

Material Safety Data Sheet

Scintiverse (TM) E

ACC# 88499

Section 1 - Chemical Product and Company Identification

MSDS Name: Scintiverse (TM) E

Catalog Numbers: SX16-4

Synonyms: None

Company Identification:

Fisher Scientific
1 Reagent Lane
Fair Lawn, NJ 07410

For information, call: 201-796-7100

Emergency Number: 201-796-7100

For CHEMTREC assistance, call: 800-424-9300

For International CHEMTREC assistance, call: 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
1330-20-7	Xylene	<96	215-535-7
9016-45-9	Ethoxylated Nonylphenol (EO-9)	<5	unlisted
92-71-7	2,5-Diphenyloxazole	<0.1	202-181-3
1806-34-4	POPOP	<0.1	217-304-6

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: light blue liquid. Flash Point: > 86 deg F.

Warning! Vapor harmful. Harmful or fatal if swallowed. **Flammable liquid and vapor.** May cause severe eye irritation and possible injury. May cause skin irritation. May cause respiratory and digestive tract irritation. Aspiration hazard if swallowed. Can enter lungs and cause damage. May cause central nervous system depression. May cause liver and kidney damage. May cause pulmonary edema. May cause reproductive and fetal effects.

Target Organs: Kidneys, central nervous system, liver.

Potential Health Effects

Eye: Contact may cause severe eye irritation and possible eye damage.

Skin: Exposure may cause irritation characterized by redness, dryness, and inflammation. Prolonged and/or repeated contact may cause defatting of the skin and dermatitis. May be absorbed through the skin.

Ingestion: Aspiration hazard. May cause central nervous system depression, kidney damage, and liver damage. Symptoms may include: headache, excitement, fatigue, nausea, vomiting, stupor, and coma. Causes gastrointestinal irritation with nausea, vomiting and diarrhea. Aspiration of material into the lungs may cause chemical pneumonitis, which may be fatal.

Inhalation: Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. Inhalation of vapor may cause respiratory tract irritation. Prolonged exposure may result in dizziness and general weakness. Irritation may lead to chemical pneumonitis and pulmonary edema.

Chronic: Chronic exposure to organic solvents has been associated with various neurotoxic effects including permanent brain and nervous system damage. May cause reproductive and fetal effects.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Discard contaminated clothing in a manner which limits further exposure.

Ingestion: Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Possible aspiration hazard. Get medical aid immediately.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

Notes to Physician: No specific antidote exists. Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire. Flammable liquid and vapor. May be ignited by heat, sparks, and flame. Vapors may form an explosive mixture with air.

Extinguishing Media: For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT use straight streams of water. For large fires, use dry chemical, carbon dioxide, alcohol-resistant foam, or water spray.

Flash Point: > 86e deg F (> 30.00 deg C)
Autoignition Temperature: Not available.
Explosion Limits, Lower:Not available.
Upper: Not available.
NFPA Rating: (estimated) Health: 2; Flammability: 3; Instability: 0

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Remove all sources of ignition. Provide ventilation. A vapor suppressing foam may be used to reduce vapors. Water spray may reduce vapor but may not prevent ignition in closed spaces.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use only in a well-ventilated area. Ground and bond containers when transferring material. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.
Storage: Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Keep from contact with oxidizing materials. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Xylene	100 ppm TWA; 150 ppm STEL	none listed	100 ppm TWA; 435 mg/m3 TWA
Ethoxylated Nonylphenol (EO-9)	none listed	none listed	none listed
2,5-Diphenyloxazole	none listed	none listed	none listed
POPOP	none listed	none listed	none listed

OSHA Vacated PELs: Xylene: 100 ppm TWA; 435 mg/m3 TWA Ethoxylated Nonylphenol (EO-9): No OSHA Vacated PELs are listed for this chemical. 2,5-Diphenyloxazole: No OSHA Vacated PELs are listed for this chemical. POPOP: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear chemical splash goggles.
Skin: Wear appropriate protective gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to prevent skin exposure.
Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Appearance: light blue
Odor: none reported
pH: Not available.
Vapor Pressure: Not available.
Vapor Density: Not available.
Evaporation Rate:> 1.0 (ether=1)
Viscosity: Not available.
Boiling Point: Not available.
Freezing/Melting Point:Not available.
Decomposition Temperature:Not available.
Solubility: Not available.
Specific Gravity/Density:0.9-0.93
Molecular Formula:Mixture
Molecular Weight:Not available.

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: High temperatures, incompatible materials, ignition sources.
Incompatibilities with Other Materials: Alkalis, strong acids, and strong oxidizers.
Hazardous Decomposition Products: Carbon monoxide, carbon dioxide.
Hazardous Polymerization: Has not been reported

Section 11 - Toxicological Information

RTECS#:**CAS#** 1330-20-7: ZE2100000**CAS#** 9016-45-9: AX0247000; AX0257000; MD0900000; MD0905000; OQ0248333; WZ4200000; WZ4375000; WZ4550000; WZ4725000; WZ4750000**CAS#** 92-71-7: RP6825000**CAS#** 1806-34-4 unlisted.**LD50/LC50:**

CAS# 1330-20-7:

Draize test, rabbit, eye: 87 mg Mild;
Draize test, rabbit, eye: 5 mg/24H Severe;
Draize test, rabbit, skin: 100% Moderate;
Draize test, rabbit, skin: 500 mg/24H Moderate;
Inhalation, rat: LC50 = 5000 ppm/4H;
Oral, mouse: LD50 = 2119 mg/kg;
Oral, rat: LD50 = 4300 mg/kg;
Skin, rabbit: LD50 = >1700 mg/kg;

CAS# 9016-45-9:

Draize test, rabbit, eye: 5 mg Severe;
Draize test, rabbit, eye: 5 mg Severe;
Draize test, rabbit, eye: 20 mg Severe;
Draize test, rabbit, eye: 100 mg Severe;
Draize test, rabbit, eye: 15 mg Severe;
Draize test, rabbit, eye: 5 mg Severe;
Oral, mouse: LD50 = >50 gm/kg;
Oral, rat: LD50 = 4 gm/kg;
Oral, rat: LD50 = 1310 mg/kg;
Oral, rat: LD50 = 2590 uL/kg;
Oral, rat: LD50 = >3 gm/kg;
Oral, rat: LD50 = 4290 uL/kg;
Oral, rat: LD50 = 3670 uL/kg;

CAS# 92-71-7:

CAS# 1806-34-4:

Carcinogenicity:

CAS# 1330-20-7: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 9016-45-9: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 92-71-7: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 1806-34-4: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information available.**Teratogenicity:** Xylene: Effects on newborn: growth statistics, inhalation-rat TCLo=50mg/m³/6 hours. Specific Developmental Abnormalities: musculoskeletal, inhalation rat TCLo=250mg/m³/24 hours.**Reproductive Effects:** Xylene: Fertility: abortion: inhalation-rabbit 1g/m³/24 hours.**Mutagenicity:** Please refer to RTECS for specific component information.**Neurotoxicity:** No information available.**Other Studies:**

Section 12 - Ecological Information

Ecotoxicity: No data available. Xylene: Acute and long-term toxicity to fish and invertebrates: LD50 for goldfish is 13 mg/L/24 Hr. Cas#1330-20-7:LC50(96Hr.) rainbow trout = 8.05 mg/L, Static condition;LC50(96Hr.) fathead minnow = 16.1 mg/L, flow-through conditions; LC50(96Hr.) bluegill = 16.1 mg/L, flow-through;EC50 (48 Hr.) water flea = 3.82 mg/L, flow-through conditions;EC50(24 Hr.) photobacterium phosphoreum = 0.0084 mg/L, Microtox test.**Environmental:** In air, xylenes degrade by reacting with photochemically produced hydroxyl radicals. In soil it will volatilize and leach into groundwater. Little bioconcentration is expected.**Physical:** ATMOSPHERIC FATE: According to a model of gas/particle partitioning of semivolatile organic compounds in the atmosphere, xylene, which has an experimental vapor pressure of 7.99 mm Hg at 25 deg C, will exist solely as a vapor in the ambient atmosphere. Vapor-phase xylene is degraded in the atmosphere by reaction with photochemically-produced hydroxyl radicals; the atmospheric lifetime of xylene is about 1-2 days. Ambient levels of xylene are detected in the atmosphere due to large emissions of this compound.**Other:** None

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.**RCRA U-Series:**

CAS# 1330-20-7: waste number U239 (Ignitable waste, Toxic waste).

Section 14 - Transport Information

US DOT

Canada TDG

Shipping Name:	XYLENES SOLUTION	No information available.
Hazard Class:	3	
UN Number:	UN1307	
Packing Group:	III	

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 1330-20-7 is listed on the TSCA inventory.
CAS# 9016-45-9 is listed on the TSCA inventory.
CAS# 92-71-7 is listed on the TSCA inventory.
CAS# 1806-34-4 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

CAS# 1330-20-7: 100 lb final RQ; 45.4 kg final RQ

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

SARA Codes

CAS # 1330-20-7: immediate, delayed, fire.
CAS # 9016-45-9: immediate, delayed, fire.

Section 313

This material contains Xylene (CAS# 1330-20-7, <96%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

Clean Air Act:

CAS# 1330-20-7 is listed as a hazardous air pollutant (HAP).

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

CAS# 1330-20-7 is listed as a Hazardous Substance under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 1330-20-7 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

CAS# 9016-45-9 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

CAS# 92-71-7 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

CAS# 1806-34-4 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

XN

Risk Phrases:

R 10 Flammable.

R 20/21 Harmful by inhalation and in contact with skin.

R 38 Irritating to skin.

Safety Phrases:

S 16 Keep away from sources of ignition - No smoking.

S 25 Avoid contact with eyes.

S 33 Take precautionary measures against static discharges.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 28B After contact with skin, wash immediately with plenty of water and soap.

WGK (Water Danger/Protection)

CAS# 1330-20-7: 2

CAS# 9016-45-9: 2

CAS# 92-71-7: No information available.

CAS# 1806-34-4: No information available.

Canada - DSL/NDSL

CAS# 1330-20-7 is listed on Canada's DSL List.

CAS# 9016-45-9 is listed on Canada's DSL List.

CAS# 92-71-7 is listed on Canada's DSL List.
CAS# 1806-34-4 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of B2, D2B.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

CAS# 1330-20-7 is not listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information

MSDS Creation Date: 6/22/1999

Revision #5 Date: 10/03/2005

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.