

Product Name: BENZENE

Revision Date: 05 Dec 2014

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# SAFETY DATA SHEET

**SECTION 1****PRODUCT AND COMPANY IDENTIFICATION****PRODUCT****Product Name:** BENZENE**Product Description:** Aromatic Hydrocarbon**Intended Use:** Feedstock**COMPANY IDENTIFICATION****Supplier:****EXXONMOBIL CHEMICAL COMPANY**

P.O. BOX 3272

HOUSTON, TX. 77253-3272 USA

**24 Hour Health Emergency**

(800) 726-2015

**Transportation Emergency Phone**

(800) 424-9300 or (703) 527-3887 CHEMTREC

**Product Technical Information**

(832) 624-8500

**Supplier General Contact**

(832) 624-8500

**SECTION 2****HAZARDS IDENTIFICATION**

This material is hazardous according to regulatory guidelines (see (M)SDS Section 15).

**CLASSIFICATION:**

Flammable liquid: Category 2.

Skin irritation: Category 2. Eye irritation: Category 2A. Germ Cell Mutagen: Category 1B. Carcinogen: Category 1A.

Specific target organ toxicant (repeated exposure): Category 1. Aspiration toxicant: Category 1.

**LABEL:****Pictogram:****Signal Word:** Danger**Hazard Statements:**

H225: Highly flammable liquid and vapor. H304: May be fatal if swallowed and enters airways. H315: Causes skin irritation. H319: Causes serious eye irritation. H340: May cause genetic defects. H350: May cause cancer. H372: Causes damage to organs through prolonged or repeated exposure. Blood

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### Precautionary Statements:

P201: Obtain special instructions before use. P202: Do not handle until all safety precautions have been read and understood. P210: Keep away from heat/sparks/open flames/hot surfaces. -- No smoking. P233: Keep container tightly closed. P240: Ground / bond container and receiving equipment. P241: Use explosion-proof electrical, ventilating, and lighting equipment. P242: Use only non-sparking tools. P243: Take precautionary measures against static discharge. P260: Do not breathe mist / vapours. P264: Wash skin thoroughly after handling. P270: Do not eat, drink or smoke when using this product. P273: Avoid release to the environment. P280: Wear protective gloves/protective clothing/eye protection/face protection. P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P302 + P352: IF ON SKIN: Wash with plenty of soap and water. P303 + P361 + P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308 + P313: IF exposed or concerned: Get medical advice/ attention. P312: Call a POISON CENTER or doctor/physician if you feel unwell. P331: Do NOT induce vomiting. P332 + P313: If skin irritation occurs: Get medical advice/ attention. P337 + P313: If eye irritation persists: Get medical advice/attention. P362 + P364: Take off contaminated clothing and wash it before reuse. P370 + P378: In case of fire: Use water fog, foam, dry chemical or carbon dioxide (CO<sub>2</sub>) to extinguish. P403 + P235: Store in a well-ventilated place. Keep cool. P405: Store locked up. P501: Dispose of contents and container in accordance with local regulations.

**Contains:** benzene

### Other hazard information:

**HAZARD NOT OTHERWISE CLASSIFIED (HNOC):** None as defined under 29 CFR 1900.1200.

### PHYSICAL / CHEMICAL HAZARDS

Material can accumulate static charges which may cause an ignition. Material can release vapors that readily form flammable mixtures. Vapor accumulation could flash and/or explode if ignited.

### HEALTH HAZARDS

May be irritating to nose, throat, and lungs. Exposure to benzene is associated with cancer (acute myeloid leukemia and myelodysplastic syndrome), damage to the blood-producing system, and serious blood disorders (see Section 11).

### ENVIRONMENTAL HAZARDS

Expected to be toxic to aquatic organisms.

<b>NFPA Hazard ID:</b>	Health: 3	Flammability: 3	Reactivity: 0
<b>HMIS Hazard ID:</b>	Health: 3*	Flammability: 3	Reactivity: 0

**NOTE:** This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

<b>SECTION 3</b>	<b>COMPOSITION / INFORMATION ON INGREDIENTS</b>
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This material is defined as a substance.

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**Hazardous Substance(s) or Complex Substance(s) required for disclosure**

Name	CAS#	Concentration*	GHS Hazard Codes
benzene	71-43-2	100 %	H225, H303, H304, H340(1B), H350(1A), H315, H319(2A), H372, H401

\* All concentrations are percent by weight unless material is a gas. Gas concentrations are in percent by volume.

As per paragraph (i) of 29 CFR 1910.1200, formulation is considered a trade secret and specific chemical identity and exact percentage (concentration) of composition may have been withheld. Specific chemical identity and exact percentage composition will be provided to health professionals, employees, or designated representatives in accordance with applicable provisions of paragraph (i).

<b>SECTION 4</b>	<b>FIRST AID MEASURES</b>
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**INHALATION**

Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.

**SKIN CONTACT**

Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse.

**EYE CONTACT**

Flush thoroughly with water for at least 15 minutes. Get medical assistance.

**INGESTION**

Seek immediate medical attention. Do not induce vomiting.

**NOTE TO PHYSICIAN**

If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately. This light hydrocarbon material, or a component, may be associated with cardiac sensitization following very high exposures (well above occupational exposure limits) or with concurrent exposure to high stress levels or heart-stimulating substances like epinephrine. Administration of such substances should be avoided.

<b>SECTION 5</b>	<b>FIRE FIGHTING MEASURES</b>
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**EXTINGUISHING MEDIA**

**Appropriate Extinguishing Media:** Use water fog, foam, dry chemical or carbon dioxide (CO<sub>2</sub>) to extinguish flames.

**Inappropriate Extinguishing Media:** Straight Streams of Water

**FIRE FIGHTING**

**Fire Fighting Instructions:** Evacuate area. If a leak or spill has not ignited, use water spray to disperse the vapors and to protect personnel attempting to stop a leak. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Firefighters should use standard protective equipment and

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in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

**Unusual Fire Hazards:** Extremely Flammable. Incomplete combustion may create large amounts of soot. Vapors are flammable and heavier than air. Vapors may travel across the ground and reach remote ignition sources causing a flashback fire danger. Hazardous material. Firefighters should consider protective equipment indicated in Section 8.

**Hazardous Combustion Products:** Smoke, Fume, Oxides of carbon, Incomplete combustion products

## FLAMMABILITY PROPERTIES

**Flash Point [Method]:** -11°C (12°F) [ASTM D-56]

**Flammable Limits (Approximate volume % in air):** LEL: 1.2 UEL: 7.8

**Autoignition Temperature:** 498°C (928°F) [Technical literature]

## SECTION 6

## ACCIDENTAL RELEASE MEASURES

### NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. US regulations require reporting releases of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.

### PROTECTIVE MEASURES

Avoid contact with spilled material. Warn or evacuate occupants in surrounding and downwind areas if required due to toxicity or flammability of the material. See Section 5 for fire fighting information. See the Hazard Identification Section for Significant Hazards. See Section 4 for First Aid Advice. See Section 8 for advice on the minimum requirements for personal protective equipment. Additional protective measures may be necessary, depending on the specific circumstances and/or the expert judgment of the emergency responders.

### SPILL MANAGEMENT

**Land Spill:** Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do it without risk. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Prevent entry into waterways, sewer, basements or confined areas. A vapor suppressing foam may be used to reduce vapors. Use clean non-sparking tools to collect absorbed material. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Large Spills: Water spray may reduce vapor; but may not prevent ignition in closed spaces.

**Water Spill:** Stop leak if you can do it without risk. Eliminate sources of ignition. Warn other shipping. If the Flash Point exceeds the Ambient Temperature by 10 degrees C or more, use containment booms and remove from the surface by skimming or with suitable absorbents when conditions permit. If the Flash Point does not exceed the Ambient Air Temperature by at least 10C, use booms as a barrier to protect shorelines and allow material to evaporate. Seek the advice of a specialist before using dispersants.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

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## ENVIRONMENTAL PRECAUTIONS

Large Spills: Dike far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

## SECTION 7

## HANDLING AND STORAGE

### HANDLING

Avoid all personal contact. Prevent exposure to ignition sources, for example use non-sparking tools and explosion-proof equipment. Prevent small spills and leakage to avoid slip hazard. Material can accumulate static charges which may cause an electrical spark (ignition source). Use proper bonding and/or ground procedures. However, bonding and grounds may not eliminate the hazard from static accumulation. Consult local applicable standards for guidance. Additional references include American Petroleum Institute 2003 (Protection Against Ignitions Arising out of Static, Lightning and Stray Currents) or National Fire Protection Agency 77 (Recommended Practice on Static Electricity) or CENELEC CLC/TR 50404 (Electrostatics - Code of practice for the avoidance of hazards due to static electricity).

**Loading/Unloading Temperature:** [Ambient]

**Transport Temperature:** [Ambient]

**Transport Pressure:** [Ambient]

**Static Accumulator:** This material is a static accumulator. A liquid is typically considered a nonconductive, static accumulator if its conductivity is below 100 pS/m ( $100 \times 10^{-12}$  Siemens per meter) and is considered a semiconductive, static accumulator if its conductivity is below 10,000 pS/m. Whether a liquid is nonconductive or semiconductive, the precautions are the same. A number of factors, for example liquid temperature, presence of contaminants, anti-static additives and filtration can greatly influence the conductivity of a liquid.

### STORAGE

Ample fire water supply should be available. A fixed sprinkler/deluge system is recommended. The container choice, for example storage vessel, may effect static accumulation and dissipation. Keep container closed. Handle containers with care. Open slowly in order to control possible pressure release. Store in a cool, well-ventilated area. Outside or detached storage preferred. Storage containers should be grounded and bonded. Fixed storage containers, transfer containers and associated equipment should be grounded and bonded to prevent accumulation of static charge.

**Storage Temperature:** [Ambient]

**Storage Pressure:** [Ambient]

**Suitable Containers/Packing:** Tank Trucks; Tankers; Barges; Tank Cars

**Suitable Materials and Coatings (Chemical Compatibility):** Polypropylene; Carbon Steel; Stainless Steel; Epoxy Phenolic; Fluorinated Silicone Rubber

**Unsuitable Materials and Coatings:** Compatibility with epoxy/resin compositions will vary; Rubber; Polyethylene; PVC

## SECTION 8

## EXPOSURE CONTROLS / PERSONAL PROTECTION

### EXPOSURE LIMIT VALUES

Exposure limits/standards (Note: Exposure limits are not additive)

Substance Name	Form	Limit / Standard			NOTE	Source
benzene		OSHA	0.5 ppm		N/A	OSHA

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		Action level				Sp.Reg.
benzene		STEL	5 ppm		N/A	OSHA Sp.Reg.
benzene		TWA	1 ppm		N/A	OSHA Sp.Reg.
benzene		STEL	1 ppm		N/A	ExxonMobil
benzene		TWA	0.5 ppm		N/A	ExxonMobil
benzene		STEL	2.5 ppm		Skin	ACGIH
benzene		TWA	0.5 ppm		Skin	ACGIH

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

### Biological limits

Substance	Specimen	Sampling Time	Limit	Determinant	Source
benzene	Creatinine in urine	End of shift	25 ug/g	S-Phenylmercapturic acid	ACGIH BELs (BEIs)
benzene	Creatinine in urine	End of shift	500 ug/g	t,t-Muconic acid	ACGIH BELs (BEIs)

## ENGINEERING CONTROLS

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider:

Local ventilation should be provided. Use explosion-proof ventilation equipment to stay below exposure limits.

## PERSONAL PROTECTION

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

**Respiratory Protection:** If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include:

Half-face filter respirator

For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapor warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

**Hand Protection:** Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include:

Chemical resistant gloves are recommended. If contact with forearms is likely wear gauntlet style gloves.

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**Eye Protection:** Chemical goggles are recommended.

**Skin and Body Protection:** Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include:

Chemical/oil resistant clothing is recommended.

**Specific Hygiene Measures:** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

## ENVIRONMENTAL CONTROLS

Comply with applicable environmental regulations limiting discharge to air, water and soil. Protect the environment by applying appropriate control measures to prevent or limit emissions.

## SECTION 9

## PHYSICAL AND CHEMICAL PROPERTIES

**Note:** Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the Supplier for additional information.

### GENERAL INFORMATION

**Physical State:** Liquid

**Form:** Clear

**Color:** Colorless

**Odor:** Aromatic

**Odor Threshold:** N/D

### IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION

**Relative Density (at 20 °C):** 0.877 [In-house method]

**Density (at 20 °C):** 877 kg/m<sup>3</sup> (7.32 lbs/gal, 0.88 kg/dm<sup>3</sup>) [In-house method]

**Flammability (Solid, Gas):** N/A

**Flash Point [Method]:** -11°C (12°F) [ASTM D-56]

**Flammable Limits (Approximate volume % in air):** LEL: 1.2 UEL: 7.8

**Autoignition Temperature:** 498°C (928°F) [Technical literature]

**Boiling Point / Range:** 80°C (176°F) [Technical literature]

**Decomposition Temperature:** N/D

**Vapor Density (Air = 1):** 2.7 at 101 kPa [Technical literature]

**Vapor Pressure:** 10 kPa (75 mm Hg) at 20 °C | 100 kPa (750 mm Hg) at 79.9°C [Technical literature]

**Evaporation Rate (n-butyl acetate = 1):** N/D

**pH:** N/A

**Log Pow (n-Octanol/Water Partition Coefficient):** 2.13 [Technical literature]

**Solubility in Water:** Slight

**Viscosity:** <0.8 cSt (0.8 mm<sup>2</sup>/sec) at 40 °C [In-house method]

**Oxidizing Properties:** See Hazards Identification Section.

### OTHER INFORMATION

**Freezing Point:** 5°C (41°F) [Technical literature]

**Melting Point:** N/A

**Pour Point:** 5°C (41°F) [Technical literature]



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**Molecular Weight:** 78  
**Hygroscopic:** No

## SECTION 10 STABILITY AND REACTIVITY

**REACTIVITY:** See sub-sections below.

**STABILITY:** Material is stable under normal conditions.

**CONDITIONS TO AVOID:** See Footnote

**MATERIALS TO AVOID:** See Footnote

**HAZARDOUS DECOMPOSITION PRODUCTS:** Material does not decompose at ambient temperatures.

**POSSIBILITY OF HAZARDOUS REACTIONS:** Hazardous polymerization will not occur.

[Footnote: This product is intended for industrial use. Exposure to heat, air, oxidizing agents and other chemicals not part of an industrial process should be avoided.]

## SECTION 11 TOXICOLOGICAL INFORMATION

### INFORMATION ON TOXICOLOGICAL EFFECTS

<b>Hazard Class</b>	<b>Conclusion / Remarks</b>
<b>Inhalation</b>	
Acute Toxicity: (Rat) 4 hour(s) LC50 43767 mg/m3 (Vapor)	Minimally Toxic. Based on test data for the material. Test(s) equivalent or similar to OECD Guideline 403
Irritation: No end point data for material.	Elevated temperatures or mechanical action may form vapors, mist, or fumes which may be irritating to the eyes, nose, throat, or lungs.
<b>Ingestion</b>	
Acute Toxicity (Rat): LD50 > 2000 mg/kg	Minimally Toxic. Based on test data for the material. Test(s) equivalent or similar to OECD Guideline 401
<b>Skin</b>	
Acute Toxicity (Rabbit): LD50 > 5000 mg/kg	Minimally Toxic. Based on test data for the material. Test(s) equivalent or similar to OECD Guideline 402
Skin Corrosion/Irritation: Data available.	Irritating to the skin. Based on test data for the material. Test(s) equivalent or similar to OECD Guideline 404
<b>Eye</b>	
Serious Eye Damage/Irritation: Data available.	Irritating and will injure eye tissue. Based on test data for the material. Test(s) equivalent or similar to OECD Guideline 405
<b>Sensitization</b>	
Respiratory Sensitization: No end point data for material.	Not expected to be a respiratory sensitizer.
Skin Sensitization: Data available.	Not expected to be a skin sensitizer. Based on test data for the material. Test(s) equivalent or similar to OECD Guideline 406
<b>Aspiration:</b> Data available.	May be fatal if swallowed and enters airways. Based on physico-chemical properties of the material.
<b>Germ Cell Mutagenicity:</b> Data available.	Caused genetic effects in laboratory animals, but the relevance to humans is uncertain. Based on test data for the material. Test(s) equivalent or similar to OECD Guideline 471 473 474
<b>Carcinogenicity:</b> Data available.	Caused cancer from prolonged, high exposure. Based on human



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	epidemiology studies. Based on test data for the material. Test(s) equivalent or similar to OECD Guideline 453
<b>Reproductive Toxicity:</b> Data available.	Not expected to be a reproductive toxicant. Based on test data for the material. Test(s) equivalent or similar to OECD Guideline 414 415
<b>Lactation:</b> No end point data for material.	Not expected to cause harm to breast-fed children.
<b>Specific Target Organ Toxicity (STOT)</b>	
Single Exposure: No end point data for material.	Not expected to cause organ damage from a single exposure.
Repeated Exposure: Data available.	Causes organ damage from prolonged or repeated exposure. Based on test data for the material. Test(s) equivalent or similar to OECD Guideline 408 412 413

## OTHER INFORMATION

### For the product itself:

Target Organs Repeated Exposure: Blood

Vapor concentrations above recommended exposure levels are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anesthetic and may have other central nervous system effects. If exposure is overwhelming, death due to respiratory collapse can occur almost immediately or may be delayed several hours to several days.

Adverse effects to the blood producing system and serious blood disorders, including leukemia, were observed. Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema. Very high exposure (confined spaces / abuse) to light hydrocarbons may result in abnormal heart rhythm (arrhythmias). Concurrent high stress levels and/or co-exposure to high levels of hydrocarbons (above occupational exposure limits), and to heart-stimulating substances like epinephrine, nasal decongestants, asthma drugs, or cardiovascular drugs may initiate arrhythmias.

BENZENE: Caused cancer (acute myeloid leukemia and myelodysplastic syndrome), damage to the blood-producing system, and serious blood disorders in human studies. Caused genetic effects and effects on the immune system in laboratory animal and some human studies. Caused toxicity to the fetus and cancer in laboratory animal studies.

The following ingredients are cited on the lists below:

Chemical Name	CAS Number	List Citations
benzene	71-43-2	1, 3

### --REGULATORY LISTS SEARCHED--

1 = NTP CARC

3 = IARC 1

5 = IARC 2B

2 = NTP SUS

4 = IARC 2A

6 = OSHA CARC

## SECTION 12

## ECOLOGICAL INFORMATION

The information given is based on data available for the material, the components of the material, and similar materials.

### ECOTOXICITY

Material -- Expected to be toxic to aquatic organisms.

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## MOBILITY

Material -- Highly volatile, will partition rapidly to air. Not expected to partition to sediment and wastewater solids.

## PERSISTENCE AND DEGRADABILITY

### Biodegradation:

Material -- Expected to be readily biodegradable.

### Hydrolysis:

Material -- Transformation due to hydrolysis not expected to be significant.

### Photolysis:

Material -- Transformation due to photolysis not expected to be significant.

### Atmospheric Oxidation:

Material -- Expected to degrade at a moderate rate in air

## BIOACCUMULATION POTENTIAL

Material -- Potential to bioaccumulate is low.

## ECOLOGICAL DATA

### Ecotoxicity

Test	Duration	Organism Type	Test Results
Aquatic - Acute Toxicity	96 hour(s)	Oncorhynchus mykiss	LC50 5.3 mg/l: data for the material
Aquatic - Acute Toxicity	48 hour(s)	Daphnia magna	EC50 10 mg/l: data for the material
Aquatic - Acute Toxicity	72 hour(s)	Pseudokirchneriella subcapitata	ErC50 29 mg/l: data for the material
Aquatic - Chronic Toxicity	7 day(s)	Ceriodaphnia dubia	NOEC 3 mg/l: data for the material
Aquatic - Chronic Toxicity	7 day(s)	Ceriodaphnia dubia	LOEC 9 mg/l: data for the material
Aquatic - Chronic Toxicity	28 day(s)	Morone saxatilis	NOEC 3.1 mg/l: data for the material
Aquatic - Chronic Toxicity	28 day(s)	Morone saxatilis	LOEC 5.3 mg/l: data for the material

### Persistence, Degradability and Bioaccumulation Potential

Media	Test Type	Duration	Test Results
Water	Photolysis		Half-life (t1/2) 13.4 day(s)
Water	Ready Biodegradability	28 day(s)	Percent Degraded 96 : material
Octanol-Water	Calculated		log Kow 2.13 : material
Water	Bioaccumulation		BCF <10 : material

## SECTION 13

## DISPOSAL CONSIDERATIONS

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

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## DISPOSAL RECOMMENDATIONS

Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products.

## REGULATORY DISPOSAL INFORMATION

RCRA Information: Disposal of unused product may be subject to RCRA regulations (40 CFR 261). Disposal of the used product may also be regulated due to ignitability, corrosivity, reactivity or toxicity as determined by the Toxicity Characteristic Leaching Procedure (TCLP). Potential RCRA characteristics: IGNITABILITY. TCLP (BENZENE)

**Empty Container Warning** Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, 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.

## SECTION 14

## TRANSPORT INFORMATION

### LAND (DOT)

Proper Shipping Name: BENZENE

Hazard Class & Division: 3

ID Number: 1114

Packing Group: II

Product RQ: 10 LBS - benzene

ERG Number: 130

Label(s): 3

Transport Document Name: UN1114, BENZENE, 3, PG II, RQ

### LAND (TDG)

Proper Shipping Name: BENZENE

Hazard Class & Division: 3

UN Number: 1114

Packing Group: II

### SEA (IMDG)

Proper Shipping Name: BENZENE

Hazard Class & Division: 3

EMS Number: F-E, S-D

UN Number: 1114

Packing Group: II

Marine Pollutant: No

Label(s): 3

Transport Document Name: UN1114, BENZENE, 3, PG II, (-11°C c.c.)

### AIR (IATA)

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**Hazard Class & Division:** 3  
**UN Number:** 1114  
**Packing Group:** II  
**Label(s) / Mark(s):** 3  
**Transport Document Name:** UN1114, BENZENE, 3, PG II

SECTION 15	REGULATORY INFORMATION
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**OSHA HAZARD COMMUNICATION STANDARD:** This material is considered hazardous in accordance with OSHA HazCom 2012, 29 CFR 1910.1200.

**Listed or exempt from listing/notification on the following chemical inventories:** AICS, DSL, ENCS, IECSC, KECI, PICCS, TSCA

**EPCRA SECTION 302:** This material contains no extremely hazardous substances.

**CERCLA:**

Chemical Name	CAS Number	Typical Value	Component RQ	Product RQ
benzene	71-43-2	100 %	10 LBS	10 LBS

**SARA (311/312) REPORTABLE HAZARD CATEGORIES:** Fire. Immediate Health. Delayed Health.

**SARA (313) TOXIC RELEASE INVENTORY:**

Chemical Name	CAS Number	Typical Value
benzene	71-43-2	100 %

The following ingredients are cited on the lists below:

Chemical Name	CAS Number	List Citations
benzene	71-43-2	1, 2, 4, 10, 11, 13, 15, 16, 17, 18, 19

--REGULATORY LISTS SEARCHED--

1 = ACGIH ALL	6 = TSCA 5a2	11 = CA P65 REPRO	16 = MN RTK
2 = ACGIH A1	7 = TSCA 5e	12 = CA RTK	17 = NJ RTK
3 = ACGIH A2	8 = TSCA 6	13 = IL RTK	18 = PA RTK
4 = OSHA Z	9 = TSCA 12b	14 = LA RTK	19 = RI RTK
5 = TSCA 4	10 = CA P65 CARC	15 = MI 293	

Code key: CARC=Carcinogen; REPRO=Reproductive

SECTION 16	OTHER INFORMATION
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This warning is given to comply with California Health and Safety Code 25249.6 and does not constitute an admission or a waiver of rights. This product contains a chemical known to the State of California to cause cancer, birth defects, or

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other reproductive harm.

N/D = Not determined, N/A = Not applicable

**KEY TO THE H-CODES CONTAINED IN SECTION 3 OF THIS DOCUMENT (for information only):**

H225: Highly flammable liquid and vapor; Flammable Liquid, Cat 2

H303: May be harmful if swallowed; Acute Tox Oral, Cat 5

H304: May be fatal if swallowed and enters airways; Aspiration, Cat 1

H315: Causes skin irritation; Skin Corr/Irritation, Cat 2

H319(2A): Causes serious eye irritation; Serious Eye Damage/Irr, Cat 2A

H340(1B): May cause genetic defects; Germ Cell Mutagenicity, Cat 1B

H350(1A): May cause cancer; Carcinogenicity, Cat 1A

H372: Causes damage to organs through prolonged or repeated exposure; Target Organ, Repeated, Cat 1

H401: Toxic to aquatic life; Acute Env Tox, Cat 2

**THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:**

Updates made in accordance with implementation of GHS requirements.

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