

# MATERIAL SAFETY DATA SHEET

MSDS DATE:08/13/07

---

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

---

PRODUCT NAME: OIL RED O-ISOPROPANOL  
SYNONYMS: SOLVENT RED 27; SUDAN RED III, 2-PROPANOL; ISOPROBANOL; SEC-PROPYL ALCOHOL; IPA; DIMETHYL CARBINOL

PRODUCT CODES: 26079-05

MANUFACTURER: ELECTRON MICROSCOPY SCIENCES  
DIVISION: 1560 INDUSTRY ROAD/P.O. BOX 550  
ADDRESS: HATFIELD, PA 19440

EMERGENCY PHONE: 215-412-8400  
CHEMTREC PHONE: 800-424 -4300

FAX PHONE: 215-412-8450

CHEMICAL NAME: N/A  
CHEMICAL FAMILY: N/A

---

## SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

---

### INGREDIENT:

OIL RED O, CERTIFIED  
ISOPROPYL ALCOHOL

<u>CAS NO.</u>	<u>% WT</u>	<u>% VOL</u>	<u>SARA 313 REPORTABLE</u>
1320-06-5	0.2	N/A	
67-63-0	100	N/A	
	<u>ppm</u>	<u>mg/m3</u>	
OSHA PEL-TWA:	N/A	N/A	
OSHA PEL STEL :	500	1225	
OSHA PEL CEILING:	N/A	N/A	
ACGIH TLV-TWA:	400	980	
ACGIH TLV STEL:	N/A	N/A	
ACGIH TLV CEILING:	N/A	N/A	

---

## SECTION 3: HAZARDS IDENTIFICATION

---

EMERGENCY OVERVIEW: WARNING! FLAMMABLE! KEEP AWAY FROM HEAT, FLAME AND SPARKS. HARMFUL IF INHALED. AVOID BREATHING VAPORS: USE WITH ADEQUATE VENTILATION. OIL RED O IS A CANCER SUSPECT AGENT! AVOID ALL ROUTES OF EXPOSURE.

ROUTES OF ENTRY: INHALATION, SKIN, INGESTION

### POTENTIAL HEALTH EFFECTS

EYES: LIQUID MAY BE IRRITATING TO EYES.

SKIN: LIQUID MAY BE IRRITATING TO SKIN. PROLONGED SKIN CONTACT MAY RESULT IN DERMATITIS.

INGESTION: INGESTION MAY CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION

INHALATION: INHALATION OF VAPORS MAY CAUSE HEADACHE, NAUSEA, VOMITING, DIZZINESS, DROWSINESS, IRRITATION OF RESPIRATORY TRACT, LOSS OF CONSCIOUSNESS, AND MAY CAUSE PULMONARY EDEMA.

ACUTE HEALTH HAZARDS: INHALATION OF VAPORS MAY CAUSE HEADACHE, NAUSEA, VOMITING, DIZZINESS, DROWSINESS, IRRITATION OF RESPIRATORY TRACT, LOSS OF CONSCIOUSNESS, AND MAY CAUSE PULMONARY EDEMA. LIQUID MAY BE IRRITATING TO SKIN AND EYES. PROLONGED SKIN CONTACT MAY RESULT IN DERMATITIS. INGESTION MAY CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION.

CHRONIC HEALTH HAZARDS: INHALATION OF VAPORS MAY CAUSE HEADACHE, NAUSEA, VOMITING, DIZZINESS, DROWSINESS, IRRITATION OF RESPIRATORY TRACT, LOSS OF CONSCIOUSNESS, AND MAY CAUSE PULMONARY EDEMA. LIQUID MAY BE IRRITATING TO SKIN AND EYES. PROLONGED SKIN CONTACT MAY RESULT IN DERMATITIS. INGESTION MAY CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: NONE IDENTIFIED

# MATERIAL SAFETY DATA SHEET

MSDS DATE:08/13/07

---

## CARCINOGENICITY

OSHA: NO    ACGIH: N/A                    NTP: NO                    IARC: NO  
OTHER: N/A

---

## SECTION 4: FIRST AID MEASURES

---

**EYES:** FLUSH WITH WATER FOR 15 MINUTES. IF IRRITATION OCCURS, SEEK MEDICAL ATTENTION

**SKIN:** WASH WITH SOAP AND WATER. PROMPTLY REMOVE CONTAMINATED CLOTHING. WASH CLOTHING BEFORE REUSE. IF IRRITATION OCCURS, SEEK MEDICAL ATTENTION.

**INGESTION:** IF CONSCIOUS AND ALERT, GIVE LARGE QUANTITIES OF WATER AND INDUCE VOMITING BY TOUCHING BACK OF THROAT WITH FINGER. NEVER GIVE ANYTHING BY MOUTH TO A PERSON WHO IS UNCONSCIOUS. CALL A PHYSICIAN.

**INHALATION:** REMOVE TO FRESH AIR; IF BREATHING IS DIFFICULT, GIVE OXYGEN IF QUALIFIED PERSONNEL ARE AVAILABLE. CALL A PHYSICIAN

**NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:** N/A

---

## SECTION 5: FIRE-FIGHTING MEASURES

---

**FLAMMABLE LIMITS IN AIR, UPPER:** 2.5  
(% BY VOLUME)                    **LOWER:** 12.0

**FLASH POINT:**

F: 53 DEG

C: N/A

**METHOD USED:** CLOSED CUP

**AUTOIGNITION TEMPERATURE:** N/A

F: N/A

C: N/A

**NFPA HAZARD CLASSIFICATION**

HEALTH: N/A

FLAMMABILITY: N/A

REACTIVITY: N/A

OTHER: N/A

**HMIS HAZARD CLASSIFICATION**

HEALTH: N/A

FLAMMABILITY: N/A

REACTIVITY: N/A

PROTECTION: N/A

**EXTINGUISHING MEDIA:** CARBON DIOXIDE, DRY CHEMICAL

**SPECIAL FIRE FIGHTING PROCEDURES:** FIREFIGHTERS SHOULD WEAR PROPER PROTECTIVE EQUIPMENT AND SELF CONTAINED BREATHING APPARATUS WITH FULL FACE PIECE OPERATED IN POSITIVE PRESSURE MODE. VAPORS MAY FLOW ALONG SURFACE TO DISTANT IGNITION SOURCES AND FLASH BACK. CLOSED CONTAINERS EXPOSED TO HEAT MAY EXPLODE.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** FIRE MAY PRODUCE IRRITATING OR TOXIC GASES.

**HAZARDOUS DECOMPOSITION PRODUCTS:** N/A

---

## SECTION 6: ACCIDENTAL RELEASE MEASURES

---

**ACCIDENTAL RELEASE MEASURES:** ELIMINATE ALL SOURCES OF IGNITION. WAERING PROPER PROTECTIVE GEAR, ABSORB ON SAND EARTH OR VERMICULITE. CAREFULLY SWEEP UP AND CONTAINERIZE FOR PROPER DISPOSAL.

# MATERIAL SAFETY DATA SHEET

MSDS DATE:08/13/07

---

## SECTION 7: HANDLING AND STORAGE

---

HANDLING AND STORAGE: STORE AWAY FROM HEAT, FLAME, AND SPARKS. DO NOT BREATHE VAPORS; USE WITH ADEQUATE VENTILATION. AVOID CONTACT WITH SKIN, EYES AND CLOTHING.

OTHER PRECAUTIONS: KEEP IN TIGHTLY CLOSED CONTAINER. WASH THOROUGHLY AFTER HANDLING

---

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

---

ENGINEERING CONTROLS:

VENTILATION: FUME HOOD

RESPIRATORY PROTECTION: AT CONCENTRATIONS UP TO 1000 PPM A CHEMICAL CARTRIDGE RESPIRATOR WITH ORGANIC VAPOR CARTRIDGE IS RECOMMENDED.

EYE PROTECTION: SAFETY GOGGLES

SKIN PROTECTION: NEOPRENE PROTECTIVE GLOVES

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: APPROVED WORK CLOTHES

WORK HYGIENIC PRACTICES: USE CARE WHEN HANDLING. EYEWASH AND QUICK DRENCH SHOWER AVAILABLE

EXPOSURE GUIDELINES: N/A

---

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

---

APPEARANCE: REDDISH

ODOR: N/A

PHYSICAL STATE: VOLATILE LIQUID

pH AS SUPPLIED: N/A

pH (Other): N/A

BOILING POINT:

F: N/A

C: 82.3 DEG

MELTING POINT:

F: N/A

C: -89 DEG

FREEZING POINT: N/A

F: N/A

C: N/A

VAPOR PRESSURE (mmHg): 33

@

F: N/A

C: 20 DEG

VAPOR DENSITY (AIR = 1): 2.07

@

F: N/A

C: N/A

@

F: N/A

C: N/A

EVAPORATION RATE:

BASIS (=1): 2.83

# MATERIAL SAFETY DATA SHEET

MSDS DATE:08/13/07

---

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (con't)

---

SOLUBILITY IN WATER: YES

PERCENT SOLIDS BY WEIGHT: N/A

PERCENT VOLATILE: N/A  
BY WT/ BY VOL @

F: N/A

C: N/A

VOLATILE ORGANIC COMPOUNDS (VOC): N/A

WITH WATER: N/A LBS/GAL  
WITHOUT WATER: N/A LBS/GAL

MOLECULAR WEIGHT: N/A

VISCOSITY: N/A

@

F: N/A

C: N/A

---

## SECTION 10: STABILITY AND REACTIVITY

---

STABILITY: STABLE

CONDITIONS TO AVOID (STABILITY): HEAT, FLAMES, OTHER SOURCES OF IGNITION

INCOMPATIBILITY (MATERIAL TO AVOID): STRONG OXIDIZING AGENTS, ALUMINUM, NITRIC ACID, SULFURIC ACID, AMINES & AMMONIA.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: CO<sub>1</sub> CO<sub>2</sub>

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS TO AVOID (POLYMERIZATION): N/A

---

## SECTION 11: TOXICOLOGICAL INFORMATION

---

TOXICOLOGICAL INFORMATION: TOXICITY:

LD50 (ORAL-RAT) (MG/KG) 5045

LD50 (IPR-MUS) (MG/KG) 993

LD50 (SKN-RBT) (G/KG) 13

LD50 (IV-MUS) (MG/KG) 1863

---

## SECTION 12: ECOLOGICAL INFORMATION

---

ECOLOGICAL INFORMATION: DEGRADABILITY: BOD (G/G): 1.29-1.59 STD. DILUTION/SEWAGE SEED.

AQUATIC TOXICITY: 900-1100 PPM/24 HR./CHUB/CRITICAL RANGE/FRESH WATER.

---

## SECTION 13: DISPOSAL CONSIDERATIONS

---

WASTE DISPOSAL METHOD: COMPLY WITH FEDERAL, STATE, LOCAL REGULATIONS.

RCRA HAZARD CLASS: N/A

# MATERIAL SAFETY DATA SHEET

MSDS DATE:08/13/07

SECTION 13: DISPOSAL CONSIDERATIONS (con't)

---

## SECTION 14: TRANSPORT INFORMATION

---

### U.S. DEPARTMENT OF TRANSPORTATION

PROPER SHIPPING NAME: OIL RED O-ISOPROPANOL

HAZARD CLASS: N/A

ID NUMBER: UN1219

PACKING GROUP: III

LABEL STATEMENT: FLAMMABLE LIQUID

### WATER TRANSPORTATION

PROPER SHIPPING NAME: SAME

HAZARD CLASS:

ID NUMBER:

PACKING GROUP:

LABEL STATEMENTS:

### AIR TRANSPORTATION

PROPER SHIPPING NAME: SAME

HAZARD CLASS:

ID NUMBER:

PACKING GROUP:

LABEL STATEMENTS:

OTHER AGENCIES: N/A

---

## SECTION 15: REGULATORY INFORMATION

---

### U.S. FEDERAL REGULATIONS

TSCA (TOXIC SUBSTANCE CONTROL ACT): N/A

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): N/A

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT): N/A

311/312 HAZARD CATEGORIES: N/A

313 REPORTABLE INGREDIENTS: N/A

STATE REGULATIONS: N/A

INTERNATIONAL REGULATIONS: N/A

---

## SECTION 16: OTHER INFORMATION

---

OTHER INFORMATION: N/A

PREPARATION INFORMATION: N/A

DISCLAIMER: IN COMPLIANCE WITH THE OSHA HAZARD COMMUNICATION STANDARD, 2.9 C.F.R. 1910. 1200, WE ARE PROVIDING YOU WITH A MSDS FOR THE HAZARDOUS MATERIAL YOU ARE PURCHASING.

IT IS YOUR RESPONSIBILITY TO EDUCATE YOUR EMPLOYEES ON THE SAFE USE OF THE HAZARDOUS MATERIAL.

ELECTRON MICROSCOPY SCIENCES MAKES NO PRESENTATION AS TO THE ACCURACY OF THE INFORMATION IN THE MSDS. THE INFORMATION IS BELIEVED TO BE CORRECT; HOWEVER, YOU (THE CUSTOMER), SHOULD PERFORM YOUR OWN INVESTIGATION AND INDEPENDENT VERIFICATION. IF YOU RESELL THE PRODUCT, YOU ARE RESPONSIBLE TO FORWARD THE INFORMATION IN THE MSDS TO YOUR CUSTOMER.