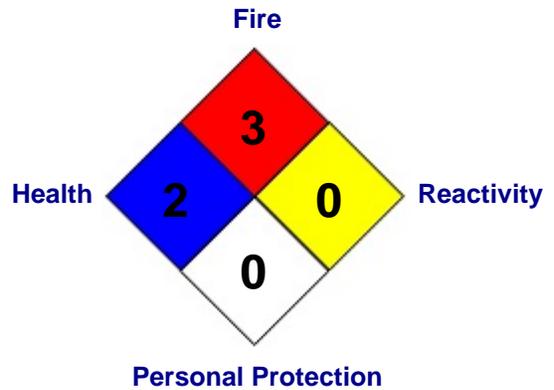




HMIS Hazard Rating:

- 4 = Severe
- 3 = Serious
- 2 = Moderate
- 1 = Slight
- 0 = Minimal



I. Chemical Product and Company Identification

Product Name: Xylene
Identification #: 35-515-3003
Product Use/Class: Paraffin & Scale Additives
Supplier: Superior Well Services
Manufacturer: Weatherford Fracturing Technologies
Emergency Contact: CHEMTREC 1 (800) 424-9300
Prepared By: RAA
Date Prepared: 02/20/2008

II. Composition/Information on Ingredients

Chemical Name: Xylene
CAS Number: 1330-20-7
Percent by Mass Less Than: 70-90

Exposure Limits

Threshold Limit Value - Time Weighted Average: 100 ppm/8hr
Threshold Limit Value - Short Term Exposure Limit: 150 ppm/15min
Permissible Exposure Limit - Time Weighted Average: 100 ppm/8hr
Permissible Exposure Limit - Ceiling: NI
Company Threshold Limit - Time Weighted Average: 46 ppm
Skin: NI

Chemical Name: Ethyl Benzene
CAS Number: 100-41-4
Percent by Mass Less Than: 10-30

Exposure Limits

Threshold Limit Value - Time Weighted Average: 100 ppm/8hr
Threshold Limit Value - Short Term Exposure Limit: 125 ppm/15min
Permissible Exposure Limit - Time Weighted Average: 100 ppm/8hr
Permissible Exposure Limit - Ceiling: NI
Company Threshold Limit - Time Weighted Average: 46 ppm
Skin: NI

Chemical Name: Toluene
CAS Number: 108-88-3
Percent by Mass Less Than: .9

Exposure Limits

Threshold Limit Value - Time Weighted Average: 50 ppm/8hr
Threshold Limit Value - Short Term Exposure Limit: NI
Permissible Exposure Limit - Time Weighted Average: 200 ppm/8hr
Permissible Exposure Limit - Ceiling: 300 ppm
Company Threshold Limit - Time Weighted Average: NI
Skin: Yes

III. Hazardous Identification

Emergency Overview:	Flammable irritant.
Effects of Overexposure	
Eye Contact:	Liquid, aerosols and vapors of this product may be irritating and can cause pain, tearing, reddening and swelling accompanied by a stinging sensation and/or a feeling like that of fine dust in the eyes.
Skin Contact:	May cause skin irritation. Allergic reactions are possible. May cause skin sensitization, an allergic reaction which becomes evident on re-exposure to this material.
Inhalation:	Headaches, dizziness, nausea, decreased blood pressure, change in heart rate, and cyanosis may result from overexposure to vapor or skin exposure.
Ingestion:	This material may be harmful or fatal if swallowed. May cause stomach or intestinal upset with pain, nausea, and/or diarrhea.
Chronic Harards:	This product contains Ethyl Benzene. The IARC has evaluated Ethyl Benzene and classified it as a possible carcinogen for humans (group 2B) based on sufficient evidence for carcinogenicity in experimental animals, but inadequate evidence for cancer in exposed humans.

Primary Route(s) of Entry:	<input type="checkbox"/> Skin Contact	<input type="checkbox"/> Eye Contact	<input type="checkbox"/> Ingestion
	<input type="checkbox"/> Skin Absorbtion	<input type="checkbox"/> Inhalation	

IV. First Aid Measures

Eye Contact:	Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Remove contact lenses if possible. Get medical attention if irritation persists.
Skin Contact:	Remove contaminated clothing. Wash skin with soap and water. Get medical attention if irritation persists. Wash clothing before reuse.
Inhalation:	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion:	If swallowed, DO NOT induce vomiting. If victim is fully conscious, drink a glass of water or milk. Never give anything by mouth to an unconscious person. Get medical attention immediately.

V. Fire Fighting Measures

Flash Point:	76-81 F
Auto Ignition Temperature:	810-932F
Lower Explosive Temp.:	1.9 @ 77F
Upper Explosive Temp.:	12.3 @ 77F
Extinguishing Media:	CO2, Dry Chemical, Foam, Water Fog
Unusual Fire and Explosive Harards:	Vapors can travel to a source of ignition and flash back. "Empty" containers retain product residue (liquid and/or vapors) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC, ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, properly bunged and promptly returned to a drum conditioner, or properly disposed of.
Special Fire Fighting Procedures:	This product is a dangerous fire and explosive hazard. DO not extinguish pressure fires unless fuel flow can be stopped. Vapors may flow along surfaces, reach distant ignition sources, and flash back. Fire fighters should wear self-contained breathing apparatus and full protective clothing. Use water spray to cool fire exposed surfaces and to disperse vapors. Use foam or dry chemical to extinguish fire. Avoid spraying water directly into storage containers due to danger of boil over.

VI. Accidental Release Measures

Steps to be Taken in Case Material is Released or Spilled: Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Avoid runoff into storm sewers and ditches. (See section VIII.) Spilled material should be contained and disposed of properly. Extinguish possible ignition sources until the area is determined to be free from fire or explosive hazards. Evacuate area. US regulations require reporting spills and releases to soil, water, and air in excess of reportable quantities. In case of water spill, eliminate sources of ignition. Warn occupants and shipping in surrounding and downwind areas of fire and explosion hazard and request all to stay clear. Remove from surface with suitable absorbents. If allowed by local authorities and environmental agencies, sinking and/or suitable dispersants may be used in non-confined waters. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

VII. Handling and Storage

Handling: Handle all chemicals with care. Ground and bond containers when transferring materials.

Storage: Store in a cool, dry, well-ventilated safety storage cabinet or room with appropriate labels. Avoid elevated temperatures. Keep away from ignition sources and ground all equipment containing this material. Containers must be able to withstand expansion and/or pressures expected from warming and cooling in storage. Empty containers contain residue (liquid and/or vapor) and can be dangerous. **DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.** Containers should be bonded and grounded for transfers to avoid static sparks.

VIII. Exposure Controls/Personal Protection

Engineering Controls: General or dilution ventilation is frequently insufficient as the sole means of controlling employee exposure. Local ventilation is usually preferred. Explosion-proof equipment (fans, switches, etc.) should be used in mechanical ventilation systems. Lab samples should be handled in a lab hood.

Respiratory Protection: A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

Skin Protection: Where contact is likely, wear chemical resistant gloves, long sleeves and rubber boots.

Eye Protection: Wear safety glasses with side shields (or goggles) and a face shield.

Other Protective Equipment: Where splashing is possible, full chemically resistant protective clothing (acid suit) and boots are required. Emergency eyewash stations and deluge showers should be available in the work area. Follow all MSDS/label precautions even after container is emptied because they may retain product residues. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment.

Hygienic Practices: Wash hands before eating. Use only in well ventilated area.

IX. Physical and Chemical Properties

Boiling Point:	279-289 F	Vapor Density:	3.7
Odor:	Aromatic	Odor Threshold:	No Information
Appearance:	Clear Liquid	Evaporation Rate:	.8
Solubility in H2O:	.02 @ 77F	Specific Gravity:	0.87 @60F
Freeze Point:	-54- -13 F	pH at 50.0%:	No Information
Vapor Pressure:	7-14.2 mm/Hg @ 100F	Viscosity:	.7 cSt @77F
Physical State:	Liquid		
Coefficient of Water Oil Distribution:	No Information		

X. Stability and Reactivity

Conditions to Avoid:	Heat, sparks, flames, and other sources of ignition. Avoid strong oxidizing conditions and agents.
Incompatibility:	Avoid contact with strong oxidizing agents, nitric and sulfuric acids, halogen, and molten sulfur. Temperatures above ambient.
Hazardous Decomposition Products:	Carbon dioxide which can act as a asphyxiant. Carbon monoxide which is toxic if inhaled.
Hazardous Polymization:	Will not occur under normal conditions.
Stability:	This product is stable under normal storage conditions.

XI. Toxicological Properties

Toxicological Properties:	This product contains Ethyl Benzene. The IARC has evaluated Ethyl Benzene and classified it as a possible carcinogen for humans (group 2B) based on sufficient evidence for carcinogenicity in experimental animals, but inadequate evidence for cancer in exposed humans.
Oral:	Xylene: LD50 rat=4300 mg/kg; Ethylbenzene: LD50 rat=3500 mg/kg
Dermal:	Xylene: LD50 rabbit=14100 uL/kg; Ethylbenzene: LD50 rabbit=17800 uL/kg
Inhalation:	Xylene: LC50 rat= 4550 ppm/4hr

XII. Ecological Information

Ecological Properties:	This mixture contains components that are potentially toxic to fresh water and salt water ecosystems.
Ecotoxicity:	No product information is available.
Chemical Fate Information:	This mixture will normally float on water with its lighter components evaporating rapidly. In stagnant or slow flowing waterways, a hydrocarbon layer can cover a large surface area and eliminate atmospheric oxygen transport into water. This will lead to oxygen depletion which can kill fish and/or create an anaerobic environment. Can also be harmful to plankton, algae, aquatic life, and water birds. This product is not expected to bioaccumulate through food chains.

XIII. Disposal Consideration

Disposal Method:	Consult local, state, and federal regulatory agencies for acceptable disposal procedures and disposal locations. Disposal in streams or sewers may be prohibited by federal, state, and local regulations.
RCRA Status:	Discarded product, as sold, would be considered a RCRA Hazardous Waste based on the characteristics of ignitability and toxicity. The EPA Hazardous Waste Numbers are D001 and D018.

XIV. Transportation Information

DOT Proper Shipping Name: Xylenes
DOT Technical Name:
DOT Hazard Class: 3
DOT Hazard Subclass:
DOT UN/NA Number: UN1307
Packing Group: II
Resp. Guide Page:

DOT Proper Shipping Name: Xylenes
DOT Technical Name:
DOT Hazard Class: 3
DOT Hazard Subclass:
DOT UN/NA Number: UN1307
Packing Group: III
Resp. Guide Page:

XV. Regulatory Information

OSHA:	Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)		
TSCA Status:	All components of this product are listed on the Toxic Substance Control Act Inventory.		
CERCLA SARA:	This product has been reviewed according to the EPA 'Hazard Categories' promulgated under the sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories: Immediate Health Hazard, Chronic Health Hazard, Fire Hazard		
SARA Section 313 Required Reporting:	Chemical	CAS Number	WT/WT%
	Xylene	1330-20-7	70-90
	Ethyl Benzene	100-41-4	10-30

XVI. Other Information

Other Information: NA = Not applicable ND = Not Determined NI = No Information NE = Not Established

This product material safety data sheet provides health and safety information. The product is to be used in applications consistent with our product literature. Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. For any other uses, or when used in conjunction with other products, exposures must be evaluated by the user so that appropriate handling practices and training programs can be established to ensure safe workplace operations. This information is confidential to Superior Well Services, Ltd. (SWSI) and intended solely for the use of the individual or entity to whom they are directly distributed. Distribution or use beyond the individual or entity is strictly prohibited without the consent of SWSI.