAS #	EC #	1278/2008 Classification
Xylene	>99	1330-20-7	215-535-7	H226, H312, H315, H332

## SECTION 4 - FIRST AID MEASURES

## 4.1 Description of First Aid Measures

### Inhalation

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

### Ingestion

DO NOT INDUCE VOMITING. If swallowed and the person is conscious, immediately give large amounts of water. Get medical attention.

### Skin

Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

### Eyes

Immediately flush eyes with plenty of water for at least fifteen minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

## 4.2 Most Important Symptoms and Effects, Both Acute and Delayed

### Inhalation

Inhalation of high concentrations may result in nausea, vomiting, headache, ringing in the ears, and severe breathing difficulties which may be delayed in onset. Substernal pain, cough, and hoarseness are also reported. Symptoms of central nervous system depression or effects which may occur can include headache, excitation, euphoria, dizziness, incoordination, drowsiness, light-headedness, blurred vision, fatigue, tremors, convulsions, loss of consciousness, coma, respiratory arrest and death, depending on the concentration and duration of exposure.

### Ingestion

Salivation, pain, nausea, vomiting and diarrhea. Exposure may also cause central nervous system symptoms similar to those listed under Inhalation.

### Skin

Reddening, itching, and inflammation. Repeated or prolonged contact may result in drying, reddening, itching, pain, inflammation, cracking and possible secondary infection with tissue damage.

### Eyes

Pain, tears, burns, sensitivity to light, swelling and possible corneal damage. Prolonged or repeated exposure may cause irritation and conjunctivitis.

## 4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

Unknown/not applicable

## SECTION 5 - FIRE FIGHTING MEASURES

### 5.1 Extinguishing media

Dry chemical, foam or carbon dioxide. Water spray may be used to keep fire exposed containers cool, dilute spills to nonflammable mixtures, protect personnel attempting to stop leak and disperse vapors.

### 5.2 Special Hazards Arising from the Substance/Mixture

#### Hazardous Combustion Products

Involvement in a fire causes formation of carbon monoxide and unidentified organic components.

#### Hazardous Decomposition Products

Involvement in a fire causes formation of carbon monoxide and unidentified organic components.

#### Hazardous Polymerization

Will not occur under normal conditions of use (See Sections 10.4 & 10.5).

### 5.3 Advice for Firefighters

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

### 5.4 Further Information

No data available.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

### 6.1 Personal Precautions

Wear appropriate protective equipment as specified in Section 8.

### 6.2 Environmental Precautions

Prevent discharge into the environment. Dike spills and stop leakage where practical. Do not allow material to enter drains.

### 6.3 Methods and Materials for Containment and Cleaning Up

Ventilate area. Remove all sources of ignition. Isolate hazard area. Contain and recover liquid. Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material and place in a chemical waste container.

## 6.4 References to Other Sections

For disposal information, see Section 13. For protective clothing and equipment, see Section 8.

## SECTION 7 - HANDLING AND STORAGE

### 7.1 Precautions for Safe Handling

Avoid contact and inhalation. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling. Transfer methods should avoid static sparks. Use explosion proof ventilation.

### 7.2 Conditions for Safe Storage (including any incompatibles)

Keep in a tightly closed container, stored in a cooled, dry, ventilated area away from sources of heat or ignition. Protect from physical damage. Isolate from incompatible materials (section 10).

#### Incompatibles

Strong oxidizing agents and strong acids.

### 7.3 Specific End Uses

Investigational research by professional users

## SECTION 8 - EXPOSURE CONTROLS/PERSONAL PRECAUTIONS

### 8.1 Control Parameters

ACGIH Threshold Limit Value (TLV): 100 ppm

OSHA Permissible Exposure Limit (PEL): 100 ppm

### 8.2 Exposure Controls

#### Engineering Controls

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source.

#### Respiratory Protection

If the exposure limit is exceeded, wear a supplied air, full-facepiece respirator, airlined hood, or full-facepiece self-contained breathing apparatus.

#### Eye Protection

Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

#### Skin Protection

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on Basic Physical & Chemical Properties

a. Appearance	Clear colorless liquid	b. Odor	Slight aromatic
c. Odor Threshold	N.A.	d. pH	Not Applicable
e. Melting/Freezing Point (°C)	-25	f. Boiling point (°C)	137-140
g. Flash Point (°C)	29	h. Evaporation Rate	0.7 (BuAc = 1)
i. Flammability	Combustible	j. Upper/Lower Flammability or Explosive Limits	l <sub>el</sub> , 1.0%; u <sub>el</sub> 7.0%
k. Vapor Pressure	8 @ 20C	l. Vapor Density (Air = 1)	3.7 (air = 1)
m. Relative Density	0.86 @ 20C	n. Water Solubility	Insoluble
o. Partition Coefficient n-octanol/water	Mixture	p. Autoignition Temperature (°C)	464C (867F)
q. Decomposition Temperature (°C)	N.A.	r. Viscosity	0.98 cSt @ 3 C
s. Explosive Properties	combustible liquid and vapor	t. Oxidizing Properties	Not an Oxidizer

## SECTION 10 - STABILITY AND REACTIVITY

### 10.1 Reactivity

Not reactive under recommended conditions of use and storage.

### 10.2 Chemical Stability

Stable under ordinary conditions of use and storage.

### 10.3 Possibility of Hazardous Reactions

Will not occur under normal conditions of use (See Sections 10.4 & 10.5).

### 10.4 Conditions to Avoid

Heat, flames, ignition sources and incompatibles.

## 10.5 Incompatible Materials

Strong oxidizing agents and strong acids.

## 10.6 Hazardous Decomposition Products

Involvement in a fire causes formation of carbon monoxide and unidentified organic components.

## SECTION 11 - TOXICOLOGICAL INFORMATION

### Product LD50 Values

#### Oral Rat LD50 (mg/kg)

4343

#### Dermal Rabbit LD50 (mg/kg)

1717

### Component Cancer List Status

	NTP Carcinogen		IARC Category
	Known	Anticipated	
Xylene	No	No	3

### Potential Health Effects

#### Inhalation

Inhalation of vapors may be irritating to the nose and throat. High vapor concentrations are anesthetic and central nervous system depressants.

#### Ingestion

May cause irritation of the mouth, throat, and gastrointestinal tract. Aspiration into lungs may cause chemical pneumonia and lung damage.

#### Skin

Skin contact results in loss of natural oils and often results in a characteristic dermatitis. May be absorbed through the skin.

#### Eyes

Vapors cause eye irritation. Splashes cause severe irritation, possible corneal burns and eye damage.

### Carcinogenicity

IARC has determined that there is inadequate evidence to assign the carcinogenicity of xylene in humans and in experimental animals (IARC Class 3).

### Mutagenicity

Has been shown to be positive in mutagenicity assays.

### Reproductive Toxicity

May cause adverse reproductive and/or developmental effects. Pregnant women may be at an increased risk from exposure. Consumption of alcoholic beverages may enhance toxic effects.

### Teratogenic Effects

May cause teratogenic effects.

### Routes of Entry

Inhalation, ingestion, and skin contact.

### Target Organ Statement

Pre-existing medical conditions which may be aggravated by exposure include disorders of the skin, eye, heart, kidney, liver, blood, respiratory system, neurological and hemopoietic organs.

## SECTION 12 - ECOLOGICAL INFORMATION

### 12.1 Toxicity

	Vertebrates	Invertebrates	Algae	Microorganisms
Aquatic Toxicity (ppm unless otherwise noted)	LC50 (96 hr, Salmo gairdneri) 2.6 mg/l	IC50 (Daphnia magna) 1 mg/l.	EC50 2.2 mg/l	IC50 (24hr) 96mg/l
	Birds	Arthropods	Plants	Microorganisms
Terrestrial Environment Toxicity (ppm unless otherwise noted)	No data	No data	No data	IC50 (10hrs) 0.22g/g soil

### 12.2 Persistence and Degradability

Readily biodegradable, >85% elimination in 28 days

### 12.3 Bioaccumulative Potential

BCF 5-15

## 12.4 Mobility in Soil

log Koc 2.73

## 12.5 Results of PBT and vPvB Assessment

not PBT / vPvB

## 12.6 Other Adverse Effects

None

## SECTION 13 - DISPOSAL CONSIDERATIONS

### 13.1 Waste Treatment Methods

Offer surplus or non-recyclable product to licensed disposal company. Disposal is subject to user compliance with applicable law and product characteristics at time of disposal. Dispose of packaging as product.

## SECTION 14 - TRANSPORT INFORMATION

	ADR/RID	IATA	IMO	DOT
14.1 UN Number	1307	1307	1307	1307
14.2 Shipping Name	Xylenes	Xylenes	Xylenes	Xylenes
14.3 Hazard Class	3	3	3	3
14.4 Packing Group	III	III	III	III
14.5 Environmental Hazards	N.A.	N.A.	N.A.	N.A.
14.6 Special Precautions	N.A.	N.A.	N.A.	N.A.

## SECTION 15 - REGULATORY INFORMATION

### 15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance/Mixture

#### United States

##### TSCA Regulatory Statement

All intentional ingredients are listed on the TSCA Inventory.

##### SARA 311/312 Hazard Categories

Component	Fire	Pressure	Reactivity	Acute	Chronic
Xylene	Yes	No	No	Yes	Yes

#### Europe

##### EEC Regulatory

All intentional ingredients are listed on the European EINECS Inventory.

## SECTION 16 - OTHER INFORMATION

### Revisional Updates

4/26/2019 - Updated Section 1.4

5/29/2015 - Updated Sections 2.1 and 3.2

1/9/2014 - Released Version 1.0

### NFPA Codes

Health 2 Flammability 3 Reactivity 0

### Dangers

#### Xylene

H226 - Flammable liquid and vapor.

H312 - Harmful in contact with skin.

H315 - Causes skin irritation.

H332 - Harmful if inhaled.

**MANUFACTURER DISCLAIMER:** The information given herein is offered in good faith as accurate, but without guarantee. Conditions of the use and suitability of the product for particular uses are beyond our control. All risks of use of the product are therefore assumed by the user. Nothing is intended as a recommendation for uses which infringe valid patents or as extending license under valid patents. Appropriate warnings and safe handling procedures should be provided to handlers and users.