1. Product and company identification

Product name: TRETOLITE™ DMO374 DEMULSIFIER
   ™ a trademark of Baker Hughes Incorporated.
Supplier: Baker Hughes Canada Company
          5050 47th Street S.E.
          Calgary, Alberta, T2B 3S1, Canada
          For Product Information: 403-537-3850 or 281-276-5400
          (8:00 a.m. - 5:00 p.m. cst, Monday - Friday)

Material Uses: Special: Demulsifier.
Code: DMO374
Validation date: 9/30/2015.
Print date: 9/30/2015.
Version: 5.01
Responsible name: Global Regulatory Affairs - Telephone 281-276-5400 or 800-231-3606
In case of emergency: CANUTEC 613-996-6666 (Canada 24 hours)
                   Baker Petroilte 800-231-3606 (North America 24 hour)
                   (001)281-276-5400
                   CHEMTREC 800-424-9300 (U.S. 24 hour)
                   CHEMTREC Int'l 01-703-527-3887 (International 24 hours)

Canada
WHMIS (Canada): Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C
                  (200°F).
                  Class D-2A: Material causing other toxic effects (Very toxic).
                  Class D-2B: Material causing other toxic effects (Toxic).

WHMIS (Pictograms): ☢️ ⚠️

2. Hazards identification

Physical state: Liquid.
Odor: Aromatic hydrocarbon.
Color: Amber.
Emergency overview: WARNING!

COMBUSTIBLE LIQUID AND VAPOR. INHALATION CAUSES HEADACHES,
DIZZINESS, DROWSINESS AND NAUSEA AND MAY LEAD TO
UNCONSCIOUSNESS. CAUSES RESPIRATORY TRACT AND EYE IRRITATION.
MAY BE HARMFUL IF ABSORBED THROUGH SKIN. MAY CAUSE SKIN
IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND
CAUSE IRRITATION. HARMFUL OR FATAL IF SWALLOWED. CAN ENTER LUNGS
AND CAUSE DAMAGE. CONTAINS MATERIAL THAT MAY CAUSE TARGET
ORGAN DAMAGE, BASED ON ANIMAL DATA. SUSPECT CANCER HAZARD -
CONTAINS MATERIAL WHICH MAY CAUSE CANCER. ASPIRATION HAZARD.
2. Hazards identification

At elevated temperatures, vapors can form an ignitable or explosive mixture with air. Can form explosive mixtures at temperatures at or above the flash point. Static discharges can cause ignition or explosion when container is not bonded. Keep away from heat, sparks and flame. Do not breathe vapor or mist. Do not ingest. Do not get in eyes. Avoid contact with skin and clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling. Vapors can travel to a source of ignition and flashback. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material.

Routes of entry: Dermal contact. Eye contact. Inhalation.

Potential acute health effects
- **Inhalation**: Can cause central nervous system (CNS) depression. Irritating to respiratory system.
- **Ingestion**: Can cause central nervous system (CNS) depression. Aspiration hazard if swallowed. Can enter lungs and cause damage.
- **Skin**: Harmful in contact with skin. Moderately irritating to the skin.
- **Eyes**: Irritating to eyes.

Potential chronic health effects
- **Chronic effects**: Contains material that may cause target organ damage, based on animal data. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
- **Carcinogenicity**: Contains material which may cause cancer. Risk of cancer depends on duration and level of exposure.
- **Target organs**: Contains material which may cause damage to the following organs: blood, kidneys, lungs, the nervous system, liver, mucous membranes, gastrointestinal tract, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.

Over-exposure signs/symptoms
- **Inhalation**: respiratory tract irritation, nausea or vomiting, coughing, headache, drowsiness/fatigue, dizziness/vertigo, unconsciousness
- **Ingestion**: nausea or vomiting
- **Skin**: irritation, redness, dryness, cracking
- **Eyes**: pain or irritation, watering, redness

Medical conditions aggravated by over-exposure: Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

See toxicological information (Section 11)

3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS number</th>
<th>Wt. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light aromatic naphtha</td>
<td>64742-95-6</td>
<td>30 - 60</td>
</tr>
<tr>
<td>1,2,4-Trimethylbenzene</td>
<td>95-63-6</td>
<td>10 - 30</td>
</tr>
<tr>
<td>1,3,5-Trimethylbenzene</td>
<td>108-67-8</td>
<td>5 - 10</td>
</tr>
<tr>
<td>1,2,3-Trimethylbenzene</td>
<td>526-73-8</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Xylene</td>
<td>1330-20-7</td>
<td>1 - 5</td>
</tr>
<tr>
<td>2-Ethylhexanol</td>
<td>104-76-7</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Cumene</td>
<td>98-82-8</td>
<td>0.1 - 1</td>
</tr>
</tbody>
</table>
4. First aid measures

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

Skin contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

Inhalation : Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Ingestion : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wear suitable protective clothing and gloves. Remove contaminated clothing and shoes.

Additional information
If product is ingested and vomiting occurs naturally, have person lean forward to reduce the risk of aspiration into the lungs.

5. Fire-fighting measures

Flammability of the product : Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.

Extinguishing media

Suitable : Use dry chemical, CO₂, water spray (fog) or foam.
Not suitable : Do not use water jet.

Special exposure hazards : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Hazardous thermal decomposition products : carbon dioxide, carbon monoxide

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

Personal precautions : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Methods for cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Absorb with an inert material. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor.
6. Accidental release measures

Large spill: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Dike spill area and do not allow product to reach sewage system or surface or ground water. Notify any reportable spill to authorities. (See section 12 for environmental risks and 13 for disposal information.) Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. Handling and storage

Handling: Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage: Store in accordance with local regulations. Store in a segregated and approved area. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

<table>
<thead>
<tr>
<th>Ingredients:</th>
<th>List name</th>
<th>TWA (8 hours)</th>
<th>STEL (15 mins)</th>
<th>Ceiling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylene</td>
<td>US ACGIH</td>
<td>100</td>
<td>434</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>OSHA PEL</td>
<td>100</td>
<td>435</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>OSHA PEL 1989</td>
<td>100</td>
<td>435</td>
<td>-</td>
</tr>
<tr>
<td>1,3,5-Trimethylbenzene</td>
<td>US ACGIH</td>
<td>25</td>
<td>123</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>OSHA PEL 1989</td>
<td>25</td>
<td>125</td>
<td>-</td>
</tr>
<tr>
<td>1,2,3-Trimethylbenzene</td>
<td>US ACGIH</td>
<td>25</td>
<td>123</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>OSHA PEL 1989</td>
<td>25</td>
<td>125</td>
<td>-</td>
</tr>
<tr>
<td>1,2,4-Trimethylbenzene</td>
<td>US ACGIH</td>
<td>25</td>
<td>123</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>OSHA PEL 1989</td>
<td>25</td>
<td>125</td>
<td>-</td>
</tr>
<tr>
<td>Cumene</td>
<td>US ACGIH</td>
<td>50</td>
<td>245</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>OSHA PEL</td>
<td>50</td>
<td>245</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>OSHA PEL 1989</td>
<td>50</td>
<td>245</td>
<td>-</td>
</tr>
</tbody>
</table>


Consult local authorities for acceptable exposure limits.

Only components of this product with established exposure limits appear in the box above. If OSHA permissible exposure levels are shown above they are the OSHA 1989 levels or are from subsequent OSHA regulatory actions. Although the 1989 levels have been vacated the 11th Circuit Court of Appeals, Baker Hughes recommends that these lower exposure levels be observed as reasonable worker protection.
8. Exposure controls/personal protection

Recommended monitoring procedures: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Engineering measures: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Use explosion-proof ventilation equipment.

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Take off contaminated clothing and wash before reuse.

Personal protection

Respiratory: If a risk assessment indicates it is necessary, use a properly fitted, air purifying or supplied air respirator complying with an approved standard. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hands: Chemical-resistant gloves: Nitrile or Neoprene gloves.

Eyes: Wear chemical safety goggles. When transferring material wear face-shield in addition to chemical safety goggles.

Skin: Wear long sleeves and other protective clothing to prevent repeated or prolonged skin contact.

9. Physical and chemical properties

Physical state: Liquid.

Flash point: Closed cup: 42.8°C (109°F) [SFCC]

Auto-ignition temperature: Not available.

Flammable limits: Not available.

Color: Amber.

Odor: Aromatic hydrocarbon.

pH: Not available.

Boiling/condensation point: Not available.

Initial Boiling Point: Not available.

Melting/freezing point: Not available.

Relative density: 0.913 (15.6°C)

Density: 7.61 (lbs/gal)

Vapor density: >1 [Air = 1]

Odor threshold: Not available.

Evaporation rate: Not available.

VOC: Not available.

Viscosity: Not available.

Solubility (Water): Dispersible

Vapor pressure: Not available.

Pour Point: Not available.

Partition coefficient (LogKow): Not available.
10. Stability and Reactivity

Chemical stability: The product is stable.
Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.
Hazardous polymerization: Under normal conditions of storage and use, hazardous polymerization will not occur.
Conditions to avoid: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
Materials to avoid: Reactive or incompatible with the following materials: oxidizing materials and acids.
Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Conditions of reactivity: Flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.

11. Toxicological information

Acute toxicity
Product/ingredient name | Result | Species | Dose | Exposure
--- | --- | --- | --- | ---
Xylene | LC50 Inhalation Gas | Rat | 5000 ppm | 4 hours
LD50 Dermal | Rabbit | >1700 mg/kg | -
LD50 Oral | Male rat | 3523 mg/kg | -
LD50 Oral | Rat | 4300 mg/kg | -
1,3,5-Trimethylbenzene | LC50 Inhalation Vapor | Rat | 24000 mg/m³ | 4 hours
LD50 Oral | Rat | 5000 mg/kg | -
1,2,4-Trimethylbenzene | LC50 Inhalation Vapor | Rat | 18000 mg/m³ | 4 hours
LD50 Oral | Rat | 5 g/kg | -
Light aromatic naphtha | LD50 Oral | Rat | 2900 mg/kg | -
2-Ethylhexanol | LC50 Inhalation Vapor | Rat | 0.89 mg/l | 4 hours
LD50 Dermal | Rabbit | 1970 mg/kg | -
LD50 Oral | Rat | 2049 mg/kg | -
Cumene | LC50 Inhalation Vapor | Mouse | 10000 mg/m³ | 7 hours
LD50 Inhalation Vapor | Rat | 39000 mg/m³ | 4 hours
LD50 Dermal | Rabbit | 10600 mg/kg | -
LD50 Oral | Rat | 2.9 g/kg | -

Carcinogenicity
Classification
Product/ingredient name | ACGIH | IARC | EPA | NIOSH | NTP | OSHA
--- | --- | --- | --- | --- | --- | ---
Xylene | A4 | 3 | - | - | - | -
Cumene | - | 2B | - | - | - | Reasonably anticipated to be a human carcinogen.

Chronic toxicity Remarks

9/30/2015.

DMO374 6/11
11. Toxicological information

1) Light aromatic naphtha

Solvent naphtha (petroleum), light aromatic is a component of this product. Solvent naphtha (petroleum), light aromatic may cause damage to the peripheral nerves, resulting in numbness or tingling of the extremities with chronic (long term) exposure to high concentrations. (Micromedex) Rats exposed for 4 months to 1700 ppm of a solvent similar to this product showed evidence of mild damage to the liver, lungs and kidneys. These effects were not seen in rats exposed for one year to 350 ppm of another similar solvent. Rats exposed to vapors of a similar solvent during pregnancy showed embryo/fetotoxicity at concentrations producing maternal toxicity.

In response to a TSCA test rule, several studies of a solvent similar to this product were completed. Mutagenicity studies and a rat inhalation neurotoxicity study were negative. In a mouse developmental effects study, reduced fetal body weight was seen but no teratogenicity. A rat reproductive effects study demonstrated toxicity but little effect on reproductive parameters. (Vendor MSDS)

Ingestion has produced Central Nervous System effects in laboratory animals. (EPA/OTS 87-8214199 and 88-920000348)

2) 1,2,4-Trimethylbenzene

1,2,4-Trimethylbenzene, also known as pseudocumene, is a component of this product. Chronic pseudocumene exposure may provoke bronchospasm with cough and wheezing (Plunkett, 1976; ACGIH, 1991; Battig et al, 1956). Respiratory distress was noted in experimental animals following sub acute inhalation exposure (Gage, 1970). Nervousness and anxiety were noted with chronic occupational exposure (Battig et al, 1956; ACGIH, 1991).

At the time of this review, no studies were found on the potential adverse reproductive effects of pseudocumene in humans, but trimethylbenzenes (including pseudocumene) can cross the placental barrier (Clayton & Clayton, 1994; Doroty et al, 1976). In an experimental animal study, offspring born to pregnant rats exposed to pseudocumene were healthy at birth and grew normally (Cameron et al, 1938).

Blood effects such as anemia and delayed clotting time have been noticed in workers chronically exposed to a solvent containing trimethylbenzene. The blood effects, however, may have been due to a contaminant in the solvent such as benzene (a known blood toxin).

3) 1,3,5-Trimethylbenzene

1,3,5-Trimethylbenzene (Mesitylene) is a component of this product. Chronic asthmatic-like bronchitis may be a delayed chronic hazard (EPA, 1985; Laham, 1997; HSDB, 1997). Nervousness, tension, and anxiety have been noted in chronically exposed workers with exposure to a mixture of solvents including mesitylene (HSDB, 1997). Elevated alkaline phosphates and S GOT (liver enzymes) levels have been noted in chronic animal inhalation studies (Clayton & Clayton, 1994). These effects have not been reported in exposed humans. (Reprotex)

Thrombocytopenia (a lack of platelets in the blood) with bleeding from the gums and nose and mild anemia may occur with chronic exposure to mesitylene as a component of the commercial solvent mixture, "Fleet-X-DV-99" (Plunkett, 1976; Finkel, 1983; HSDB, 1997). Coagulation (clotting of the blood) times were delayed by about 40% in a group of workers chronically exposed to a mixture of solvents containing about 30% mesitylene (Laham, 1987). These hematological disorders may have been due to a contaminant, such as benzene (Hathaway et al, 1996). Thrombocytosis (an increase of platelets in the blood) and thrombocytopenia have been noted in rabbits (Clayton & Clayton, 1994). (Reprotex)

1,3,5-Trimethylbenzene has been positive in a mutagenicity assay (Lewis, 1992). (Reprotex)

4) 1,2,3-Trimethylbenzene

Not available.

5) Xylene

Xylene (mixed isomers) is a component of this product. Effects of chronic exposure to xylene are similar to those of acute exposure, but may be more severe. Chronic inhalation reportedly was associated with headache, tremors, apprehension, memory loss, weakness, dizziness, loss of appetite, nausea, ringing in the ears, irritability, thirst, anemia, mucosal bleeding, enlarged liver, and hyperplasia, but not destruction of the bone marrow (Clayton & Clayton, 1994; ILO, 1983).
11. Toxicological information

Some earlier reports of effects of chronic exposure to xylene have been questioned, as exposures were not limited to xylene alone.

Effects on the blood have been reported from chronic exposure to as little as 50 mg/m3 (Pap & Varga, 1987). Repeated exposure can damage bone marrow, causing low blood cell count and can damage the liver and kidneys (NJ Department of Health, Hazardous Substance Fact Sheet). Chronic xylene exposure (usually mixed with other solvents) has produced irreversible damage to the CNS (LO, 1983). CNS effects may be exacerbated by ethanol abuse (Savolainen, 1980). Xylene may damage hearing or enhance sensitivity to noise in chronic occupational exposures (Morata et al, 1994), probably from neurotoxic mechanism. Tolerance to xylene can occur over the work week and disappear over the weekend. (ACGIH, 1992).

Inhalation exposure has produced fetotoxicity and postnatal developmental toxicity in laboratory animals. (API, 1978, Kensington, MD, EPA/OTS Document No. 878210350 and Hass, U., et al, 1995, Neurotoxicology and Teratology 17: 341-349 and 1997, Neurotoxicology 18: 547-552) Xylene has been shown to cause teratogenic effects in mice at doses that are toxic to the mother. (Journal of Toxicology and Environmental Health 9:97:105)

Inhalation of hexane has synergistically enhanced the hearing loss caused by inhalation exposure to xylene in laboratory animals. (Nylén, P., 1996, Food and Chemical Toxicology, 34: 1121-1123 and Nylén, P. and Hagman, M., 1994, Pharmacology & Toxicology, 74: 124-129)


Xylene has caused teratogenic effects in animal studies in the absence of maternal toxicity. (Food and Chemical Toxicology 41:3:415-429)

6) 2-Ethylhexanol

2-Ethylhexanol (2EH) is a component of this product. Chronic overexposure has been suggested as a cause of the following effects in laboratory animals, and may aggravate pre-existing disorders of these organs in humans: liver abnormalities, kidney damage, lung damage, cardiac abnormality, blood abnormalities, and spleen damage. (Vendor MSDS)

In subchronic oral studies, 2EH has produced liver and kidney effects in laboratory animals. (RTECS)

2EH has produced developmental effects in oral studies in laboratory animals including teratogenicity at maternally toxic doses (Clayton & Clayton, 1994). (HSDB)

7) Cumene

Cumene is a component of this product. Workers chronically exposed to cumene vapors for 7 to 10 years had increased calcium salt concentrations, alterations of enzymatic activity, lipid metabolism, liver and hepatobiliary functions, and difficulty performing voluntary movement (Putalova, 1979).

Hyperemia (the presence of an increase in the amount of blood), and congestion were noted in the lungs, liver, and kidneys of experimental animals following repeated exposure; increased kidney weight was observed with high doses (Snyder, 1987; Werner et al, 1944; Fabre et al, 1955; Wolf et al, 1956; Cushman et al, 1995).

Renal (kidney) proximal tubular cell hypertrophy (an increase in the size of the cell), hyperplasia (an increase in the number of cells in a tissue or organ, excluding a tumor), and hyaline drop formation (fibroid formation) have also been noted in experimental animals (ACGIH, 1991; Clayton & Clayton, 1994; Cushman et al, 1995).

Increased fetal death and teratogenicity were reported in the offspring of pregnant rats exposed to the "maximum permissible" concentration of cumene vapor for 4 months (Serebrennikov & Ogleshnev, 1978).
## 12. Ecological information

### Aquatic ecotoxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylene</td>
<td>Acute LC50 8500 μg/l Marine water</td>
<td>Crustaceans - Daggerblade grass shrimp - Palaemonetes pugio</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 13400 μg/l Fresh water</td>
<td>Fish - Fathead minnow - Pimephales promelas</td>
<td>96 hours</td>
</tr>
<tr>
<td>1,3,5-Trimethylbenzene</td>
<td>Acute LC50 12520 to 15050 μg/l Fresh water</td>
<td>Fish - Goldfish - Carassius auratus</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 400 μg/l Fresh water</td>
<td>Daphnia - Water flea - Daphnia magna</td>
<td>21 days</td>
</tr>
<tr>
<td>1,2,4-Trimethylbenzene</td>
<td>Acute LC50 4910 μg/l Marine water</td>
<td>Crustaceans - Scud - Elasmopus pectenicrus</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 22.4 μg/l Fresh water</td>
<td>Fish - Tilapia - Tilapia zilli</td>
<td>96 hours</td>
</tr>
<tr>
<td>2-Ethylhexanol</td>
<td>Acute LC50 75 mg/dm3 Fresh water</td>
<td>Fish - Rainbow trout, donaldson trout - Oncorhynchus mykiss</td>
<td>96 hours</td>
</tr>
<tr>
<td>Cumene</td>
<td>Acute EC50 2600 μg/l Fresh water</td>
<td>Algae - Green algae - Pseudokirchneriella subcapitata</td>
<td>72 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 7400 to 11290 μg/l Fresh water</td>
<td>Crustaceans - Brine shrimp - Artemia sp.</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 30500 μg/l Fresh water</td>
<td>Daphnia - Water flea - Daphnia magna</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 2700 μg/l Fresh water</td>
<td>Fish - Rainbow trout, donaldson trout - Oncorhynchus mykiss</td>
<td>96 hours</td>
</tr>
</tbody>
</table>

**Conclusion/Summary**: Not available.

### Biodegradability

**Conclusion/Summary**: Not available.

## 13. Disposal considerations

**Waste disposal**: The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

## 14. Transport information

<table>
<thead>
<tr>
<th>Regulatory information</th>
<th>UN number</th>
<th>Proper shipping name</th>
<th>Classes</th>
<th>PG*</th>
<th>Label</th>
<th>Additional information</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT Classification</td>
<td>UN1993</td>
<td>FLAMMABLE LIQUID, N.O.S. (Contains: Light aromatic naphtha, 1,2, 4-Trimethylbenzene)</td>
<td>3</td>
<td>III</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TDG Classification</td>
<td>UN1993</td>
<td>FLAMMABLE LIQUID, N.O.S. (Contains: Light aromatic naphtha, 1,2, 4-Trimethylbenzene)</td>
<td>3</td>
<td>III</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

9/30/2015. DMO374 9/11
14. Transport information

<table>
<thead>
<tr>
<th>IMDG Class</th>
<th>UN1993</th>
<th>FLAMMABLE LIQUID, N.O.S. (Contains: Light aromatic naphtha, 1,2, 4-Trimethylbenzene)</th>
<th>3</th>
<th>III</th>
<th>Emergency schedules (EmS) F-E S-E</th>
</tr>
</thead>
<tbody>
<tr>
<td>IATA-DGR Class</td>
<td>UN1993</td>
<td>FLAMMABLE LIQUID, N.O.S. (Contains: Light aromatic naphtha, 1,2, 4-Trimethylbenzene)</td>
<td>3</td>
<td>III</td>
<td></td>
</tr>
</tbody>
</table>

PG*: Packing group
DOT Reportable: Xylene, 697 gal of this product.
Quantity: Not applicable.
Marine pollutant: Not applicable.

North-America NAERG: 128

15. Regulatory information

Canada
WHMIS (Canada): Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F).
Class D-2A: Material causing other toxic effects (Very toxic).
Class D-2B: Material causing other toxic effects (Toxic).

Canada (CEPA DSL): All components are listed or exempted.

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

Canadian NPRI: The following components are listed: Xylene (all isomers); Trimethylbenzene; Trimethylbenzene; 1,2,4-Trimethylbenzene; Light aromatic solvent naphtha

U.S. Federal regulations: United States inventory (TSCA 8b): All components are listed or exempted.

SARA 302/304: No products were found.

SARA 311/312 Classification:
Fire hazard
Immediate (acute) health hazard
Delayed (chronic) health hazard

SARA 313

Supplier notification:
1,2,4-Trimethylbenzene: 95-63-6 20 - 30
Xylene: 1330-20-7 1 - 5

16. Other information

Label requirements: COMBUSTIBLE LIQUID AND VAPOR. INHALATION CAUSES HEADACHES, DIZZINESS, DROWSINESS AND NAUSEA AND MAY LEAD TO UNCONSCIOUSNESS. CAUSES RESPIRATORY TRACT AND EYE IRRITATION. MAY BE HARMFUL IF ABSORBED THROUGH SKIN. MAY CAUSE SKIN IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION. HARMFUL OR FATAL IF SWALLOWED. CAN ENTER LUNGS AND CAUSE DAMAGE. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA. SUSPECT CANCER HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE CANCER. ASPIRATION HAZARD.
16. Other information

National Fire Protection
Association (U.S.A.)

Flammability
Health
Instability
Special

Date of printing: 9/30/2015.

Indicates information that has changed from previously issued version.

Notice to reader

NOTE: The information on this SDS is based on data which is considered to be accurate. Baker Hughes, however, makes no guarantees or warranty, either expressed or implied of the accuracy or completeness of this information.

The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of this product.

This SDS was prepared and is to be used for this product. If the product is used as a component in another product, this SDS information may not be applicable.