

### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 08/20/2015 Revision date: 01/23/2017

| <b>SECTION 1: Identifica</b>   | tion               |  |
|--|--------------------|--|
| 1.1. Identification  |                    |  |
| Product form   |                    | : Mixtures   |
| Product name   |                    | : E-4550   |
| 1.2. Recommended us  | se and restriction | ons on use   |
| Use of the substance/mixture   |                    | : Emulsion Breaker   |
| 1.3. Supplier  |                    |  |
| Chemical Consultants Inc.<br>1600 Ratcliff Drive<br>Gillette, WY 82716 - United<br>T 307-686-2141 - F 307-686<br>www.chemicalconsultants.c | 6-1106             |  |
| 1.4. Emergency teleph  | one number         |  |
| Emergency number   |                    | : INFOTRAC 1-800-424-5571  |
| SECTION 2: Hazard(s)   |                    |  |
| 2.1. Classification of t   | he substance o     | r mixture  |
| GHS-US classification  |                    |  |
| Flammable liquids<br>Category 2  | H225               | Highly flammable liquid and vapor  |
| Serious eye damage/eye irritation Category 2   | H319               | Causes serious eye irritation  |
| Carcinogenicity Category   | H350               | May cause cancer (Dermal, Inhalation, oral)  |
| Reproductive toxicity<br>Category 2  | H361               | Suspected of damaging fertility or the unborn child (Dermal, Inhalation, oral)                                       |
| Specific target organ<br>toxicity (repeated exposure)<br>Category 1  | H372               | Causes damage to organs (blood, eyes, liver, Skin) through prolonged or repeated exposure (Dermal, Inhalation, oral) |
| Aspiration bazard Category   | H304               | May be fatal if swallowed and enters airways   |

May be fatal if swallowed and enters airways

Full text of H statements : see section 16

H304

Aspiration hazard Category

1

| 2.2. GHS Label elements, including | precautionary statements  |       |
|------------------------------------|---|-------|
| GHS-US labeling                    |   |       |
| Hazard pictograms (GHS-US)         |   |       |
|                                    | GHS02 GHS07 GHS08   |       |
| Signal word (GHS-US)               | : Danger  |       |
| Hazard statements (GHS-US)         | <ul> <li>H225 - Highly flammable liquid and vapor</li> <li>H304 - May be fatal if swallowed and enters airways</li> <li>H319 - Causes serious eye irritation</li> <li>H350 - May cause cancer (Dermal, Inhalation, oral)</li> <li>H361 - Suspected of damaging fertility or the unborn child (Dermal, Inhalation, oral)</li> <li>H372 - Causes damage to organs (blood, eyes, liver, Skin) through prolonged or repeated exposure (Dermal, Inhalation, oral)</li> </ul>   |       |
| Precautionary statements (GHS-US)  | <ul> <li>P201 - Obtain special instructions before use</li> <li>P202 - Do not handle until all safety precautions have been read and understood</li> <li>P210 - Keep away from open flames, sparks No smoking</li> <li>P233 - Keep container tightly closed</li> <li>P240 - Ground/Bond container and receiving equipment</li> <li>P241 - Use explosion-proof electrical, lighting, ventilating equipment</li> <li>P242 - Use only non-sparking tools</li> <li>P243 - Take precautionary measures against static discharge</li> <li>P260 - Do not breathe fume, vapors</li> </ul> |       |
| 01/23/2017                         | EN (English US) Pa  | age 1 |

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P264 - Wash hands thoroughly after handling P270 - Do not eat, drink or smoke when using this product P280 - Wear eye protection, protective gloves P301+P310 - If swallowed: Immediately call a POISON CENTER 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 P314 - Get medical advice/attention if you feel unwell P331 - Do NOT induce vomiting P337+P313 - If eye irritation persists: Get medical advice/attention P370+P378 - In case of fire: Use carbon dioxide (CO2), dry extinguishing powder, foam to extinguish P403+P235 - Store in a well-ventilated place. Keep cool P405 - Store locked up P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards which do not result in classification

#### No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

#### SECTION 3: Composition/Information on ingredients

3.1. Substances

#### Not applicable

3.2. Mixtures

| Name  | Product identifier  | %      | GHS-US classification  |
|---|---------------------|--------|--|
| Xylene                                      | (CAS No) 1330-20-7  | 15-55  | Flam. Liq. 3, H226<br>Eye Irrit. 2A, H319<br>Carc. 2, H351<br>Repr. 2, H361<br>STOT RE 1, H372<br>Aquatic Acute 2, H401<br>Aquatic Chronic 2, H411 |
| ethylbenzene                                | (CAS No) 100-41-4   | 5-15   | Flam. Liq. 2, H225<br>Acute Tox. 4 (Inhalation:vapour), H332<br>Carc. 2, H351<br>STOT RE 2, H373<br>Asp. Tox. 1, H304                              |
| solvent naphtha (petroleum), heavy aromatic | (CAS No) 64742-94-5 | 4-14   | Asp. Tox. 1, H304  |
| naphthalene                                 | (CAS No) 91-20-3    | .3-5.3 | Acute Tox. 4 (Oral), H302<br>Carc. 1B, H350<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410  |

\*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of hazard classes and H-statements : see section 16

| SECTION 4: First-aid measures          |  |
|--|--|
| 4.1. Description of first aid measures | 5  |
| First-aid measures general             | : Call a physician immediately.  |
| First-aid measures after inhalation    | : Remove person to fresh air and keep comfortable for breathing.   |
| First-aid measures after skin contact  | : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing.   |
| First-aid measures after eye contact   | : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. |
| First-aid measures after ingestion     | : Do not induce vomiting. Call a physician immediately.  |
| 4.2. Most important symptoms and e     | effects (acute and delayed)  |
| Symptoms/injuries after eye contact    | : Eye irritation.  |
| Symptoms/injuries after ingestion      | : Risk of lung edema.  |
| 4.3. Immediate medical attention and   | d special treatment, if necessary  |
| Treat symptomatically                  |  |

Treat symptomatically.

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| SECTION 5: Fire fighting modelures                |   |
|---|---|
| SECTION 5: Fire-fighting measures                 |   |
| 5.1. Suitable (and unsuitable) extinguish         |   |
| Suitable extinguishing media                      | : Water spray. Dry powder. Foam. Carbon dioxide.  |
| 5.2. Specific hazards arising from the ch         |   |
| Fire hazard                                       | : Highly flammable liquid and vapor.  |
| Reactivity  | : Highly flammable liquid and vapor.  |
| 5.3. Special protective equipment and p           |   |
| Protection during firefighting                    | : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.  |
| <b>SECTION 6: Accidental release meas</b>         | sures   |
| 6.1. Personal precautions, protective eq          | uipment and emergency procedures  |
| 6.1.1. For non-emergency personnel                |   |
| Emergency procedures                              | : No open flames, no sparks, and no smoking. Only qualified personnel equipped with suitable protective equipment may intervene. Do not breathe dust/fume/gas/mist/vapors/spray.  |
| 6.1.2. For emergency responders                   |   |
| Protective equipment                              | : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".   |
| 6.2. Environmental precautions                    |   |
| Avoid release to the environment. Notify authorit | ies if product enters sewers or public waters.  |
| 6.3. Methods and material for containme           | ent and cleaning up   |
| Methods for cleaning up                           | <ul> <li>Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public<br/>waters.</li> </ul>   |
| Other information                                 | : Dispose of materials or solid residues at an authorized site.   |
| 6.4. Reference to other sections                  |   |
| For further information refer to section 13.      |   |
| SECTION 7: Handling and storage                   |   |
| 7.1. Precautions for safe handling                |   |
| Precautions for safe handling                     | : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes. |
| Hygiene measures                                  | : Separate working clothes from town clothes. Launder separately. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.   |
| 7.2. Conditions for safe storage, including       | ng any incompatibilities  |
| Technical measures                                | : Ground/bond container and receiving equipment.  |
| Storage conditions                                | : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.  |

### SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

| Xylene (1330-20-7) |                                     |                           |  |
|--------------------|-------------------------------------|---------------------------|--|
| ACGIH              | ACGIH TWA (ppm)                     | 100 ppm                   |  |
| ACGIH              | ACGIH STEL (ppm)                    | 150 ppm                   |  |
| ACGIH              | Remark (ACGIH)                      | URT & eye irr; CNS impair |  |
| OSHA               | OSHA PEL (TWA) (mg/m <sup>3</sup> ) | 435 mg/m <sup>3</sup>     |  |
| OSHA               | OSHA PEL (TWA) (ppm)                | 100 ppm                   |  |

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| ethylbenzene (100  | )-41-4)                                |  |
|--------------------|--|--|
| ACGIH              | ACGIH TWA (ppm)                        | 20 ppm (Ethyl benzene; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value) |
| ACGIH              | Remark (ACGIH)                         | URT irr; kidney dam (nephropathy)  |
| OSHA               | OSHA PEL (TWA) (mg/m <sup>3</sup> )    | 435 mg/m <sup>3</sup>  |
| OSHA               | OSHA PEL (TWA) (ppm)                   | 100 ppm  |
| solvent naphtha (p | etroleum), heavy aromatic (64742-94-5) |  |
| Not applicable     |  |  |
| naphthalene (91-20 | -3)                                    |  |
| ACGIH              | ACGIH TWA (ppm)                        | 10 ppm (Naphthalene; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)   |
| ACGIH              | Remark (ACGIH)                         | Hematologic eff; URT & eye irr; Skin; A3   |
| OSHA               | OSHA PEL (TWA) (mg/m <sup>3</sup> )    | 50 mg/m <sup>3</sup>   |
| OSHA               | OSHA PEL (TWA) (ppm)                   | 10 ppm   |

#### 8.2. Appropriate engineering controls

Appropriate engineering controls Environmental exposure controls : Ensure good ventilation of the work station.

## sure controls : Avoid release to the environment.

### 8.3. Individual protection measures/Personal protective equipment

### Personal protective equipment:

Gloves. Protective goggles.

#### Hand protection:

Protective gloves

#### Eye protection:

Safety glasses

### Skin and body protection:

Wear suitable protective clothing

#### **Respiratory protection:**

Wear respiratory protection



| <b>SECTION 9: Physical and</b> | t chemical properties   |
|--------------------------------|---|
| 9.1. Information on basic      | physical and chemical properties  |
| Physical state                 | : Liquid  |
| Color                          | : brown   |
| Odor                           | <ul> <li>There may be no odour warning properties, odour is subjective and inadequate to warn of<br/>overexposure.</li> <li>Mixture contains one or more component(s) which have the following odour(s):<br/>Pleasant odour Aromatic odour Petroleum-like odour Sweet odour No data available on odour<br/>Tar odour Stuffy odour Oil-like odour</li> </ul> |
| Odor threshold                 | : No data available   |
| pН                             | : 5.5   |
| Melting point                  | : Not applicable  |
| Freezing point                 | : No data available   |
| Boiling point                  | : 247 °F  |
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| Flash point                                 | : 71 °F             |
|---|---------------------|
| Relative evaporation rate (butyl acetate=1) | : No data available |
| Flammability (solid, gas)                   | : Not applicable.   |
| Vapor pressure                              | : 0.2 psi           |
| Relative vapor density at 20 °C             | : No data available |
| Relative density                            | : No data available |
| Specific gravity / density                  | : 0.909             |
| Solubility                                  | : No data available |
| Log Pow                                     | : No data available |
| Auto-ignition temperature                   | : No data available |
| Decomposition temperature                   | : No data available |
| Viscosity, kinematic                        | : 9.55 cSt          |
| Viscosity, dynamic                          | : No data available |
| Explosion limits                            | : No data available |
| Explosive properties                        | : No data available |
| Oxidizing properties                        | : No data available |
|   |                     |

9.2. Other information

No additional information available

| SECTION 10: Stability and reactivity   |
|--|
| 10.1. Reactivity   |
| Highly flammable liquid and vapor.   |
| 10.2. Chemical stability   |
| Stable under normal conditions.  |
| 10.3. Possibility of hazardous reactions   |
| No dangerous reactions known under normal conditions of use.   |
| 10.4. Conditions to avoid  |
| Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.      |
| 10.5. Incompatible materials   |
| Oxidizing agent.   |
| 10.6. Hazardous decomposition products   |
| Under normal conditions of storage and use, hazardous decomposition products should not be produced. |
| SECTION 11: Toxicological information  |
| 11.1. Information on toxicological effects   |

Acute toxicity

: Not classified

| Xylene (1330-20-7)         |   |
|----------------------------|---|
| LD50 oral rat              | 3523 - 8600 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Literature study; 3523 mg/kg<br>bodyweight; Rat; OECD 401: Acute Oral Toxicity; Experimental value; >4000 mg/kg<br>bodyweight; Rat; OECD 401: Acute Oral Toxicity; Experimental value) |
| LD50 dermal rabbit         | > 4200 mg/kg body weight (Rabbit; Experimental value; OECD 402: Acute Dermal Toxicity)  |
| LC50 inhalation rat (mg/l) | 29 mg/l/4h (Rat; Experimental value; 27.57 mg/l/4h; Rat; Experimental value)  |
| ATE US (oral)              | 3523.000 mg/kg body weight  |
| ATE US (vapors)            | 29.000 mg/l/4h  |
| ATE US (dust, mist)        | 29.000 mg/l/4h  |
| ethylbenzene (100-41-4)    |   |
| LD50 oral rat              | 3500 mg/kg (Rat; Other; Experimental value)   |
| LD50 dermal rabbit         | 15415 mg/kg (Rabbit; Literature study; Other; 15432 mg/kg; Rabbit; Experimental value)  |
| LC50 inhalation rat (mg/l) | 17.8 mg/l/4h (Rat; Literature study)  |
| LC50 inhalation rat (ppm)  | 4000 ppm/4h (Rat; Literature study)   |
| ATE US (oral)              | 3500.000 mg/kg body weight  |

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| ethylbenzene (100-41-4)                               |   |
|---|---|
| ATE US (dermal)                                       | 15415.000 mg/kg body weight   |
| ATE US (gases)  | 4000.000 ppmV/4h  |
| ATE US (vapors)                                       | 17.800 mg/l/4h  |
| ATE US (dust, mist)                                   | 17.800 mg/l/4h  |
| naphthalene (91-20-3)                                 |   |
| LD50 oral rat   | > 1100 mg/kg (Rat)  |
| LD50 dermal rat                                       | > 2500 mg/kg (Rat)  |
| LD50 dermal rabbit                                    | > 20000 mg/kg (Rabbit)  |
| ATE US (oral)   | 500.000 mg/kg body weight   |
| Skin corrosion/irritation                             | : Not classified  |
|   | pH: 5.5   |
| Serious eye damage/irritation                         | : Causes serious eye irritation.  |
|   | pH: 5.5   |
| Respiratory or skin sensitization                     | Not classified  |
| Germ cell mutagenicity                                | : Not classified  |
| Carcinogenicity                                       | : May cause cancer (Dermal, Inhalation, oral).  |
|   | · · · · · /   |
| Xylene (1330-20-7)                                    | O Net dess'6-bla  |
| IARC group  | 3 - Not classifiable  |
| ethylbenzene (100-41-4)                               |   |
| IARC group  | 2B - Possibly carcinogenic to humans  |
| naphthalene (91-20-3)                                 |   |
| IARC group  | 2B - Possibly carcinogenic to humans  |
| National Toxicology Program (NTP) Status              | 3 - Reasonably anticipated to be Human Carcinogen   |
| Reproductive toxicity                                 | : Suspected of damaging fertility or the unborn child (Dermal, Inhalation, oral).   |
| Specific target organ toxicity – single exposure      | : Not classified  |
|   |   |
| Specific target organ toxicity – repeated<br>exposure | : Causes damage to organs (blood, eyes, liver, Skin) through prolonged or repeated exposure (Dermal, Inhalation, oral).                 |
| Aspiration hazard                                     | : May be fatal if swallowed and enters airways.   |
| Symptoms/injuries after eye contact                   | : Eye irritation.   |
| Symptoms/injuries after ingestion                     | : Risk of lung edema.   |
|   |   |
| ECTION 12: Ecological information                     |   |
| 2.1. Toxicity   |   |
| Ecology - general                                     | : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.                  |
| ethylbenzene (100-41-4)                               |   |
| LC50 fish 2   | 4.2 mg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Salmo gairdneri; Semi-static system; Fresh water; Experimental value)        |
| naphthalene (91-20-3)                                 |   |
| EC50 Daphnia 1  | 2.16 mg/l (EC50; 48 h; Daphnia magna)   |
| LC50 fish 2   | 0.11 mg/l (LC50; 96 h; Oncorhynchus mykiss)   |
| Threshold limit algae 1                               | 0.4 mg/l (EC50; 72 h; Skeletonema costatum)   |
|   |   |
| 2 Porsistance and degradability                       |   |
| 2.2. Persistence and degradability                    |   |
| Xylene (1330-20-7)                                    | Deadily biodegradeble is yeter. Disclogradeble is the cell big (test) data as yet 2015 of the   |
|   | Readily biodegradable in water. Biodegradable in the soil. No (test)data on mobility of the substance available. Photolysis in the air. |
| Xylene (1330-20-7)                                    | Readily biodegradable in water. Biodegradable in the soil. No (test)data on mobility of the substance available. Photolysis in the air. |

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| ethylbenzene (100-41-4)         |   |
|---------------------------------|---|
| Biochemical oxygen demand (BOD) | 1.44 g O₂/g substance (20d.)  |
| Chemical oxygen demand (COD)    | 2.1 g O₂/g substance  |
| ThOD                            | 3.17 g O₂/g substance   |
| BOD (% of ThOD)                 | 45.4 (20 days)  |
| naphthalene (91-20-3)           |   |
| Persistence and degradability   | Readily biodegradable in water. Forming sediments in water. Biodegradable in the soil.<br>Adsorbs into the soil. Photolysis in the air. |
| Biochemical oxygen demand (BOD) | 0 g O₂/g substance  |
| Chemical oxygen demand (COD)    | 0.22 g O₂/g substance   |
| ThOD                            | 2.99 g O₂/g substance   |

#### 12.3.

## Bioaccumulative potential

| Xylene (1330-20-7)  |   |
|---|---|
| BCF fish 2 7 - 26 (BCF; 8 weeks; Oncorhynchus mykiss; Flow-through system; Fresh water) |   |
| Log Pow   | 3.2 (Conclusion by analogy; 20 °C)  |
| Bioaccumulative potential   | Low potential for bioaccumulation (BCF < 500).  |
| ethylbenzene (100-41-4)   |   |
| BCF fish 1  | 1 (BCF; Other; 6 weeks; Oncorhynchus kisutch; Flow-through system; Salt water; Literature<br>study) |
| BCF fish 2  | 15 - 79 (BCF)   |
| BCF other aquatic organisms 1   | 4.68 (BCF)  |
| Log Pow   | 3.15 (Experimental value; 3.6; Experimental value; EU Method A.8: Partition Coefficient; 20 °C)     |
| Bioaccumulative potential   | Low potential for bioaccumulation (BCF < 500).  |
| naphthalene (91-20-3)   |   |
| BCF fish 1  | 23 - 168 (BCF; 8 weeks; Cyprinus carpio)  |
| Log Pow   | 3.3 (Experimental value)  |
| Bioaccumulative potential   | Low potential for bioaccumulation (BCF < 500).  |

### 12.4. Mobility in soil

| Xylene (1330-20-7)           |  |
|------------------------------|--|
| Ecology - soil               | May be harmful to plant growth, blooming and fruit formation.                                |
| ethylbenzene (100-41-4)      |  |
| Surface tension              | 0.029 N/m  |
| Log Koc                      | log Koc,PCKOCWIN v1.66; 2.71; Calculated value; Koc; PCKOCWIN v1.66; 517.8; Calculated value |
| naphthalene (91-20-3)        |  |
| Surface tension              | 0.03 N/m (100 °C)  |
| 2.5. Other adverse effects   |  |
| Effect on the global warming | : No known effects from this product.  |
| GWPmix comment               | : No known effects from this product.  |

| SECTIO    | N 13: Disposal co | nsiderations  |
|-----------|-------------------|---|
| 13.1. E   | Disposal methods  |   |
| Waste tre | eatment methods   | : Dispose of contents/container in accordance with licensed collector's sorting instructions. |
| Additiona | al information    | : Flammable vapors may accumulate in the container.   |

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### SECTION 14: Transport information

### **Department of Transportation (DOT)**

In accordance with DOT

Transport document description

UN-No.(DOT) Proper Shipping Name (DOT)

Class (DOT) Packing group (DOT) Hazard labels (DOT)

: RQ, UN1993 Flammable liquids, n.o.s. (xylene, ethylbenzene). Marine pollutant (solvent naptha (petroleum) heavy arom., napthalene), 3, II

: UN1993

: Flammable liquids, n.o.s. xylene, ethylbenzene). Marine pollutant (solvent naptha (petroleum) heavy arom., napthalene

- : 3 Class 3 Flammable and combustible liquid 49 CFR 173.120
- : II Medium Danger
- : 3 Flammable liquid



: Yes (IMDG only)

Marine pollutant

| DOT Packaging Non Bulk (49 CFR 173.xxx)                          | : 202   |
|--|---|
| DOT Packaging Bulk (49 CFR 173.xxx)                              | : 242   |
| DOT Symbols  | : G - Identifies PSN requiring a technical name   |
| DOT Special Provisions (49 CFR 172.102)                          | <ul> <li>IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.</li> <li>T7 - 4 178.274(d)(2) Normal</li></ul>  |
| DOT Packaging Exceptions (49 CFR 173.xxx)                        | : 150   |
| DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) | : 5L  |
| DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)     | : 60 L  |
| DOT Vessel Stowage Location                                      | : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded. |
| Emergency Response Guide (ERG) Number                            | : 128   |
| Other information  | : No supplementary information available.   |
| Transportation of Dangerous Goods                                |   |
| Transport by sea   |   |
| Transport document description (IMDG)                            | : UN 1993 FLAMMABLE LIQUID, N.O.S., 3, II   |
| UN-No. (IMDG)  | : 1993  |
| Proper Shipping Name (IMDG)                                      | : FLAMMABLE LIQUID, N.O.S.  |
| Class (IMDG)   | : 3 - Flammable liquids   |

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| Packing group (IMDG)      | : II - substances presenting medium danger |
|---------------------------|--|
| Limited quantities (IMDG) | : 1L                                       |
| Marine pollutant          | : Yes (IMDG only)                          |
|                           |  |

#### Air transport

| Transport document description (IATA) | : UN 1993 Flammable liquid, n.o.s., 3, II |
|---------------------------------------|---|
| UN-No. (IATA)                         | : 1993                                    |
| Proper Shipping Name (IATA)           | : Flammable liquid, n.o.s.                |
| Class (IATA)                          | : 3 - Flammable Liquids                   |
| Packing group (IATA)                  | : II - Medium Danger                      |
|                                       |   |

| SECTION 15: Regulatory information |                                     |   |
|------------------------------------|-------------------------------------|---|
| 1                                  | 15.1. US Federal regulations        |   |
|                                    | E-4550                              |   |
|                                    | SARA Section 311/312 Hazard Classes | Delayed (chronic) health hazard<br>Fire hazard<br>Immediate (acute) health hazard |

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

| Xylene       | CAS No 1330-20-7 | 15-55%  |
|--------------|------------------|---------|
| ethylbenzene | CAS No 100-41-4  | 5-15%   |
| naphthalene  | CAS No 91-20-3   | .3-5.3% |

| Xylene (1330-20-7)                  |  |  |
|-------------------------------------|--|--|
| CERCLA RQ                           | 100 lb   |  |
| SARA Section 311/312 Hazard Classes | Immediate (acute) health hazard<br>Delayed (chronic) health hazard                     |  |
| ethylbenzene (100-41-4)             |  |  |
| EPA TSCA Regulatory Flag            | T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA. |  |
| CERCLA RQ                           | 1000 lb  |  |
| naphthalene (91-20-3)               |  |  |
| EPA TSCA Regulatory Flag            | T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA. |  |
| CERCLA RQ                           | 100 lb   |  |

### 15.2. International regulations

CANADA

No additional information available

### **EU-Regulations**

No additional information available

### **National regulations**

| ethylbenzene (100-41-4)                                      |  |
|--|--|
| Listed on IARC (International Agency for Research on Cancer) |  |

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### naphthalene (91-20-3)

| Listed on IARC (International Agency for Research on Cancer) |
|--|
| Listed as carcinogen on NTP (National Toxicology Program)    |

### 15.3. US State regulations

California Proposition 65 - This product contains, or may contain, trace quantities of a substance(s) known to the state of California to cause cancer, developmental and/or reproductive harm

| ethylbenzene (100-41-4                                   | 4)   |   |   |                                     |
|--|--|---|---|-------------------------------------|
| U.S California -<br>Proposition 65 -<br>Carcinogens List | U.S California -<br>Proposition 65 -<br>Developmental Toxicity | U.S California -<br>Proposition 65 -<br>Reproductive Toxicity -<br>Female | U.S California -<br>Proposition 65 -<br>Reproductive Toxicity -<br>Male | No significant risk<br>level (NSRL) |
| Yes  | No   | No  | No  | 54                                  |
| naphthalene (91-20-3)                                    |  |   |   |                                     |
| U.S California -<br>Proposition 65 -<br>Carcinogens List | U.S California -<br>Proposition 65 -<br>Developmental Toxicity | U.S California -<br>Proposition 65 -<br>Reproductive Toxicity -<br>Female | U.S California -<br>Proposition 65 -<br>Reproductive Toxicity -<br>Male | No significant risk<br>level (NSRL) |
| Yes  | No   | No  | No  |                                     |
| Xylene (1330-20-7)                                       |  |   |   |                                     |
| U.S New Jersey - Rigl<br>U.S Pennsylvania - R            | nt to Know Hazardous Substance<br>IK (Right to Know) List      | List  |   |                                     |
| ethylbenzene (100-41-4                                   | 4)   |   |   |                                     |
| U.S New Jersey - Rigl<br>U.S Pennsylvania - R            | nt to Know Hazardous Substance<br>IK (Right to Know) List      | List  |   |                                     |
| naphthalene (91-20-3)                                    |  |   |   |                                     |
| U.S New Jersey - Rig<br>U.S Pennsylvania - R             | nt to Know Hazardous Substance<br>FK (Right to Know) List      | List  |   |                                     |

### **SECTION 16: Other information**

Revision date

: 01/23/2017

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| Full text of H-phrase  | es:  |  |  |
|------------------------|--|--|--|
| H225                   | Highly flammable liquid and vapor  |  |  |
| H226                   | Flammable liquid and vapor   |  |  |
| H302                   | Harmful if swallowed   |  |  |
| H304                   | May be fatal if swallowed and enters airways   |  |  |
| H319                   | Causes serious eye irritation  |  |  |
| H332                   | Harmful if inhaled   |  |  |
| H350                   | May cause cancer   |  |  |
| H351                   | Suspected of causing cancer  |  |  |
| H361                   | Suspected of damaging fertility or the unborn child  |  |  |
| H372                   | Causes damage to organs through prolonged or repeated exposure   |  |  |
| H373                   | May cause damage to organs through prolonged or repeated exposure  |  |  |
| H400                   | Very toxic to aquatic life   |  |  |
| H401                   | Toxic to aquatic life  |  |  |
| H410                   | Very toxic to aquatic life with long lasting effects   |  |  |
| H411                   | Toxic to aquatic life with long lasting effects  |  |  |
| NFPA health hazar      | temporary incapacitation or residual injury.   |  |  |
| NFPA fire hazard       | <ul> <li>3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature conditions.</li> </ul>  |  |  |
| NFPA reactivity        | : 0 - Material that in themselves are normally stable, even under fire conditions.   |  |  |
| HMIS III Rating        |  |  |  |
| Health<br>Flammability | <ul> <li>2 Moderate Hazard - Temporary or minor injury may occur</li> <li>3 Serious Hazard - Materials capable of ignition under almost all normal temperature conditions. Includes flammable liquids with flash points below 73 F and boiling points above 100 F. as well as liquids with flash points between 73 F and 100 F. (Classes IB &amp; IC)</li> </ul> |  |  |
| Physical               | <ul> <li>0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT<br/>react with water, polymerize, decompose, condense, or self-react. Non-Explosives.</li> </ul>  |  |  |
| Personal protection    | : B<br>B - Safety glasses, Gloves  |  |  |

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product