

MATERIAL SAFETY DATA SHEET

ELJEN TECHNOLOGY
SWEETWATER, TX 79556

Emergency Phone (24 hours)
CHEMTREC (800) 424-9300

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Date: 3 August 2003

PRODUCT NAME: EJ-301 LIQUID SCINTILLATOR

SECTION I SUPPLIER INFORMATION

COMMON NAME EJ-301
CHEMICAL NAME Aromatic hydrocarbon + organic fluors
FORMULA C₆H₄(CH₃)₂
PRODUCT CAS # 1330-20-7
MANUFACTURER ELJEN TECHNOLOGY
ADDRESS 300 CRANE STREET
SWEETWATER, TEXAS 79556
PHONE (325) 235-4276
FAX (325) 235-2872

SECTION II HAZARDOUS INGREDIENT INFORMATION

| COMPONENT | % WT. | OSHA-PEL | TLV-ACGIH |
|----------------------|-------|-----------------------|-----------------------|
| Aromatic hydrocarbon | > 90% | 435 mg/m ³ | 435 mg/m ³ |
| Organic fluors | <10% | not determined | not determined |

INGREDIENT HAZARD STATEMENT

Solvent is flammable and toxic.

Solvent is harmful by inhalation, in contact with skin and if swallowed.

Solvent is irritating to the eyes, respiratory system and skin.

SECTION III PHYSICAL/CHEMICAL PROPERTIES

BOILING POINT 137-144°C (285°F)
MELTING POINT Not applicable
SPECIFIC GRAVITY (H₂O=1) 0.87
VAPOR PRESSURE (mm Hg) 18 mm @ 37.7°C (100°F)
VAPOR DENSITY (air =1) 3.7
PERCENT VOLATILE BY VOLUME (%) 99%
EVAPORATION RATE (Ether=1) 9.5
SOLUBILITY IN WATER Nil

APPEARANCE AND ODOR Clear, blue fluorescent liquid with aromatic odor

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SECTION IV FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used): 85°F (29°C) (cc)

AUTO-IGNITION TEMP: 867°F (464°C)

FLAMMABLE LIMITS

LEL 1.1%

UEL 7%

EXTINGUISHING MEDIA:

Carbon dioxide, dry chemical powder, alcohol or polymer film
Water may be effective for cooling but may not extinguish flames.

SPECIAL FIRE FIGHTING PROCEDURES:

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Use water spray to cool fire-exposed containers.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Vapor may travel considerable distance to ignition source and flash back.
Forms explosive mixtures in air.

SECTION V REACTIVITY DATA

STABILITY: STABLE UNSTABLE

CONDITIONS TO AVOID: Sources of sparks (welding).

INCOMPATIBILITY(Mat's. To Avoid): Oxidizing agents

HAZARDOUS DECOMPOSITION PRODUCTS: Toxic combustion products,
Carbon dioxide, Carbon monoxide

HAZARDOUS POLYMERIZATION: Will not occur.

AVOID: Not applicable

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SECTION VI HEALTH HAZARD DATA

ROUTES OF ENTRY

EYES: Yes
SKIN: Yes
INHALATION: Yes
INGESTION: Yes

ACUTE EFFECTS OF OVEREXPOSURE

EYE: Can cause severe irritation, redness, tearing, blurred vision.

SKIN: Prolonged or repeated contact can cause moderate irritation, defatting, and dermatitis.

INHALATION: May cause irritation to upper respiratory tract. Excessive breathing can cause dizziness, nausea, headache.

INGESTION: May cause gastrointestinal disturbances, nausea, vomiting and diarrhea.

CARCINOGENICITY: Not determined

NTP: Not applicable **IARC:** Not applicable **OSHA:** Not applicable

CHRONIC HEALTH HAZARD: Long term exposure can lead to damage to liver, kidneys and nerves. Possible reproductive disorders based on tests of the solvent base with animals.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

Not determined

EMERGENCY FIRST AID

EYE Immediately flush eyes with copious amounts of water for at least 15 minutes, lifting upper and lower lids. Contact physician.

SKIN CONTACT: Immediately wash with copious amounts of soap and water. Remove contaminated clothing and launder for reuse. Contact physician if irritation and inflammation persists.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. Call a physician.

INGESTION: Do not induce vomiting. Call a physician. Aspiration solvent base into lungs by vomiting can lead to fatal complications.

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SECTION VII HANDLING PRECAUTIONS

EPA WASTE #: U239 **HAZARD CLASS:** 3
UN #: 1993 **PACKING GROUP:** III
DOT CLASSIFICATION: Flammable Liquid N.O.S. (Xylene)
LABELS REQ'D: Class 3, Flammable Liquid

IN CASE OF RELEASE OR SPILLAGE

Evacuate area. Shut off all sources of ignition. Cover with an activated carbon absorbent. Take up and place in closed containers. Ventilate and wash spill site after pick-up is completed. Absorb in vermiculite or other floor absorbent.

WASTE DISPOSAL METHOD

Burn in a chemical incinerator. Observe all Federal, state and local laws.

HANDLING AND STORAGE

Use non-sparking tools. Keep containers tightly closed. Keep away from heat and open flames. Do not keep empty containers.

SECTION VIII SPECIAL PROTECTION / CONTROL MEASURES

RESPIRATORY PROTECTION

Wear appropriate NIOSH/MSHA approved respirator.

VENTILATION

Mechanical exhaust required. Fumes are heavier than air.
Do not breathe the vapor

SKIN PROTECTION

Chemical resistant gloves and clothing. Solvent base is readily absorbed through skin.

EYE PROTECTION

Chemical resistant and flash protective goggles.

WORK HYGIENE PRACTICES

Wash thoroughly with soap and water after handling.

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SECTION IX ADDITIONAL INFORMATION

SARA HAZARD CATEGORIES

IMMEDIATE (ACUTE) HEALTH HAZARD: YES NO

DELAYED (CHRONIC) HEALTH HAZARD: YES NO

FIRE HAZARD: YES NO

REACTIVITY HAZARD: YES NO

SUDDEN RELEASE OF PRESSURE: YES NO

SARA SECTION 313 NOTIFICATION

THIS PRODUCT MAY CONTAIN A TOXIC CHEMICAL (OR CHEMICALS)
SUBJECT TO SARA SECTION 313 REPORTING REQUIREMENTS.

| <u>CHEMICAL NAME</u> | <u>CAS #</u> | <u>EC #</u> | <u>%WT</u> |
|----------------------|--------------|-------------|------------|
| Xylene | 1330-20-7 | 215-535-7 | > 90% |

EUROPEAN INFORMATION

EC Index No: 601-022-01-6
Flammable; Toxic; R 10, Flammable.
R 20/21, Harmful by inhalation and in contact with skin.
R38. Irritating to skin.
S25, Avoid contact with eyes.

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