Sea Hawk
PREMIUM YACHT FINISHES

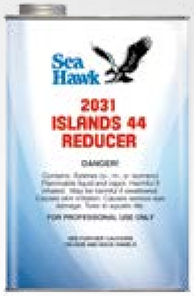
2031 Islands 44 Reducer

Safety Data Sheet

NEW NAUTICAL COATINGS, INC.
14805 49th Street North
Clearwater, FL 33762
727.523.8053 • 800.528.0997 • FAX 727.523.7325
www.SeaHawkPaints.com

Designed for hot climates, Islands 44 Reducer should be the only reducer used in Islands 44 Plus.

Xylene



OVER 35 YEARS

CHEMTREC 24-HR EMERGENCY RESPONSE NUMBER
800-424-9300 • OUTSIDE US 703-527-3887
CHEMTREC should only be called in the event of chemical emergencies involving spill, leak, fire, exposure, or accident involving chemicals.

CITGO Petroleum Corporation
1701 Golf Road, Suite 1-1101
Rolling Meadows, IL 60008-4295

MSDS No. 19173

Revision Date 11/6/2000

IMPORTANT: Read this MSDS before handling or disposing of this product and pass this information on to employees, customers and users of this product.

Hazard Rankings

	HMIS	NFPA
Health Hazard	* 2	2
Fire Hazard	3	3
Reactivity	0	0

*** = Chronic Health Hazard**

Protective Equipment

Minimum Requirements
See Section 8 for Details

Emergency Overview

Physical State	Liquid.		
Color	Transparent, colorless.	**Odor**	Aromatic hydrocarbon.

WARNING! Flammable liquid; vapor may cause flash fire!
Mist or vapor may irritate the eyes, mucous membranes, and respiratory tract!
Liquid contact may cause minimal to moderate eye and/or moderate to severe skin irritation and inflammation!
May be harmful or fatal if inhaled, ingested, or absorbed through the skin!
Overexposures may cause central nervous system (CNS) depression and/or other target organ effects such as hearing loss!
Aspiration into the lungs can cause pulmonary edema and chemical pneumonia!
Prolonged and/or repeated inhalation may increase the heart's susceptibility to arrhythmias (irregular beats)!
May adversely affect reproduction!
Contains Ethylbenzene! Based upon animal testing, a cancer hazard may exist.
Spills may create a slipping hazard!

SECTION 1: IDENTIFICATION

Trade Name	**Xylene**	**Technical Contact**	(800) 967-7601 (8am - 4pm CT M-F)
Product Number	2173	**Medical Emergency**	(918) 495-4700
CAS Number	Mixture---See Section 2.	**CHEMTREC Emergency**	(800) 424-9300
Product Family	Aromatic Hydrocarbon Solvent		
Synonyms	Xylol; Mixed Xylenes; Xylene Isomers and Ethylbenzene; Dimethylbenzenes and Ethylbenzene; C8 Alkylbenzenes; C8 Aromatics; C8 Aromatic Hydrocarbon Solvent; XE Solvent; Industrial-grade Xylene (meets ASTM D-364 Specifications); "Ten-degree" Xylene (meets ASTM D-846 Specifications).		

SECTION 2: COMPOSITION

Component Name(s)	CAS Registry No.	Concentration (%)
1) Xylene, Mixed Isomers	1330-20-7	75-90
2) Ethylbenzene	100-41-4	10-25
3) 1,3-Dimethylbenzene (meta-Xylene)	108-38-3	40-60
4) 1,2-Dimethylbenzene (ortho-Xylene)	95-47-6	10-25
5) 1,4-Dimethylbenzene (para-Xylene)	106-42-3	10-15

SECTION 3: HAZARDS IDENTIFICATION

Also see Emergency Overview and Hazard Ratings on the top of Page 1 of this MSDS.

Major Route(s) of Entry Skin contact. Eye contact. Absorption. Inhalation.

Signs and Symptoms of Acute Exposure

Inhalation Breathing high concentrations of vapor may cause respiratory irritation, euphoria, excitation or giddiness, headache, nausea, vomiting, abdominal pain, loss of appetite, fatigue, muscular weakness, staggering gait, and central nervous system (CNS) depression. CNS effects include dizziness, drowsiness, disorientation, vertigo, memory loss, visual disturbances, difficulty with breathing, convulsions, unconsciousness, paralysis, coma, and even death, depending upon the exposure duration. Vapors can reduce the oxygen content in air. Approximately 20,000 ppm (or 2 vol.%) in air is fatal to humans in 5 to 10 minutes. Sudden death from cardiac arrest (heart attack) may result from exposure to greater than 10,000 ppm for only 5 minutes. Oxygen deprivation is possible if working in confined spaces.

Eye Contact Animal test results and actual human exposures suggest that this product can cause mild to severe eye irritation upon short-term exposure. Symptoms include stinging, watering, redness, and swelling.

Skin Contact Animal test results and actual human exposures of this material suggest that this product can cause moderate skin irritation. Short-term contact symptoms include redness, itching, and burning of the skin. This material may also be absorbed through the skin and produce CNS depression effects (see "Inhalation" above). If the skin is damaged, absorption increases. Prolonged and/or repeated contact may cause moderate to severe dermatitis. Chronic symptoms may include drying, swelling, scaling, blistering, cracking, and severe tissue damage.

Ingestion If swallowed, this material may irritate the mucous membranes of the mouth, throat, and esophagus. It can be readily absorbed by the stomach and intestinal tract. Symptoms include a burning sensation of the mouth and esophagus, nausea, vomiting, dizziness, staggering gait, drowsiness, loss of consciousness, and delirium, as well as additional central nervous system (CNS) effects (see "Inhalation" above).

Due to its light viscosity, there is a danger of aspiration into the lungs during vomiting. Aspiration can result in severe lung damage or death. Progressive CNS depression, respiratory insufficiency, and ventricular fibrillation may also result in death.

Chronic Health Effects Summary Chronic effects of ingestion and subsequent aspiration into the lungs may cause pneumatocele (lung cavity) formation and chronic lung dysfunction. Chronic occupational **xylene** exposures have caused auditory nerve degeneration.

Reports have associated repeated and proplonged occupational overexposure to solvents with irreversible brain and nervous system damage (sometimes referred to as "Solvent or Painter's Syndrome"). Intentional misuse by deliberately concentrating and inhaling this product may be harmful or fatal.

Based upon animal testing, the **C8 aromatic hydrocarbon components (xylene isomers and ethylbenzene)** might be assumed to cause embryo and fetal toxicity, spontaneous abortions, and/or decreased fetal and newborn weights if overexposures occur during a woman's early gestation period.

At high exposure concentrations, **ethylbenzene,** a component of this product, has been associated with multiple organ tumors in laboratory animals. (See Section 11.)

Conditions Aggravated by Exposure Personnel with pre-existing nervous system disease, neurological conditions, skin disorders, impaired hearing, liver, or kidney function, or chronic respiratory diseases, and women attempting to conceive should avoid exposure.

Exposure to high concentrations of this material may increase the sensitivity of the heart to **epinepherine (adrenalin) and catecholamine-like drugs**. Personnel with pre-existing cardiac disorders may be more susceptible to this effect (see Section 4, "Note to Physicians").

Target Organs This substance is toxic to lungs, central nervous system, especially the auditory nerve, brain, mucous membranes, skin, eyes, and possibly, the blood, liver, kidneys, and reproductive systems.

Carcinogenic Potential This material contains ethylbenzene at concentrations at or above 0.1%. **Ethylbenzene** is considered possibly carcinogenic to humans by IARC. (See Section 11.)

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OSHA Hazard Classification is indicated by an "X" in the box adjacent to the hazard title. If no "X" is present, the product does not exhibit the hazard as defined in the OSHA Hazard Communication Standard (29 CFR 1910.1200).

OSHA Health Hazard Classification				**OSHA Physical Hazard Classification**					
Irritant	☒	**Toxic**	☐	**Combustible**	☐	**Explosive**	☐	**Pyrophoric**	☐
Sensitizer	☒	**Highly Toxic**	☐	**Flammable**	☒	**Oxidizer**	☐	**Water-reactive**	☐
Corrosive	☐	**Carcinogenic**	☒	**Compressed Gas**	☐	**Organic Peroxide**	☐	**Unstable**	☐

SECTION 4: FIRST AID MEASURES

Take proper precautions to ensure your own health and safety before attempting rescue or providing first aid. For more specific information, refer to Exposure Controls and Personal Protection in Section 8 of this MSDS.

Inhalation	Immediately move victim to fresh air. If victim is not breathing, immediately begin rescue breathing. If heart has stopped, immediately begin cardiopulmonary resuscitation (CPR). If breathing is difficult, 100 percent humidified oxygen should be administered by a qualified individual. Seek medical attention immediately.
Eye Contact	Check for and remove contact lenses. If irritation or redness develops, flush eyes with cool, clean, low-pressure water for at least 15 minutes. Hold eyelids apart to ensure complete irrigation of the eye and eyelid tissue. Do not use eye ointment. Seek medical attention immediately.
Skin Contact	Remove contaminated shoes and clothing. Flush affected area with large amounts of water. If skin surface is damaged, apply a clean dressing and seek medical attention. Do not use ointments. If skin surface is not damaged, clean affected area thoroughly with mild soap and water. Seek medical attention if tissue appears damaged or if pain or irritation persists.
Ingestion	Do not induce vomiting or give anything by mouth. If spontaneous vomiting is about to occur, place victim's head below knees. If victim is drowsy or unconscious, place on the left side with head down. Never give anything by mouth to a person who is not fully conscious. Do not leave victim unattended. Seek medical attention immediately.
Notes to Physician	Inhalation overexposure can produce toxic effects. Monitor for respiratory distress. If cough or difficulty in breathing develops, evaluate for upper respiratory tract inflammation, bronchitis, and pneumonitis. Vigorous anti-inflammatory/steroid treatment may be required at first evidence of upper airway or pulmonary edema. Administer 100 percent humidified supplemental oxygen with assisted ventilation, as required. If ingested, this material presents a significant aspiration/chemical pneumonitis hazard. As a result, induction of emesis is not recommended. Administer an aqueous slurry of activated charcoal followed by a cathartic such as magnesium citrate or sorbitol. Also, treatment may involve careful gastric lavage if performed soon after ingestion or in patients who are comatose or at risk of convulsing. Protect the airway by cuffed endotracheal intubation or by placement of the body in a Trendelenburg and left lateral decubitus position. Obtain chest X-ray and liver function tests. Monitor for cardiac function, respiratory distress and arterial blood gases in severe exposure cases. **Epinepherine and other sympathomimetic drugs** may initiate cardiac arrhythmias (irregular beating) in persons exposed to high concentrations of this material (e.g., in enclosed spaces or with deliberate abuse). If used, monitor heart action closely. Consider use of other drugs with less arrhythmogenic potential.

SECTION 5: FIRE FIGHTING MEASURES

NFPA Flammability Classification	OSHA/NFPA Class-IC Flammable Liquid. Moderately flammable!		
Flash Point Method	CLOSED CUP: 26° to 27°C (79° to 81°F). (Tagliabue [ASTM D-56])		
Lower Flammable Limit	AP 1.0 %	**Upper Flammable Limit**	AP 7.1 %
Autoignition Temperature	AP 432°C (810°F)		
Hazardous Combustion Products	Burning or excessive heating may produce smoke, carbon monoxide, carbon dioxide, and possibly other harmful gases/vapors.		

Special Properties	Flammable Liquid! This material releases vapors at or below ambient temperatures. When mixed with air in certain proportions and exposed to an ignition source, its vapor can cause a flash fire. Use only with adequate ventilation. Vapors are heavier than air and may travel long distances along the ground to an ignition source and flash back. May create vapor/air explosion hazard in confined spaces such as sewers. If container is not properly cooled, it can rupture in the heat of a fire.
Extinguishing Media	SMALL FIRE: Use dry chemicals, carbon dioxide (CO_2), foam, water fog, or inert gas (nitrogen). LARGE FIRE: Use foam, water fog, or waterspray. Water fog and spray are effective in cooling containers and adjacent structures but might cause frothing and/or may not achieve extinquishment. A water jet may be used to cool the vessel's external walls to prevent pressure build-up, autoignition, or explosion. NEVER use a water jet directly on the fire because it may spread the fire to a larger area.
Fire Fighting Protective Clothing	Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies. Evacuate area and fight the fire from a maximum distance or use unmanned hose holders or monitor nozzles. Cover pooling liquid with foam. Containers can build pressure if exposed to radiant heat; cool adjacent containers with flooding quantities of water until well after the fire is out. Withdraw immediately from the area if there is a rising sound from venting safety devices or discoloration of vessels, tanks, or pipelines. Be aware that burning liquid will float on water. Notify appropriate authorities if liquid(s) enter sewers/waterways.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Take proper precautions to ensure your own health and safety before attempting spill control or clean-up. For more specific information, refer to the Emergency Overview on Page 1, Exposure Controls and Personal Protection in Section 8 and Disposal Considerations in Section 13 of this MSDS.

Flammable Liquid! Release causes an immediate fire or explosion hazard. Evacuate all non-essential personnel from immediate area and establish a "regulated zone" with site control and security. A vapor-suppressing foam may be used to reduce vapors. Eliminate all ignition sources. All equipment used when handling this material must be grounded. Stop the leak if it can done without risk. Do not touch or walk through spilled material. Remove spillage immediately from hard, smooth walking areas. Prevent its entry into waterways, sewers, basements, or confined areas. Absorb or cover with dry earth, sand, or other non-combustible material and transfer to appropriate waste containers. Use clean, non-sparking tools to collect absorbed material.

For large spills, secure the area and control access. Dike far ahead of a liquid spill to ensure complete collection. Water mist or spray may be used to reduce or disperse vapors; but, it may not prevent ignition in closed spaces. This material will float on water and its run-off may create an explosion or fire hazard. Verify that responders are properly HAZWOPER-trained and wearing appropriate respiratory equipment and fire-resistant protective clothing during cleanup operations. In an urban area, cleanup spill as soon as possible; in natural environments, cleanup on advice from specialists. Pick up free liquid for recycle and/or disposal if it can be accomplished safely with explosion-proof equipment. Collect any excess material with absorbant pads, sand, or other inert non-combustible absorbent materials. Place into appropriate waste containers for later disposal. Comply with all laws and regulations.

SECTION 7: HANDLING AND STORAGE

Handling

A spill or leak can cause an immediate fire/explosion hazard. Keep containers closed and do not handle or store near heat, sparks, or any other potential ignition sources. Bond and ground all equipment before transferring this material from one container to another. Do not contact with oxidizable materials. Do not breathe vapor. Use only with adequate ventilation/personal protection. Never siphon by mouth or take internally. Avoid contact with eyes, skin, and clothing. Prevent contact with food, chewing, or smoking materials.

When performing repairs and maintenance on contaminated equipment, keep unnecessary persons away from the area. Eliminate all potential ignition sources. Drain and purge equipment, as necessary, to remove material residues. Use gloves constructed of impervious materials and protective clothing if direct contact is anticipated. Provide ventilation to maintain exposure potential below applicable exposure limits. Promptly remove contaminated clothing. Wash exposed skin thoroughly with soap and water after handling.

Empty containers may contain material residues which can ignite with explosive force. Misuse of empty containers can be dangerous if used to store toxic, flammable, or reactive materials. Cutting or welding of empty containers can cause fire, explosion, or release of toxic fumes from residues. Do not

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pressurize or expose empty containers to open flame, sparks, or heat. Keep container closed and drum bungs in place. All label warnings and precautions must be observed. Return empty drums to a qualified reconditioner. Consult appropriate federal, state and local authorities before reusing, reconditioning, reclaiming, recycling, or disposing of empty containers and/or waste residues of this material.

Storage

Store and transport in accordance with all applicable laws. Keep containers tightly closed and store in a cool, dry, well-ventilated place, plainly labeled, and out of closed vehicles. Keep away from all ignition sources! Ground all equipment containing this material. Containers should be able to withstand pressures expected from warming and cooling in storage. This flammable liquid should be stored in a separate safety cabinet or room, and preferably refrigerated. All electrical equipment in areas where this material is stored or handled should be installed in accordance with applicable requirements of the N.F.P.A.'s National Electical Code (NEC).

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and/or mists below the pertinent exposure limits (see below). All electrical equipment should comply with the NFPA NEC Standards. Ensure that an emergency eye wash station and safety shower are near the work-station location.

Personal Protective Equipment

Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to OSHA regulations. The following pictograms represent the minimum requirements for personal protective equipment. For certain operations, additional PPE may be required.

Eye Protection

Safety glasses with side shields are recommended as a minimum protection. During transfer operations or when there is a likelihood of misting, splashing, or spraying, chemical goggles and face shield should be worn. Suitable eye wash water should be readily available.

Hand Protection

Avoid skin contact and use gloves (disposable PCV, neoprene, nitrile, vinyl, or PVC/NBR). Before eating, drinking, smoking, use of toilet facilities, or leaving work, wash hands with plenty of mild soap and water. DO NOT use gasoline, kerosene, other solvents, or harsh abrasive skin cleaners.

Body Protection

Avoid skin contact. It is recommended that fire-retardant garments (e.g. Nomex™) be worn while working with flammable and combustible liquids. If splashing or spraying is expected, chemical-resistant protective clothing (Tyvek®, nitrile, or neoprene) should be worn. This might include long-sleeves, apron, slicker suit, boots, and additional facial protection. If general contact occurs, IMMEDIATELY remove soaked clothing and take a shower. Contaminated leather goods should be removed promptly and discarded.

Respiratory Protection

For unknown vapor concentrations use a positive-pressure, pressure-demand, self-contained breathing apparatus (SCBA). For known vapor concentrations above the occupational exposure guidelines (see below), use a NIOSH-approved organic vapor respirator if adequate protection is provided. Protection factors vary depending upon the type of respirator used. Respirator use should follow OSHA requirements (29 CFR 1910.134) or equivalent standard (e.g. ANSI Z88.2).

General Comments

Warning! Odor is an inadequate warning for hazardous conditions.

Occupational Exposure Guidelines

Substance	**Applicable Workplace Exposure Levels**
1) Xylene, Mixed Isomers ("A4" = Not Classifiable)	TWA: 100 STEL: 150 (ppm) from ACGIH (TLV) [2000] TWA: 100 STEL: 150 (ppm) from OSHA (PEL) [1989]
2) Ethylbenzene ("A3" Animal Carcinogen [Proposed for 2001.])	TWA: 100 STEL: 125 (ppm) from ACGIH (TLV) [2000] TWA: 100 STEL: 125 (ppm) from OSHA (PEL) [1989]

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid.	**Color**	Transparent, colorless.	**Odor**	Aromatic hydrocarbon.
Specific Gravity	0.871 (Water = 1)	**pH**	Not applicable.	**Vapor Density**	3.70 (Air = 1)
Boiling Point/Range	136° to 145°C (277° to 293°F) (ASTM D-86)			**Melting/Freezing Point**	-95° to -25°C (-139° to -13°F) (ASTM D-92)
Vapor Pressure	6.6-7.0 mm Hg at 20°C (68°F).			**Viscosity (cSt @ 40°C)**	LT 3
Solubility in Water	Slightly soluble in cold water (LT 0.08%).			**Volatile Characteristics**	Volatile Organic Compounds (VOCs) Content = 100%; 872 gm/L.

Additional Properties C8 Aromatic Hydrocarbon Content = 99.8 to 100 Wt.% (ASTM D-1319);
Alkane, Isoparaffin, and Cycloalkane Hydrocarbons Content = LT 0.2 Wt.% (ASTM D-1319);
Average Density at 60°F = 7.253 lbs./gal. (ASTM D-2161);
Aniline Cloud Point Temperature = 50°F (10°C) (ASTM D-611);
Kauri-Butanol (KB) Value = 98 (ASTM D-1133);
Dry Point Temperature = 285°F (141°C) (ASTM D-86);
Evaporation Rate = 0.8 when n-Butyl acetate = 1.0;
Heat Value = 18,445 Btu.

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability	Stable.	**Hazardous Polymerization**	Not expected to occur.
Conditions to Avoid	Keep away from extreme heat, sparks, open flame, and strongly oxidizing conditions.		
Materials Incompatibility	Strong acids, alkalies, and oxidizers such as liquid chlorine, other halogens, hydrogen peroxide, and oxygen.		
Hazardous Decomposition Products	No substances are readily identified from composition; but, no degradation data is available.		

SECTION 11: TOXICOLOGICAL INFORMATION

For other health-related information, refer to the Emergency Overview on Page 1 and the Hazards Identification in Section 3 of this MSDS.

Toxicity Data

Xylenes (Mixed Isomers):
ORAL (LD50): Acute: 4,300 mg/kg [Rat].
GAS (LC50): Acute: 4,550 ppm for 4 hours [Rat].
DERMAL (LD50): Acute: 14,100 uL/kg [Rabbit].
SUBCUTANEOUS (LD50): Acute: 1,700 mg/kg [Rat].
INTRAPERITONEAL (LD50): Acute: 2,459 mg/kg [Rat].
INTRAPERITONEAL (LD50): Acute: 1,548 mg/kg [Mouse].
Ethylbenzene (EB or Ethylbenzol):
ORAL (LD50): Acute: 3,500 mg/kg [Rat].
DERMAL (LD50): Acute: 17,800 uL/kg [Rabbit].
INTRAPERITONEAL (LD50): Acute: 2,624 mg/kg [Rat].

An inhalation study with laboratory animals indicated an association of **xylene** with hearing loss in rats. Chronic overexposure to xylene may produce irreversible damage to the central nervous system, including ototoxicity, that can be increased by the consumption of ethanol (alcoholic drinks). Drinking beverages which contain **ethanol** in conjunction with **xylene** exposure increases the alcoholic effects and impairs the clearance of xylenes from the body. Xylene isomers accumulate in the adipose (fat) tissues, from which they are slowly released. Complete clearance may take several days following exposure.

Several animal studies using pregnant rodents have shown that **mixed xylene isomers (dimethylbenzenes) and ethylbenzene** may all cause embryo and/or feto-toxicity. Inhalation and feeding studies involving pregnant laboratory animals have produced limited evidence of fetal toxicity including increased incidence of spontaneous abortions, decreased fetal weight, delayed bone development, non-lethal abnormalities such as musculoskeletal and craniofacial variations, and reduced litter sizes. The significance of these animal study results to humans is not known. Xylenes may also cause teratogenic effects.

Two-year rat and mouse gavage (forced feeding) studies by the National Toxicology Program (NTP) using **mixed xylene isomers including 17% ethylbenzene** showed "no evidence of carcinogenicity". Also, a two-year mixed xylenes skin-painting study with shaved rats and mice showed "no incidence of non-neoplastic or neoplastic lesions". And, none of the components were mutagenic when tested in the modified Ames assay, Chinese hampster ovary (CHO) cell assay (with and without metabolic activation), or the in-vitro CHO sister-chromatid exchange (SCE) assay.

The National Toxicology Program (NTP) completed a 2-year inhalation bioassay of **ethylbenzene (EB)** in rodents. The study was conducted in rats and mice at exposure concentrations of 0, 75, 200, and 750 ppm. No significant effects were observed at the 75 and 200 ppm levels. However, compared to chamber controls, the severity of nephropathy was increased in rats at the 750 ppm level; and male rats had higher incidences of renal tubule carcinomas. Step section analyses of the kidneys found a significant increase hyperplasia and renal tubule adenomas in both male and female rats. Also at this 750 ppm level, male mice had a higher incidence of alveolar/bronchiolar adenomas and carcinomas and female mice had increased hepatocellular adenomas and carcinomas when compared to chamber controls. Hyperplasia was also observed in the thyroid gland of both sexes of mice and in the pituitary gland of female mice. The relevance of these findings to human health is unclear. However, based upon this data, the International Agency for Research on Cancer (IARC) has designated EB as possibly carcinogenic to humans (Group 2B).

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Ecological effects testing has not been conducted on this material. If spilled, this aromatic naphtha, its storage tank water bottoms and sludge, and any contaminated soil or water may be hazardous to human, animal, and aquatic life. **Xylene isomers and ethylbenzene** are volatile and might contribute to the creation of atmospheric smog.

Using Rainbow Trout (Oncorhynchus mykiss) and Dungeness Crab (Cancer magister), **all the components in this naphtha (xylene isomers and ethylbenzene)** showed a 96-hour TLms (Median Toxic Limit) of from 5 ppm to 20 ppm in ambient saltwater. Also, 24-hour and 96-hour TLms produced results from 10 ppm to 60 ppm when using Bluegill Sunfish (Lepomis macrochirus), Goldfish (Carassius auratus), and Guppy (Lebistes reticulatus) in fresh water. Using Water Fleas (Daphnia magna), these substances showed 24-hour TLms of from 100 ppm to 200 ppm. Based upon actual spill incident investigations, similar naphthas have been shown to bioaccumulate in tissues of various fish from a 1 ppm to 10 ppm levels.

Environmental Fate

This naphtha is potentially toxic to freshwater and saltwater ecosystems. It will normally float on water and evaporate rapidly. In stagnant or slow-flowing waterways, a naphtha hydrocarbon layer can cover a large surface area. As a result, this covering layer might limit or eliminate natural atmospheric oxygen transport into the water. With time, if not removed, oxygen depletion in the waterway might be enough to cause a fish kill or create an anaerobic environment. This coating action can also be harmful or fatal to plankton, algae, aquatic life, and water birds. Additionally, potable water and boiler feed water systems should NEVER be allowed more than 5 ppm contamination from this material.

For additional ecological information concerning components of this product, users should refer to the Hazardous Substances Data Bank® and the Oil and Hazardous Materials/Technical Assistance Data System (OHM/TADS) maintained by the U.S. National Library of Medicine. (See Section 2 for components.)

SECTION 13: DISPOSAL CONSIDERATIONS

Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly, it is the responsibility of the user to determine the proper storage, transportation, treatment and/or disposal methodologies for spent materials and residues at the time of disposition.

Maximize material recovery for reuse or recycling. If spilled material is introduced into a wastewater treatment system, chemical and biological oxygen demand (COD and BOD) will likely increase. This material is biodegradable if gradually exposed to microorganisms, preferably in an aerobic environment. In sewage- seeded wastewater, at or below concentrations of 0.2 vol.% of this naphtha, there is little or no effect on bio-oxidation and/or digestion. However, at 1 vol.%, it doubles the required digestion period. Higher concen- trations interfere with floc formation and sludge settling and also plug filters or exchange beds. Vapor emissions from a bio-oxidation process contaminated by this material might prove to be a health hazard.

Recovered non-usable material may be regulated by US EPA as a hazardous waste due to its ignitibility (D001) and/or its toxic (U239) characteristics. In addition, conditions of use may cause this material to become a hazardous waste, as defined by Federal or State regulations. It is the responsibility of the user to determine if the material is a RCRA "hazardous waste" at the time of disposal. Transportation, treatment, storage, and disposal of waste material must be conducted in accordance with RCRA regulations (see 40 CFR Parts 260 through 271). State and/or local regulations might be even more restrictive. Contact the RCRA/Superfund Hotline at (800) 424-9346 or your regional US EPA office for guidance concerning case specific disposal issues.

SECTION 14: TRANSPORT INFORMATION

DOT Status	This material is regulated by the U.S. Department of Transportation (DOT).		
Proper Shipping Name	Xylenes		
Hazard Class	Class 3: Flammable liquid.	**Packing Group(s)**	PG II
		UN/NA ID	UN1307
Reportable Quantity	If present, the Reportable Quantity (RQ) substance components in this product which require DOT HAZMAT bill-of-lading display are **Xylenes and Ethylbenzene.**		
Placards		**Emergency Response Guide No.**	130
		HAZMAT STCC No.	49 093 48
		MARPOL III Status	Not a DOT "Marine Pollutant" per 49 CFR 171.8.

SECTION 15: REGULATORY INFORMATION

TSCA Inventory

This product and/or its components are listed on the Toxic Substance Control Act (TSCA) inventory.

SARA 302/304

The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 302 and 304 to submit emergency planning and notification information based on Threshold Planning Quantities (TPQs) and Reportable Quantities (RQs) for "Extremely Hazardous Substances" listed in 40 CFR 302.4 and 40 CFR 355. No components were identified.

SARA 311/312

The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to this subpart to submit aggregate information on chemicals by "Hazard Category" as defined in 40 CFR 370.2. This material would be classified under the following hazard categories:

Fire Hazard, Acute (Immediate) Health Hazard, and Chronic (Delayed) Health Hazard.

SARA 313

This product contains the following components in concentrations at or above de minimis levels and they are listed as toxic chemicals in 40 CFR Part 372 pursuant to the requirements of Section 313:
Xylenes [CAS No. 1330-20-7] concentration: 75 to 90%
Ethylbenzene [CAS No. 100-41-4] concentration: 10 to 25%.

CERCLA

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center concerning release of quantities of "hazardous substances" equal to or greater than the reportable quantities (RQ's) listed in 40 CFR 302.4. As defined by CERCLA, the term "hazardous substance" does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically designated in 40 CFR 302.4. Chemical substances present in this product subject to this statute are:
Toluene [CAS No. 108-88-3] (RQ = 1000 lbs. [453.6 kg]) concentration: 0.05 to 0.9%
Xylenes [CAS No. 1330-20-7] (RQ = 100 lbs. [45.36 kg]) concentration: 75 to 90%
Ethylbenzene [CAS No. 100-41-4] (RQ = 1000 lbs. [453.6 kg]) concentration: 10 to 25%.

CWA	This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spills which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Center at (800) 424-8802.
California Proposition 65	This material contains the following chemical substance which is known to the State of California to cause birth defects or other reproductive harm; and therefore, it is subject to requirements of California Health & Safety Code Section 25249.5: **Toluene [CAS No. 108-88-3].**
New Jersey Right-to-Know Label	For New Jersey labeling refer to components listed in Section 2.
Additional Regulatory Remarks	Under the Federal Hazardous Substances Act, related statutes, and Consumer Product Safety Commission regulations, as defined by 16 CFR 1500.14(b)(3) and 1500.83(a)(13): This product contains "Petroleum Distillates" which may require special labeling if distributed in a manner intended or packaged in a from suitable for use in the household or by children. Precautionary label dialogue should display the following: **Contains Petroleum Distillates! May be harmful or fatal if swallowed! Keep Out of Reach of Children!** In regulations promulgated pursuant to the Clean Air Act - Section 111 "Standards of Performance for New Stationary Sources" (40 CFR 60.489), the EPA classifies the following components of this material as "Volatile Organic Compounds (VOCs)" which contribute significantly to air pollution which endangers public health and welfare": **Toluene [CAS No. 108-88-3], Xylenes (mixed) [CAS No. 1330-20-7], and Ethylbenzene [CAS No. 100-41-4].**

SECTION 16: OTHER INFORMATION

Refer to the top of Page 1 for the HMIS and NFPA Hazard Ratings for this product.

REVISION INFORMATION

Version Number	3.0
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ABBREVIATIONS

AP = Approximately
EQ = Equal
> = Greater Than
< = Less Than
NA = Not Applicable
ND = No Data
NE = Not Established
ACGIH = American Conference of Governmental Industrial Hygienists
AIHA = American Industrial Hygiene Association
IARC = International Agency for Research on Cancer
NTP = National Toxicology Program
NIOSH = National Institute of Occupational Safety and Health
OSHA = Occupational Safety and Health Administration
NPCA = National Paint and Coating Manufacturers Association
HMIS = Hazardous Materials Information System
NFPA = National Fire Protection Association
EPA = Environmental Protection Agency

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