

#### **SECTION 2. HAZARDS IDENTIFICATION**

| Emergency Overview       |  |
|--------------------------|--|
| Regulatory status        | This material is considered hazardous by the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200).  |
| Signal Word              | : DANGER   |
| Hazard Summary           | Extremely flammable. Irritating to eyes and respiratory system. Affects central nervous system. Harmful or fatal if swallowed. Aspiration Hazard.  |
| Potential Health Effects |  |
| Eyes                     | Figh vapor concentration or contact may cause irritation and discomfort.   |
| Skin                     | Brief contact may cause slight irritation. Skin irritation leading to dermatitis may occur upon prolonged or repeated contact. Can be absorbed through skin.   |
| Ingestion                | Aspiration hazard if liquid is inhaled into lungs, particularly from vomiting after<br>ingestion. Aspiration may result in chemical pneumonia, severe lung damage,<br>respiratory failure and even death.  |
| Inhalation               | Vapors or mists from this material can irritate the nose, throat, and lungs, and can cause signs and symptoms of central nervous system depression, depending on the concentration and duration of exposure. Inhalation of high concentrations may cause central nervous system depression such as dizziness |
| <u>1</u>                 | EXHIBIT  |

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|                  | drowsiness, headache, and similar narcotic symptoms, but no long-term effects.   |
|------------------|--|
| Chronic Exposure | Long-term exposure may cause effects to specific organs, such as to the liver,<br>kidneys, blood, nervous system, and skin. Contains benzene, which can cause<br>blood disease, including anemia and leukemia. |
| Target Organs    | Skin, Central nervous system, Liver, Kidney, Blood   |

# SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component                          | CAS-No.   | Weight %   |
|------------------------------------|-----------|------------|
| Naphtha; Low boiling point naphtha | 8030-30-6 | 100%       |
| N-hexane                           | 110-54-3  | 25 - 35%   |
| Xylene                             | 1330-20-7 | 25 - 35%   |
| Toluene                            | 108-88-3  | 15 - 20%   |
| Cyclohexane                        | 110-82-7  | 15 - 20%   |
| Pentane                            | 109-66-0  | 15 - 20%   |
| Heptane [and isomers]              | 142-82-5  | 12.5 - 15% |
| Ethylbenzene                       | 100-41-4  | 5 - 7%     |
| Benzene                            | 71-43-2   | 3 - 5%     |
| 1,2,4-Trimethylbenzene             | 95-63-6   | 2 - 3%     |
| Sulfur                             | 7704-34-9 | 0 - 1.5%   |

| SECTION 4. FIRST AID MEASURES |  |  |  |  |  |
|-------------------------------|--|--|--|--|--|
| 100                           | Remove from exposure, lie down. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). When symptoms persist or in all cases of doubt, seek medical advice. Never give anything by mouth to an unconscious person. Take off all contaminated clothing immediately and thoroughly wash material from skin. |  |  |  |  |
|                               | If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention immediately.  |  |  |  |  |
| 444                           | In case of contact, immediately flush skin with plenty of water. Take off<br>contaminated clothing and shoes immediately. Wash contaminated clothing<br>before re-use. Contaminated leather, particularly footwear, must be discarded.<br>Note that contaminated clothing may be a fire hazard. Seek medical advice if<br>symptoms persist or develop.             |  |  |  |  |
| ž.                            | Remove contact lenses. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.   |  |  |  |  |
| E.                            | If swallowed Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention immediately.  |  |  |  |  |
|                               |  |  |  |  |  |

| Notes to physician | Symptoms:  | Dizziness, | Discomfort, | Headache, | Nausea, | Kidney dis | sorders, I | Liver |
|--------------------|------------|------------|-------------|-----------|---------|------------|------------|-------|
|                    | disorders. |            |             |           |         |            |            |       |

#### **SECTION 5. FIRE-FIGHTING MEASURES**

| Form  | 8         | Liquid   |
|---|-----------|--|
| Flash point -typical                              |           | -21.7 °C (-7.1 °F)   |
| Auto Ignition temperature                         | •         | 225 °C (437 °F)  |
| Lower explosive limit                             | 2.0       | 1.2 %(V)   |
| Upper explosive limit                             | ž         | 6.9 % (V)  |
| Suitable extinguishing media                      | 466)<br>( | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Do not use a solid water stream as it may scatter and spread fire.  |
| Specific hazards during fire fighting             | 144       | SMALL FIRES: Any extinguisher suitable for Class B fires, dry chemical, CO2, water spray, fire fighting foam, or Halon.<br>LARGE FIRES: Water spray, fog or fire fighting foam. Water may be ineffective for fighting the fire, but may be used to cool fire-exposed containers.   |
| Special protective equipment<br>for fire-fighters | 1         | Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear. Firefighters' protective clothing will provide limited protection.  |
| Further information                               |           | Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water. For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied fire fighting foam. Exposure to decomposition products may be a hazard to health. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. |

# SECTION 6. ACCIDENTAL RELEASE MEASURESPersonal precautions: Evacuate personnel to safe areas. Ventilate the area. Remove all sources of<br/>ignition. Response and clean-up crews must be properly trained and must utilize<br/>proper protective equipment (see Section 8).Environmental precautions: Should not be released into the environment. Avoid subsoil penetration. If the<br/>product contaminates rivers and lakes or drains, inform respective authorities.Methods for cleaning up: Contain and collect spillage with non-combustible absorbent material, (e.g. sand,<br/>earth, diatomaceous earth, vermiculite) and place in container for disposal<br/>according to local / national regulations.

| SECTION 7. HANDLING AND STORAGE |   |  |  |  |  |
|---------------------------------|---|--|--|--|--|
| Handling                        |   | Keep away from fire, sparks and heated surfaces. No smoking near areas where material is stored or handled. The product should only be stored and handled in |  |  |  |
|                                 | _ |  |  |  |  |

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|   |      | areas with intrinsically safe electrical classification.  |
|---|------|---|
| Advice on protection against fire and explosion |      | <ul> <li>Hydrocarbon liquids including this product can act as a non-conductive flammable liquid (or static accumulators), and may form ignitable vapor-air mixtures in storage tanks or other containers. Precautions to prevent static-initated fire or explosion during transfer, storage or handling, include but are not limited to these examples:</li> <li>(1) Ground and bond containers during product transfers. Grounding and bonding may not be adequate protection to prevent ignition or explosion of hydrocarbon liquids and vapors that are static accumulators.</li> <li>(2) Special slow load procedures for "switch loading" must be followed to avoid the static ignition hazard that can exist when higher flash point material (such as fuel oil or diesel) is loaded into tanks previously containing low flash point products (such gasoline or naphtha).</li> <li>(3) Storage tank level floats must be effectively bonded.</li> <li>For more information on precautions to prevent static-initated fire or explosion, see NFPA 77, Recommended Practice on Static Electricity (2007), and API Recommended Practice 2003, Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents (2008).</li> </ul> |
| Dust explosion class                            |      | Not applicable  |
| Requirements for storage areas and containers   | 0000 | Keep away from flame, sparks, excessive temperatures and open flame. Use<br>approved containers. Keep containers closed and clearly labeled. Empty or<br>partially full product containers or vessels may contain explosive vapors. Do not<br>pressurize, cut, heat, weld or expose containers to sources of ignition. Store in a<br>well-ventilated area. The storage area should comply with NFPA 30 "Flammable<br>and Combustible Liquid Code". The cleaning of tanks previously containing this<br>product should follow API Recommended Practice (RP) 2013 "Cleaning Mobile<br>Tanks In Flammable and Combustible Liquid Service" and API RP 2015 "Cleaning<br>Petroleum Storage Tanks".   |
| Advice on common storage                        | 2    | Keep away from food, drink and animal feed. Incompatible with oxidizing agents. Incompatible with acids.  |
| Other data                                      | ĩ    | No decomposition if stored and applied as directed.   |

# **SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

### Exposure Guidelines

| List    | Components                         | CAS-No.            | Туре:   | Value               |
|---------|------------------------------------|--------------------|---------|---------------------|
| OSHA    | Benzene - 29 CFR 1910.1028         | 71-43-2            | TWA     | 1 ppm               |
|         |                                    | 71-43-2            | STEL    | 5 ppm               |
|         |                                    | 71-43-2            | OSHA_AL | 0.5 ppm             |
| OSHA Z1 | Naphtha: Low boiling point naphtha | 8030-30 <b>-</b> 6 | PEL     | 100 ppm 400 mg/m3   |
|         | Xylene                             | 1330-20-7          | PEL     | 100 ppm 435 mg/m3   |
|         | N-hexane                           | 110-54-3           | PEL     | 500 ppm 1,800 mg/m3 |
|         | Cyclohexane                        | 110-82-7           | PEL     | 300 ppm 1,050 mg/m3 |
|         | Heptane [and isomers]              | 142-82-5           | PEL     | 500 ppm 2,000 mg/m3 |
|         | Ethylbenzene                       | 100-41-4           | PEL     | 100 ppm 435 mg/m3   |
| ACGIH   | Naphtha: Low boiling point naphtha | 8030-30-6          | TWA     | 400 ppm             |

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|   | Xylene  |  |   | 1330-20-7  | TWA   | 100 ppm  |  |  |
|---|---|--|---|--|---|--|--|--|
|   |   |  |   | 1330-20-7  | STEL  | 150 ppm  |  |  |
|   | N-hexane  |  |   | 110-54-3   | TWA   | 50 ppm   |  |  |
|   | Toluene   |  |   | 108-88-3   | TWA   | 50 ppm   |  |  |
|   | Cyclohexane   |  |   | 110-82-7   | TWA   | 100 ppm  |  |  |
|   | Pentane   |  |   | 109-66-0   | TWA   | 600 ppm  |  |  |
|   | Heptane [and isomers]                                     |  |   | 142-82-5   | TWA   | 400 ppm  |  |  |
|   |   | _  |   | 142-82-5   | STEL  | 500 ppm  |  |  |
|   | Ethylbenzene  |  |   | 100-41-4   | TWA   | 100 ppm  |  |  |
|   |   |  |   | 100-41-4   | STEL  | 125 ppm  |  |  |
|   | Benzene   |  |   | 71-43-2  | TWA   | 0.5 ppm  |  |  |
|   |   |  |   | 71-43-2  | STEL  | 2.5 ppm  |  |  |
| Engineering r   | ig measures Use ad<br>below of<br>spaces<br>classifie     |  | Use ade<br>below o<br>spaces.<br>classifie  | quate ventilation to keep gas and vapor concentrations of this product<br>ccupational exposure and flammability limits, particularly in confined<br>Use only intrinsically safe electrical equipment approved for use in<br>d areas. |   |  |  |  |
| Eye protectio   | tion Safety<br>splashi<br>to the v                        |  | Safety of<br>splashin<br>to the w   | lasses or goggles are recommended where there is a possibility of g or spraying. Ensure that eyewash stations and safety showers are close orkstation location.  |   |  |  |  |
| Hand protect  | protection : Gloves<br>specific                           |  | Gloves<br>specific  | constructed of r<br>ations for furthe  | nitrile or neopre<br>er information.  | ene are recommended. Consult manufacturer  |  |  |
| Skin and bod  | body protection 5 If need<br>TyCher<br>The res<br>with de |  | lf neede<br>TyChen<br>The res<br>with deg   | ed to prevent sk<br>n®, Saranex or<br>istance of spec<br>gree of exposur   | in contact, che<br>equivalent rec<br>ific material ma<br>e.   | emical protective clothing such as of DuPont<br>ommended based on degree of exposure.<br>ay vary from product to product as well as  |  |  |
| Respiratory p   | rotection   | 8  | A NIOS<br>canister<br>concent<br>irritation<br>29 CFR<br>manufa<br>NIOSH/<br>potentia<br>deficien<br>may not  | H/ MSHA-appro<br>may be permis<br>trations are or n<br>. Protection pro<br>1910.134, ANS<br>cturer for addition<br>MSHA-approve<br>I for uncontrolle<br>t atmospheres,<br>t provide adequ  | oved air-purifying<br>sible under ce<br>nay be expected<br>ovided by air-pu<br>SI Z88.2-1992,<br>onal guidance<br>ed positive-pre<br>ed release, exp<br>or any other ci<br>ate protection.  | ng respirator with organic vapor cartridges or<br>rtain circumstances where airborne<br>ed to exceed exposure limits or for odor or<br>urifying respirators is limited. Refer to OSHA<br>NIOSH Respirator Decision Logic, and the<br>on respiratory protection selection. Use a<br>ssure supplied-air respirator if there is a<br>posure levels are not known, in oxygen-<br>ircumstance where an air-purifying respirator |  |  |
| Work / Hygiene practices : Emer<br>opera<br>practi<br>eating<br>on the<br>produ<br>Prom<br>laund<br>wash<br>glove |   | Emerge<br>operation<br>practice<br>eating, of<br>on the s<br>product<br>Promptil<br>launder<br>washer<br>gloves. | ency eye wash o<br>ons presenting a<br>drinking, smokin<br>skin. Do not use<br>from exposed s<br>y remove conta<br>ing to prevent th<br>or dryer. Consi | capability shoul<br>a potential spla<br>ted and/or prol<br>ng, or using toi<br>solvents or ha<br>skin areas. W<br>uminated clothin<br>he formation of<br>der the need to   | Id be available in the near proximity to<br>ish exposure. Use good personal hygiene<br>longed skin exposure. Wash hands before<br>let facilities. Do not use as a cleaning solvent<br>arsh abrasive skin cleaners for washing this<br>aterless hand cleaners are effective.<br>Ing and launder before reuse. Use care when<br>i flammable vapors which could ignite via<br>b discard contaminated leather shoes and |  |  |  |

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| SECTION 9. PHYSICAL ANI   | ) (    | CHEMICAL PROPERTIES   |
|---------------------------|--------|---|
| Form                      | ţ      | Liquid  |
| Appearance                |        | Colorless to light yellow   |
| Odor                      | •      | Characteristic hydrocarbon-like   |
| Flash point - typical     |        | -21.7 °C (-7.1 °F)  |
| Auto Ignition temperature | 101    | 225 ℃ (437 °F)  |
| Thermal decomposition     | 2000   | Heating can release hazardous gases, No decomposition if stored and applied as directed.  |
| Lower explosive limit     | ŝ      | 1.2 % (V)   |
| Upper explosive limit     | 100    | 6.9 % (V)   |
| рН                        | ).     | Not applicable  |
| Specific gravity          | i<br>i | 0.77 (H20=1)  |
| Boiling point             |        | 26.7 - 148.9 ℃(80.1 - 300.0 °F)   |
| Vapor Pressure            | 3      | 758 - 896 hPa<br>at 20 ℃ (68 °F)  |
| Vapor Density (Air = 1)   | •      | 3.5   |
| Water solubility          |        | Negligible  |
| Viscosity, kinematic      |        | Not determined  |
| Percent Volatiles         | 101    | 100 %   |
| Work / Hygiene practices  |        | Emergency eye wash capability should be available in the near proximity to operations presenting a potential splash exposure. Use good personal hygiene practices. Avoid repeated and/or prolonged skin exposure. Wash hands before eating, drinking, smoking, or using toilet facilities. Do not use as a cleaning solvent on the skin. Do not use solvents or harsh abrasive skin cleaners for washing this product from exposed skin areas. Waterless hand cleaners are effective. Promptly remove contaminated clothing and launder before reuse. Use care when laundering to prevent the formation of flammable vapors which could ignite via washer or dryer. Consider the need to discard contaminated leather shoes and gloves. |

| SECTION 10. STABILITY AND REACTIVITY |    |   |  |  |  |
|--------------------------------------|----|---|--|--|--|
| Conditions to avoid                  | ġ. | Avoid high temperatures, open flames, sparks, welding, smoking and other ignition sources.  |  |  |  |
| Materials to avoid                   | :  | Strong acids and strong bases. Oxidizing agents.  |  |  |  |
| Hazardous decomposition<br>products  | :  | Carbon monoxide, carbon dioxide and noncombusted hydrocarbons (smoke).  |  |  |  |
| Thermal decomposition                | ÷  | Heating can release hazardous gases. No decomposition if stored and applied as directed.  |  |  |  |
| Hazardous reactions                  | :  | Vapors may form explosive mixture with air. Hazardous polymerization does not occur. Note: Stable under recommended storage conditions. |  |  |  |

### SECTION 11. TOXICOLOGICAL INFORMATION

| Carcinogenicity     |   |
|---------------------|---|
| NTP                 | Benzene (CAS-No.: 71-43-2)  |
| IARC                | Ethylbenzene (CAS-No.: 100-41-4)<br>Benzene (CAS-No.: 71-43-2)  |
| OSHA                | : Benzene (CAS-No.: 71-43-2)  |
| CA Prop 65          | <ul> <li>WARNING! This product contains a chemical known to the State of California to cause cancer.</li> <li>Ethylbenzene (CAS-No.: 100-41-4)</li> <li>Benzene (CAS-No.: 71-43-2)</li> </ul>   |
|                     | <ul> <li>WARNING! This product contains a chemical known to the State of California to<br/>cause birth defects or other reproductive harm.</li> <li>Toluene (CAS-No.: 108-88-3)</li> <li>Benzene (CAS-No.: 71-43-2)</li> </ul>  |
| Skin irritation     | <ul> <li>Repeated or prolonged contact with the preparation may cause removal of natural<br/>fat from the skin resulting in desiccation of the skin.</li> <li>The product may be absorbed through the skin.</li> </ul>  |
| Eye irritation      | The liquid splashed in the eyes may cause irritation and reversible damage.<br>Strong lachrymation can make it difficult to escape  |
| Further information | <ul> <li>This product contains benzene. Human health studies indicate that prolonged and/or repeated overexposure to benzene may cause damage to the blood-forming system (particularly bone marrow), and serious blood disorders such as aplastic anemia and leukemia. Benzene is listed as a human carcinogen by the NTP, IARC, OSHA and ACGIH. Acute toxicity of benzene results primarily from depression of the central nervous system (CNS). Inhalation of concentrations over 50 ppm can produce headache, lassitude, weariness, dizziness, drowsiness, or excitation. Exposure to very high levels can result in unconsciousness and death. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.</li> <li>Ingestion may cause gastrointestinal disturbances, including irritation, nausea, vomiting and diarrhea, and central nervous (brain) effects similar to alcohol intoxication. In severe cases, tremors, convulsions, loss of consciousness, coma, respiratory arrest and death may occur.</li> </ul> |
| Component           |   |

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| N-hexane    | 110-54-3  | <u>Acute oral toxicity:</u> LD50 rat<br>Dose: 25,000 mg/kg   |
|-------------|-----------|--|
|             |           | Acute dermal toxicity: LD50 rabbit<br>Dose: 2,001 mg/kg  |
|             |           | Acute Inhalation toxicity: LC50 rat<br>Dose: 171.6 mg/l<br>Exposure time: 4 h  |
|             |           | <u>Skin irrilation.</u> Classification: Irritating to skin.<br>Result: Skin irritation   |
|             |           | <u>Eve irritation:</u> Classification: Irritating to eyes.<br>Result: Mild eye irritation  |
|             |           | Teralogenicity: N11.00418960   |
| Xylene      | 1330-20-7 | Acute oral toxicity: LD50 rat<br>Dose: 2,840 mg/kg   |
|             |           | <u>Acute dermal toxicity:</u> LD50 rabbit<br>Dose: ca. 4,500 mg/kg   |
|             |           | Acute inhalation toxicity: LC50 rat<br>Dose: 6,350 mg/l<br>Exposure time: 4 h  |
|             |           | Skin irritation: Classification: Irritating to skin.<br>Result: Mild skin irritation<br>Repeated or prolonged exposure may cause skin irritation and dermatitis, due to<br>degreasing properties of the product. |
|             |           | <u>Eve irritation:</u> Classification: Irritating to eyes.<br>Result: Mild eye irritation  |
| Toluene     | 108-88-3  | <u>Acute oral toxicity:</u> LD50 rat<br>Dose: 636 mg/kg  |
|             |           | Acute dermal toxicity_LD50 rabbit<br>Dose: 12,124 mg/kg  |
|             |           | <u>Acute inhalation loxicity</u> LC50 rat<br>Dose: 49 mg/l<br>Exposure time: 4 h   |
|             |           | Skin irritation: Classification: Irritating to skin,<br>Result: Mild skin irritation<br>Prolonged skin contact may defat the skin and produce dermatitis.  |
|             |           | Eve irritation: Classification: Irritating to cycs.<br>Result: Mild eye irritation   |
| Cyclohexane | 110-82-7  | Acute dermal toxicity_LD50 rabbit<br>Dose: 2,001 mg/kg   |
|             |           | <u>Acute inhalation toxicity:</u> LC50 rat<br>Dose: 14 mg/l<br>Exposure time: 4 h  |
|             |           | Skin irritation. Classification: Irritating to skin.<br>Result: Skin irritation  |
|             |           | Eve irritation. Classification: Irritating to eyes.<br>Result: Mild eye irritation   |
| Pentane     | 109-66-0  | Acute oral toxicity_LD50 rat<br>Dose: 2,001 mg/kg  |
|             |           | Acute inhalation toxicity: LC50 rat  |

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|                        |          | Dose: 364 mg/l<br>Exposure time: 4 h   |
|------------------------|----------|--|
|                        |          | Skin irritation: Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.   |
|                        |          | Eve irritation: Classification: Irritating to eyes.<br>Result: Mild eye irritation   |
| Heptane [and isomers]  | 142-82-5 | Acute oral toxicity: LD50 rat<br>Dose: 15,001 mg/kg  |
|                        |          | <u>Acute Inhalation toxicity: L</u> C50 rat<br>Dose: 103 g/m3<br>Exposure time: 4 h  |
|                        |          | <u>Skin irritation:</u> Classification: Irritating to skin.<br>Result: Skin irritation<br>Repeated or prolonged exposure may cause skin irritation and dermatitis, due to<br>degreasing properties of the product. |
|                        |          | Eve irritation_Classification: Irritating to eyes.<br>Result: Mild eye irritation  |
| Ethylbenzene           | 100-41-4 | <u>Acute oral toxicity: L</u> D50 rat<br>Dose: 3,500 mg/kg   |
|                        |          | <u>Acute dermal toxicity:</u> LD50 rabbit<br>Dose: 15,500 mg/kg  |
|                        |          | <u>Acute Inhalation toxicity:</u> LC50 rat<br>Dose: 18 mg/l<br>Exposure time: 4 h  |
|                        |          | Skin irritation: Classification: Irritating to skin.<br>Result: Mild skin irritation   |
|                        |          | Eve irritation. Classification: Irritating to eyes.<br>Result: Risk of serious damage to eyes.   |
| Benzene                | 71-43-2  | <u>Acute oral toxicity:</u> LD50 rat<br>Dose: 930 mg/kg  |
|                        |          | <u>Acute inhalation texicity:</u> LC50 rat<br>Dose: 44 mg/l<br>Exposure time: 4 h  |
|                        |          | Skin irritation: Classification: Irritating to skin.<br>Result: Mild skin irritation<br>Repeated or prolonged exposure may cause skin irritation and dermatitis, due to<br>degreasing properties of the product.   |
|                        |          | Eve Irritation: Classification: Irritating to eyes.<br>Result: Risk of serious damage to eyes.   |
| 1,2,4-Trimethylbenzene | 95-63-6  | Acute Inhalation toxicity: LC50 rat<br>Dose: 18 mg/l<br>Exposure time: 4 h   |
|                        |          | <u>Skin imilation.</u> Classification: Irritating to skin.<br>Result: Skin irritation  |
|                        |          | Eve irritation. Classification: Irritating to eyes.<br>Result: Eye irritation  |
|                        |          |  |

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|----|--------|--|
| Ju | ilui i |  |

Acute oral toxicity: LD50 rat Dose: 5,001 mg/kg

> Acute dermal toxicity: LD50 rabbit Dose: 2,001 mg/kg

Acute Inhalation toxicity: LC50 rat Dose: 9.24 mg/l Exposure time: 4 h

<u>Eve irritation:</u> Classification: Irritating to eyes. Result: Mild eye irritation

#### **SECTION 12. ECOLOGICAL INFORMATION**

| Additional ecological information | Keep out of sewers, drainage areas, and waterways. Report spills and releases, as applicable, under Federal and State regulations. |  |
|-----------------------------------|--|--|
| Component:                        |  |  |
| N-hexane                          | 110-54-3   | Toxicity to fish:<br>LC50<br>Species: Pimephales promelas (fathead minnow)<br>Dose: 2.5 mg/l<br>Exposure time: 96 h<br>Acute and prolonged toxicity for aquatic invertebrates:<br>EC50<br>Species: Daphnia magna (Water flea)<br>Dose: 2.1 mg/l<br>Exposure time: 48 h   |
| Toluene                           | 108-88-3   | Toxicity to fish:         LC50         Species: Carassius auratus (goldfish)         Dose: 13 mg/l         Exposure time: 96 h         Acute and prolonged toxicity for aquatic invertebrates:         EC50         Species: Daphnia magna (Water flea)         Dose: 11.5 mg/l         Exposure time: 48 h         Toxicity to algae:         IC50         Species: Selenastrum capricornutum (green algae)         Dose: 12 mg/l         Exposure time: 72 h |
| Cyclohexane                       | 110-82-7   | <u>Acute and prolonged toxicity for aquatic invertebrates:</u><br>EC50<br>Species: Daphnia magna (Water flea)<br>Dose: 3.78 mg/l<br>Exposure time: 48 h  |
| Pentane                           | 109-66-0   | Acute and prolonged toxicity for aquatic invertebrates:<br>EC50<br>Species: Daphnia magna (Water flea)<br>Dose: 9.74 mg/l<br>Exposure time: 48 h   |
| Heptane [and isomers]             | 142-82-5   | <u>Toxicity to lish.</u><br>LC50<br>Species: Carassius auratus (goldfish)<br>Dose: 4 mg/I<br>Exposure time: 24 h   |

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|                        |           | Acute and prolonged toxicity for aquatic invertebrates:<br>EC50<br>Species: Daphnia magna (Water flea)<br>Dose: 1.5 mg/l<br>Exposure time: 48 h     |
|------------------------|-----------|---|
| 1,2,4-Trimethylbenzene | 95-63-6   | <u>Toxicity to fish:</u><br>LC50<br>Species: Pimephales promelas (fathead minnow)<br>Dose: 7.72 mg/l<br>Exposure time: 96 h                         |
|                        |           | Acute and prolonged toxicity for aquatic invertebrates:<br>EC50<br>Species: Daphnia<br>Dose: 3.6 mg/l<br>Exposure time: 48 h                        |
| Sulfur                 | 7704-34-9 | Acute and prolonged toxicity for aquatic invertebrates:<br>EC0<br>Species: Daphnia magna (Water flea)<br>Dose: > 10,000 mg/l<br>Exposure time: 24 h |

#### **SECTION 13. DISPOSAL CONSIDERATIONS**

Disposal

Dispose of container and unused contents in accordance with federal, state and local requirements.

# CFR Proper shipping name PETROLEUM DI

| Proper<br>UN-No<br>Class<br>Packir               | r shipping name :<br>b. :<br>ng group :                                    | PETROLEUM DISTILLATES, N.O.S.<br>1268<br>3<br>II   |
|--|--|--|
| Hazar  | d inducer  | : (Naphtha; Low boiling point naphtha)   |
| TDG  |  |  |
| Proper<br>UN-No<br>Class<br>Packir<br>Hazard     | r shipping name<br>o.<br>ng group<br>d inducer                             | PETROLEUM DISTILLATES, N.O.S.<br>UN1268<br>3<br>II<br>(Naphtha; Low boiling point naphtha) |
| IATA Cargo Transpo                               | ort  |  |
| UN UN<br>Descri                                  | I-No. :<br>ption of the goods  | UN1268<br>PETROLEUM DISTILLATES, N.O.S<br>(Naphtha; Low boiling point naphtha)             |
| Class  |  | 3  |
| Packag<br>ICAO-I<br>Packin<br>aircraft<br>Packin | ging group<br>_abels<br>g instruction (cargo<br>;)<br>g instruction (cargo | II<br>3<br>364<br>Y341   |
| aircraft   | <u>(</u> )   |  |

#### IATA Passenger Transport

|           | UN UN-No.                                   | 3          | UN1268   |
|-----------|---|------------|--|
|           | Description of the goods                    | 8          | PETROLEUM DISTILLATES, N.O.S. (Naphtha; Low boiling point naphtha) |
|           | Class                                       |            | 3  |
|           | Packaging group                             |            | II   |
|           | ICAO-Labels                                 | 3          | 3  |
|           | Packing instruction<br>(passenger aircraft) | 3          | 353  |
|           | Packing instruction<br>(passenger aircraft) | 1          | Y341   |
| IMDG-Code |   |            |  |
|           | UN-No.                                      | 2          | UN 1268  |
|           | Description of the goods                    | (9)<br>(1) | PETROLEUM DISTILLATES, N.O.S. (Naphtha; Low boiling point naphtha) |
|           | Class                                       | :          | 3  |
|           | Packaging group                             | ž.         | II   |
|           | IMDG-Labels                                 | 8          | 3  |
|           | EmS Number                                  | ł          | F-E S-E  |
|           | Marine pollutant                            | ŝ.         | No   |

#### **SECTION 15. REGULATORY INFORMATION**

| OSHA Hazards           | Flammable liquid<br>Moderate skin irritant<br>Severe eye irritant<br>Carcinogen<br>Teratogen  |
|------------------------|---|
| TSCA Status            | On TSCA Inventory   |
| DSL Status             | : All components of this product are on the Canadian DSL list.  |
| SARA 311/312 Hazards   | : Fire Hazard<br>Acute Health Hazard<br>Chronic Health Hazard   |
| SARA III               | US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic<br>Chemicals (40 CFR 372.65) - Supplier Notification Required |
| <u>Components</u>      | CAS-No.   |
| 1,2,4-Trimethylbenzene | 95-63-6   |
| Benzene                | 71-43-2   |
| Ethylbenzene           | 100-41-4  |
| Cyclohexane            | 110-82-7  |
| Toluene                | 108-88-3  |
| N-hexane               | 110-54-3  |
| Xylene                 | 1330-20-7   |
| PENN RTK               | US. Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)   |

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| <u>Components</u>     |  | CAS-No.   |
|-----------------------|--|---|
| Heptane [and isomers  | 6]   | 142-82-5  |
| Ethylbenzene          |  | 100-41-4  |
| Benzene               |  | 71-43-2   |
| 1,2,4-Trimethylbenzer | ne   | 95-63-6   |
| Sulfur                |  | 7704-34-9   |
| Pentane               |  | 109-66-0  |
| Naphtha; Low boiling  | point naphtha  | 8030-30-6   |
| Xylene                |  | 1330-20-7   |
| N-hexane              |  | 110-54-3  |
| Toluene               |  | 108-88-3  |
| Cyclohexane           |  | 110-82-7  |
| MASS RTK              | US. Massachusetts Commonwealth's Right-to-<br>Section 670.000) | Know Law (Appendix A to 105 Code of Massachusetts Regulations |
| <u>Components</u>     |  | CAS-No.   |
| Heptane [and isomers  | 5]   | 142-82-5  |
| Ethylbenzene          |  | 100-41-4  |
| Benzene               |  | 71-43-2   |
| 1,2,4-Trimethylbenzen | le   | 95-63-6   |
| Sulfur                |  | 7704-34-9   |
| Naphtha; Low boiling  | point naphtha  | 8030-30-6   |
| Xylene                |  | 1330-20-7   |
| N-hexane              |  | 110-54-3  |
| Toluene               |  | 108-88-3  |
| Cyclohexane           |  | 110-82-7  |
| NJ RTK                | US. New Jersey Worker and Community Right                      | -to-Know Act (New Jersey Statute Annotated Section 34:5A-5)   |
| <u>Components</u>     |  | CAS-No.   |
| Heptane [and isomers  | ]  | 142-82-5  |
| Ethylbenzene          |  | 100-41-4  |
| Benzene               |  | 71-43-2   |
| 1,2,4-Trimethylbenzen | e  | 95-63-6   |
| Sulfur                |  | 7704-34-9   |
| Naphtha; Low boiling  | point naphtha  | 8030-30-6   |
| Xylene                |  | 1330-20-7   |
| N-hexane              |  | 110-54-3  |
|                       |  |   |

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| Toluene             |   | 108-88-3  |
|---------------------|---|---|
| Cyclohexane         |   | 110-82-7  |
|                     |   |   |
|                     |   | CERCLA SECTION 103 and SARA SECTION 304 (RELEASE<br>TO THE ENVIROMENT)<br>The CERCLA definition of hazardous substances contains a<br>"petroleum exclusion" clause which exempts crude oil. Fractions of<br>crude oil, and products (both finished and intermediate) from the<br>crude oil refining process and any indigenous components of such<br>from the CERCLA Section 103 reporting requirements. However,<br>other federal reporting requirements, including SARA Section 304,<br>as well as the Clean Water Act may still apply. |
| California Prop. 65 | WARNING! This produce cause cancer.               | ct contains a chemical known to the State of California to  |
|                     | Ethylbenzene                                      | 100-41-4  |
|                     | Benzene   | 71-43-2   |
|                     | WARNING! This produce<br>cause birth defects or o | ct contains a chemical known to the State of California to other reproductive harm.   |
|                     | Toluene   | 108-88-3  |
|                     | Benzene   | 71-43-2   |

#### SECTION 16. OTHER INFORMATION

#### Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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| Revision Date           | 1 | 01/27/2011  |

79, 80, 81, 83, 165, 264, 318, 1017, 1018, 1019, 1020, 1021, 1027, 1032, 1055, 1136, 1716