# SAFETY DATA SHEET

## 1. Identification

**Product identifier** **Power Flush Injector Fluid**

**Other means of identification**

**FIR No.** 158039

**Recommended use** Fuel injector cleaner

**Recommended restrictions** None known.

**Manufacturer/Importer/Supplier/Distributor information**

**Company Name** Ford Motor Company

**Address** Attention: SDS Information, P.O. Box 1899
Dearborn, Michigan 48121
USA

**Telephone** 1-800-392-3673

**SDS Information** 1-800-448-2063 (USA and Canada)
fordsds.com

**Emergency telephone numbers**

Poison Control Center: USA and Canada: 1-800-959-3673
INFOTRAC (Transportation): USA and Canada 1-800-535-5053

## 2. Hazard(s) identification

| | | |
|---|---|---|
| **Physical hazards** | Flammable liquids | Category 3 |
| **Health hazards** | Acute toxicity, oral | Category 4 |
| | Skin corrosion/irritation | Category 2 |
| | Serious eye damage/eye irritation | Category 2A |
| | Carcinogenicity | Category 2 |
| **Environmental hazards** | Hazardous to the aquatic environment, acute hazard | Category 2 |
| | Hazardous to the aquatic environment, long-term hazard | Category 2 |

**OSHA defined hazards** Not classified.

**Label elements**

**Signal word** Warning

**Hazard statement** Flammable liquid and vapor. Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. Suspected of causing cancer. Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

**Precautionary statement**

**Prevention** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

| | |
|---|---|
| **Response** | If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. If in eyes: 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. If exposed or concerned: Get medical advice/attention. Take off contaminated clothing and wash before reuse. In case of fire: Use appropriate media to extinguish. Collect spillage. |
| **Storage** | Keep cool. Store locked up. Store in a well-ventilated place. |
| **Disposal** | Dispose of contents/container in accordance with local/regional/national/international regulations. |
| **Hazard(s) not otherwise classified (HNOC)** | HARMFUL OR FATAL IF SWALLOWED.<br>Aspiration may cause pulmonary edema and pneumonitis. May cause irritation of respiratory tract. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. May be harmful if absorbed through skin. |
| **Supplemental information** | None. |

## 3. Composition/information on ingredients

**Mixtures**

| Chemical name | Common name and synonyms | CAS number | % |
|---|---|---|---|
| tert-Butylbenzene | | 98-06-6 | 7 - < 12 |
| TRIMETHYLBENZENE | | 25551-13-7 | 5 - < 13 |
| Solvent naphtha (petroleum), light arom. | | 64742-95-6 | 4 - < 16 |
| 1,2,4-TRIMETHYLBENZENE | | 95-63-6 | 2 - < 7 |
| 1,4-Diethylbenzene | | 105-05-5 | 1 - < 4 |
| CUMENE | | 98-82-8 | 0.2 - < 0.8 |
| 2-BUTOXYETHANOL | | 111-76-2 | 13 - 16 |
| Solvent naphtha (petroleum), heavy arom. | | 64742-94-5 | < 10 |
| 4-METHYLPENTAN-2-OL | | 108-11-2 | 3 - 5 |
| Ammonia, aqueous solution | | 1336-21-6 | 1 - 2 |
| NAPHTHALENE | | 91-20-3 | 0.6 - 2 |
| 1,2,3-TRIMETHYLBENZENE | | 526-73-8 | 0.4 - 2 |
| SULPHURIC ACID | | 7664-93-9 | ≤ 0.1 |

Specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

## 4. First-aid measures

| | |
|---|---|
| **Inhalation** | Move to fresh air. Call a physician if symptoms develop or persist. |
| **Skin contact** | Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse. |
| **Eye contact** | Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. |
| **Ingestion** | Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. |
| **Most important symptoms/effects, acute and delayed** | Headache. Dizziness. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. |
| **Indication of immediate medical attention and special treatment needed** | Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed. |
| **General information** | Take off all contaminated clothing immediately. IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse. |

## 5. Fire-fighting measures

| | |
|---|---|
| **Suitable extinguishing media** | Water fog. Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO2). |
| **Unsuitable extinguishing media** | Do not use water jet as an extinguisher, as this will spread the fire. |

| | |
|---|---|
| **Specific hazards arising from the chemical** | Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed. Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. |
| **Special protective equipment and precautions for firefighters** | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
| **Fire fighting equipment/instructions** | In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. |
| **Specific methods** | Use standard firefighting procedures and consider the hazards of other involved materials. |
| **General fire hazards** | Flammable liquid and vapor. |

## 6. Accidental release measures

| | |
|---|---|
| **Personal precautions, protective equipment and emergency procedures** | Avoid contact with eyes, skin, and clothing. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Keep people away from and upwind of spill/leak. Keep unnecessary personnel away. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Local authorities should be advised if significant spillages cannot be contained. Wear appropriate protective equipment and clothing during clean-up. For personal protection, see section 8 of the SDS. |
| **Methods and materials for containment and cleaning up** | Use water spray to reduce vapors or divert vapor cloud drift. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools. The product is immiscible with water and will spread on the water surface. Prevent product from entering drains.<br><br>Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.<br><br>Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.<br><br>Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS. |
| **Environmental precautions** | Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. |

## 7. Handling and storage

| | |
|---|---|
| **Precautions for safe handling** | Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Take precautionary measures against static discharges. Should be handled in closed systems, if possible. Explosion-proof general and local exhaust ventilation. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Avoid release to the environment. Observe good industrial hygiene practices. Wash hands thoroughly after handling. Wear appropriate personal protective equipment. For personal protection, see Section 8 of the SDS. |
| **Conditions for safe storage, including any incompatibilities** | Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS). |

## 8. Exposure controls/personal protection

**Occupational exposure limits**

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

| Components | Type | Value |
|---|---|---|
| 2-BUTOXYETHANOL (CAS 111-76-2) | PEL | 240 mg/m3 |
| | | 50 ppm |

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

| Components | Type | Value |
|---|---|---|
| 4-METHYLPENTAN-2-OL (CAS 108-11-2) | PEL | 100 mg/m3 |
| | | 25 ppm |
| Ammonia, aqueous solution (CAS 1336-21-6) | PEL | 35 mg/m3 |
| | | 50 ppm |
| CUMENE (CAS 98-82-8) | PEL | 245 mg/m3 |
| | | 50 ppm |
| NAPHTHALENE (CAS 91-20-3) | PEL | 50 mg/m3 |
| | | 10 ppm |
| Solvent naphtha (petroleum), heavy arom. (CAS 64742-94-5) | PEL | 400 mg/m3 |
| | | 100 ppm |
| Solvent naphtha (petroleum), light arom. (CAS 64742-95-6) | PEL | 400 mg/m3 |
| | | 100 ppm |
| SULPHURIC ACID (CAS 7664-93-9) | PEL | 1 mg/m3 |

**US. ACGIH Threshold Limit Values**

| Components | Type | Value | Form |
|---|---|---|---|
| 1,2,3-TRIMETHYLBENZENE (CAS 526-73-8) | TWA | 25 ppm | |
| 1,2,4-TRIMETHYLBENZENE (CAS 95-63-6) | TWA | 25 ppm | |
| 2-BUTOXYETHANOL (CAS 111-76-2) | TWA | 20 ppm | |
| 4-METHYLPENTAN-2-OL (CAS 108-11-2) | STEL | 40 ppm | |
| | TWA | 25 ppm | |
| Ammonia, aqueous solution (CAS 1336-21-6) | STEL | 35 ppm | |
| | TWA | 25 ppm | |
| CUMENE (CAS 98-82-8) | TWA | 50 ppm | |
| NAPHTHALENE (CAS 91-20-3) | TWA | 10 ppm | |
| Solvent naphtha (petroleum), heavy arom. (CAS 64742-94-5) | TWA | 200 mg/m3 | Non-aerosol. |
| SULPHURIC ACID (CAS 7664-93-9) | TWA | 0.2 mg/m3 | Thoracic fraction. |
| TRIMETHYLBENZENE (CAS 25551-13-7) | TWA | 25 ppm | |

**US. NIOSH: Pocket Guide to Chemical Hazards**

| Components | Type | Value |
|---|---|---|
| 1,2,3-TRIMETHYLBENZENE (CAS 526-73-8) | TWA | 125 mg/m3 |
| | | 25 ppm |
| 1,2,4-TRIMETHYLBENZENE (CAS 95-63-6) | TWA | 125 mg/m3 |
| | | 25 ppm |

**US. NIOSH: Pocket Guide to Chemical Hazards**

| Components | Type | Value |
|---|---|---|
| 2-BUTOXYETHANOL (CAS 111-76-2) | TWA | 24 mg/m3 |
| | | 5 ppm |
| 4-METHYLPENTAN-2-OL (CAS 108-11-2) | STEL | 165 mg/m3 |
| | | 40 ppm |
| | TWA | 100 mg/m3 |
| | | 25 ppm |
| Ammonia, aqueous solution (CAS 1336-21-6) | STEL | 27 mg/m3 |
| | | 35 ppm |
| | TWA | 18 mg/m3 |
| | | 25 ppm |
| CUMENE (CAS 98-82-8) | TWA | 245 mg/m3 |
| | | 50 ppm |
| NAPHTHALENE (CAS 91-20-3) | STEL | 75 mg/m3 |
| | | 15 ppm |
| | TWA | 50 mg/m3 |
| | | 10 ppm |
| Solvent naphtha (petroleum), heavy arom. (CAS 64742-94-5) | TWA | 400 mg/m3 |
| | | 100 ppm |
| Solvent naphtha (petroleum), light arom. (CAS 64742-95-6) | TWA | 400 mg/m3 |
| | | 100 ppm |
| SULPHURIC ACID (CAS 7664-93-9) | TWA | 1 mg/m3 |
| TRIMETHYLBENZENE (CAS 25551-13-7) | TWA | 125 mg/m3 |
| | | 25 ppm |

**US. Workplace Environmental Exposure Level (WEEL) Guides**

| Components | Type | Value |
|---|---|---|
| 1,4-Diethylbenzene (CAS 105-05-5) | TWA | 5 ppm |

**Biological limit values**

**ACGIH Biological Exposure Indices**

| Components | Value | Determinant | Specimen | Sampling Time |
|---|---|---|---|---|
| 2-BUTOXYETHANOL (CAS 111-76-2) | 200 mg/g | Butoxyacetic acid (BAA), with hydrolysis | Creatinine in urine | * |

* - For sampling details, please see the source document.

**Exposure guidelines**

**US - California OELs: Skin designation**

| | |
|---|---|
| 2-BUTOXYETHANOL (CAS 111-76-2) | Can be absorbed through the skin. |
| 4-METHYLPENTAN-2-OL (CAS 108-11-2) | Can be absorbed through the skin. |
| CUMENE (CAS 98-82-8) | Can be absorbed through the skin. |
| NAPHTHALENE (CAS 91-20-3) | Can be absorbed through the skin. |

**US - Minnesota Haz Subs: Skin designation applies**

| | |
|---|---|
| 2-BUTOXYETHANOL (CAS 111-76-2) | Skin designation applies. |
| 4-METHYLPENTAN-2-OL (CAS 108-11-2) | Skin designation applies. |

| | |
|---|---|
| CUMENE (CAS 98-82-8) | Skin designation applies. |

**US - Tennessee OELs: Skin designation**

| | |
|---|---|
| 2-BUTOXYETHANOL (CAS 111-76-2) | Can be absorbed through the skin. |
| 4-METHYLPENTAN-2-OL (CAS 108-11-2) | Can be absorbed through the skin. |
| CUMENE (CAS 98-82-8) | Can be absorbed through the skin. |

**US ACGIH Threshold Limit Values: Skin designation**

| | |
|---|---|
| 4-METHYLPENTAN-2-OL (CAS 108-11-2) | Can be absorbed through the skin. |
| NAPHTHALENE (CAS 91-20-3) | Can be absorbed through the skin. |
| Solvent naphtha (petroleum), heavy arom. (CAS 64742-94-5) | Can be absorbed through the skin. |

**US NIOSH Pocket Guide to Chemical Hazards: Skin designation**

| | |
|---|---|
| 2-BUTOXYETHANOL (CAS 111-76-2) | Can be absorbed through the skin. |
| 4-METHYLPENTAN-2-OL (CAS 108-11-2) | Can be absorbed through the skin. |
| CUMENE (CAS 98-82-8) | Can be absorbed through the skin. |

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

| | |
|---|---|
| 2-BUTOXYETHANOL (CAS 111-76-2) | Can be absorbed through the skin. |
| 4-METHYLPENTAN-2-OL (CAS 108-11-2) | Can be absorbed through the skin. |
| CUMENE (CAS 98-82-8) | Can be absorbed through the skin. |

**Appropriate engineering controls** Provide eyewash station and safety shower. Use adequate ventilation to control airborne concentrations below the exposure limits/guidelines. If user operations generate a vapor, dust and/or mist, use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels below the recommended exposure limits/guidelines.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin protection**

**Hand protection** Suitable chemical protective gloves should be worn when the potential exists for skin exposure. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Nitrile or butyl rubber gloves are recommended.

**Other** Wear appropriate chemical resistant clothing if applicable.

**Respiratory protection** If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, an approved respirator must be worn. Respirator selection, use and maintenance should be in accordance with the requirements of OSHA Respiratory Protection Standard 29 CFR 1910.134 and/or Canadian Standard CSA Z94.4.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations** Observe any medical surveillance requirements. When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

**Appearance**

**Physical state** Liquid.

**Form** Liquid.

**Color** Yellow.

**Odor** Characteristic.

**Odor threshold** Not available.

**pH** Not available.

**Melting point/freezing point** Not available.

**Initial boiling point and boiling range** Not available.

**Flash point** 115.0 °F (46.1 °C) ASTM D93

**Evaporation rate** Not available.

**Flammability (solid, gas)** Not applicable.

**Upper/lower flammability or explosive limits**

**Flammability limit - lower (%)** Not available.

| | |
|---|---|
| **Flammability limit - upper (%)** | Not available. |
| **Explosive limit - lower (%)** | Not available. |
| **Explosive limit - upper (%)** | Not available. |
| **Vapor pressure** | Not available. |
| **Vapor density** | Not available. |
| **Relative density** | 0.91 |
| **Relative density temperature** | 77 °F (25 °C) |
| **Solubility(ies)** | |
| **Solubility (water)** | INSOLUBLE |
| **Partition coefficient (n-octanol/water)** | Not available. |
| **Auto-ignition temperature** | Not available. |
| **Decomposition temperature** | Not available. |
| **Viscosity** | Not available. |
| **Other information** | |
| **VOC** | 61.21 % CAM310 |

## 10. Stability and reactivity

| | |
|---|---|
| **Reactivity** | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| **Chemical stability** | Material is stable under normal conditions. |
| **Possibility of hazardous reactions** | Hazardous polymerization does not occur. |
| **Conditions to avoid** | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials. |
| **Incompatible materials** | Strong oxidizing agents. |
| **Hazardous decomposition products** | Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. |

## 11. Toxicological information

**Information on likely routes of exposure**

| | |
|---|---|
| **Inhalation** | Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. May cause irritation to the respiratory system. Prolonged inhalation may be harmful. |
| **Skin contact** | Causes skin irritation.<br><br>2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans. |
| **Eye contact** | Causes serious eye irritation. |
| **Ingestion** | May be fatal if swallowed and enters airways. HARMFUL OR FATAL IF SWALLOWED. |
| **Symptoms related to the physical, chemical and toxicological characteristics** | Headache. Dizziness. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. |

**Information on toxicological effects**

**Acute toxicity**

| Components | Species | Calculated/Test Results |
|---|---|---|
| 1,2,4-TRIMETHYLBENZENE (CAS 95-63-6) | | |
| **Acute** | | |
| **Dermal** | | |
| LD50 | Rabbit | > 3160 mg/kg |
| **Inhalation** | | |
| LC50 | Rat | > 2000 ppm, 48 Hours |
| **Oral** | | |
| LD50 | Rat | 6 g/kg |

| Components | Species | Calculated/Test Results |
|---|---|---|
| 2-BUTOXYETHANOL (CAS 111-76-2) | | |
| **Acute** | | |
| **Dermal** | | |
| LD50 | Rabbit | 400 mg/kg |
| **Inhalation** | | |
| LC50 | Mouse | 700 ppm, 7 Hours |
| | Rat | 486 ppm, 4 Hours |
| | | 450 ppm, 4 Hours |
| **Oral** | | |
| LD50 | Guinea pig | 1.2 g/kg |
| | Mouse | 1519 mg/kg |
| | | 1.2 g/kg |
| | Rabbit | 0.32 g/kg |
| | Rat | 560 mg/kg |
| | | 1.48 g/kg |
| **Other** | | |
| LD50 | Mouse | 1130 mg/kg |
| | Rabbit | 280 mg/kg |
| | Rat | 550 mg/kg |
| | | 340 mg/kg |
| 4-METHYLPENTAN-2-OL (CAS 108-11-2) | | |
| **Acute** | | |
| **Dermal** | | |
| LD50 | Rabbit | 3.56 ml/kg |
| **Oral** | | |
| LD50 | Rat | 2.6 g/kg |
| Ammonia, aqueous solution (CAS 1336-21-6) | | |
| **Acute** | | |
| **Oral** | | |
| LD50 | Rat | 350 mg/kg |
| CUMENE (CAS 98-82-8) | | |
| **Acute** | | |
| **Inhalation** | | |
| LC50 | Mouse | 2000 ppm, 7 Hours |
| | | 24.7 mg/l, 2 Hours |
| | Rat | 8000 ppm, 4 Hours |
| **Oral** | | |
| LD50 | Rat | 1400 mg/kg |
| | | 2.91 g/kg |
| NAPHTHALENE (CAS 91-20-3) | | |
| **Acute** | | |
| **Dermal** | | |
| LD50 | Rabbit | > 2 g/kg |
| | Rat | > 20 g/kg |
| **Oral** | | |
| LD50 | Guinea pig | 1200 mg/kg |
| | Rat | 2400 mg/kg |
| | | 2200 mg/kg |
| | | 490 mg/kg |

| Components | Species | Calculated/Test Results |
|---|---|---|
| | | 2.6 g/kg |
| **Other** | | |
| LD50 | Mouse | 969 mg/kg |
| | | 710 mg/kg |
| | | 533 mg/kg |
| | | 150 mg/kg |
| | | 100 mg/kg |
| Solvent naphtha (petroleum), heavy arom. (CAS 64742-94-5) | | |
| **Acute** | | |
| **Inhalation** | | |
| LC50 | Rat | 73680 mg/l, 4 Hours |
| | | 61 mg/l, 4 Hours |
| **Oral** | | |
| LD50 | Rat | > 25 ml/kg |
| **Other** | | |
| LD50 | Rabbit | > 5 mg/kg, 4 Hours |
| Solvent naphtha (petroleum), light arom. (CAS 64742-95-6) | | |
| **Acute** | | |
| **Inhalation** | | |
| LC50 | Rat | 73680 mg/l, 4 Hours |
| | | 61 mg/l, 4 Hours |
| **Oral** | | |
| LD50 | Rat | > 25 ml/kg |
| **Other** | | |
| LD50 | Rabbit | > 5 mg/kg, 4 Hours |
| SULPHURIC ACID (CAS 7664-93-9) | | |
| **Acute** | | |
| **Inhalation** | | |
| LC50 | Guinea pig | 0.03 mg/l, 8 Hours |
| | | 0.018 mg/l, 8 Hours |
| | Rat | 347 mg/l, 1 Hours |
| **Oral** | | |
| LD50 | Rat | 2140 mg/kg |
| TRIMETHYLBENZENE (CAS 25551-13-7) | | |
| **Acute** | | |
| **Oral** | | |
| LD50 | Rat | 8970 mg/kg |

**Skin corrosion/irritation** Causes skin irritation.

**Serious eye damage/eye irritation** Causes serious eye irritation.

**Respiratory or skin sensitization**

**Respiratory sensitization** Not a respiratory sensitizer.

**Skin sensitization** This product is not expected to cause skin sensitization.

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** Suspected of causing cancer.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

| | |
|---|---|
| CUMENE (CAS 98-82-8) | 2B Possibly carcinogenic to humans. |
| NAPHTHALENE (CAS 91-20-3) | 2B Possibly carcinogenic to humans. |
| SULPHURIC ACID (CAS 7664-93-9) | 1 Carcinogenic to humans. |

**US. National Toxicology Program (NTP) Report on Carcinogens**

| | |
|---|---|
| CUMENE (CAS 98-82-8) | Reasonably Anticipated to be a Human Carcinogen. |
| NAPHTHALENE (CAS 91-20-3) | Reasonably Anticipated to be a Human Carcinogen. |
| SULPHURIC ACID (CAS 7664-93-9) | Known To Be Human Carcinogen. |

**Reproductive toxicity** Components in this product have been shown to cause birth defects and reproductive disorders in laboratory animals.

**Specific target organ toxicity - single exposure** Not classified.

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration hazard** May be fatal if swallowed and enters airways.

**Chronic effects** May be harmful if absorbed through skin. Prolonged inhalation may be harmful.

2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.

Prolonged exposure may cause chronic effects.

## 12. Ecological information

**Ecotoxicity** Toxic to aquatic life with long lasting effects.

**Ecotoxicity**

| Components | | Species | Calculated/Test Results |
|---|---|---|---|
| 1,2,4-TRIMETHYLBENZENE (CAS 95-63-6) | | | |
| **Aquatic** | | | |
| Fish | LC50 | Fathead minnow (Pimephales promelas) | 7.19 - 8.28 mg/l, 96 hours |
| 2-BUTOXYETHANOL (CAS 111-76-2) | | | |
| **Aquatic** | | | |
| Fish | LC50 | Inland silverside (Menidia beryllina) | 1250 mg/l, 96 hours |
| Ammonia, aqueous solution (CAS 1336-21-6) | | | |
| **Aquatic** | | | |
| Fish | LC50 | Western mosquitofish (Gambusia affinis) | 15 mg/l, 96 hours |
| CUMENE (CAS 98-82-8) | | | |
| **Aquatic** | | | |
| Crustacea | EC50 | Brine shrimp (Artemia sp.) | 3.55 - 11.29 mg/l, 48 hours |
| Fish | LC50 | Rainbow trout,donaldson trout (Oncorhynchus mykiss) | 2.7 mg/l, 96 hours |
| NAPHTHALENE (CAS 91-20-3) | | | |
| **Aquatic** | | | |
| Crustacea | EC50 | Water flea (Daphnia magna) | 1.09 - 3.4 mg/l, 48 hours |
| Fish | LC50 | Pink salmon (Oncorhynchus gorbuscha) | 0.95 - 1.62 mg/l, 96 hours |
| Solvent naphtha (petroleum), heavy arom. (CAS 64742-94-5) | | | |
| **Aquatic** | | | |
| Crustacea | EC50 | Water flea (Daphnia pulex) | 2.7 - 5.1 mg/l, 48 hours |
| Fish | LC50 | Rainbow trout,donaldson trout (Oncorhynchus mykiss) | 8.8 mg/l, 96 hours |
| | | | 8.8 mg/l, 96 hours |
| Solvent naphtha (petroleum), light arom. (CAS 64742-95-6) | | | |
| **Aquatic** | | | |
| Crustacea | EC50 | Water flea (Daphnia pulex) | 2.7 - 5.1 mg/l, 48 hours |
| Fish | LC50 | Rainbow trout,donaldson trout (Oncorhynchus mykiss) | 8.8 mg/l, 96 hours |
| | | | 8.8 mg/l, 96 hours |

| Components | | Species | Calculated/Test Results |
|---|---|---|---|
| SULPHURIC ACID (CAS 7664-93-9) | | | |
| **Aquatic** | | | |
| Fish | LC50 | Western mosquitofish (Gambusia affinis) | 42 mg/l, 96 hours |

**Persistence and degradability** No data is available on the degradability of this product.

**Bioaccumulative potential**

**Partition coefficient n-octanol / water (log Kow)**

| | |
|---|---|
| 1,4-Diethylbenzene | 4.45 |
| 2-BUTOXYETHANOL | 0.83 |
| 4-METHYLPENTAN-2-OL | 1.43 |
| CUMENE | 3.66 |
| NAPHTHALENE | 3.3 |
| tert-Butylbenzene | 4.11 |

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Do not incinerate sealed containers. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** D001: Waste Flammable material with a flash point <140 F
D018: Waste Benzene
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. Transport information

**DOT**

**<Unspecified>**

**UN number** UN1268
**UN proper shipping name** Petroleum distillates, n.o.s.
**Transport hazard class(es)**
**Class** 3
**Subsidiary risk** -
**Label(s)** 3
**Packing group** III
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

**IATA**

**<Unspecified>**

**UN number** UN1268
**UN proper shipping name** PETROLEUM DISTILLATES, N.O.S.
**Transport hazard class(es)**
**Class** 3
**Subsidiary risk** -
**Label(s)** 3
**Packing group** III
**Environmental hazards** No.
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

**IMDG**

**<Unspecified>**

| | |
|---|---|
| **UN number** | UN1268 |
| **UN proper shipping name** | PETROLEUM DISTILLATES, N.O.S. |
| **Transport hazard class(es)** | |
| **Class** | 3 |
| **Subsidiary risk** | - |
| **Label(s)** | 3 |
| **Packing group** | III |
| **Environmental hazards** | |
| **Marine pollutant** | No. |
| **EmS** | Not available. |
| **Special precautions for user** | Read safety instructions, SDS and emergency procedures before handling. |
| **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** | Not established. |

**DOT**


**IATA; IMDG**


## 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

| | |
|---|---|
| 2-BUTOXYETHANOL (CAS 111-76-2) | Listed. |
| Ammonia, aqueous solution (CAS 1336-21-6) | Listed. |
| NAPHTHALENE (CAS 91-20-3) | Listed. |

**SARA 304 Emergency release notification**

| | |
|---|---|
| SULPHURIC ACID (CAS 7664-93-9) | 1000 LBS |

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**SARA 302 Extremely hazardous substance**

| Chemical name | CAS number | Reportable quantity (pounds) | Threshold planning quantity (pounds) | Threshold planning quantity, lower value (pounds) | Threshold planning quantity, upper value (pounds) |
|---|---|---|---|---|---|
| SULPHURIC ACID | 7664-93-9 | 1000 | 1000 | | |

**SARA 311/312 Hazardous chemical** Yes

| | |
|---|---|
| **Classified hazard categories** | Flammable (gases, aerosols, liquids, or solids)<br>Acute toxicity (any route of exposure)<br>Skin corrosion or irritation<br>Serious eye damage or eye irritation<br>Carcinogenicity |

**SARA 313 (TRI reporting)**

| Chemical name | CAS number | % by wt. |
|---|---|---|
| 1,2,4-TRIMETHYLBENZENE | 95-63-6 | 2 - < 7 |
| 2-BUTOXYETHANOL | 111-76-2 | 13 - 16 |
| Ammonia, aqueous solution | 1336-21-6 | 1 - 2 |
| NAPHTHALENE | 91-20-3 | 0.6 - 2 |

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

CUMENE (CAS 98-82-8)
NAPHTHALENE (CAS 91-20-3)

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

SULPHURIC ACID (CAS 7664-93-9)

**Safe Drinking Water Act (SDWA)** Not regulated.

**US state regulations**

**California Proposition 65**

**WARNING:** This product can expose you to chemicals including 4-METHYLPENTAN-2-ONE, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

**California Proposition 65 - CRT: Listed date/Carcinogenic substance**

4-METHYLPENTAN-2-ONE (CAS 108-10-1) Listed: November 4, 2011

**California Proposition 65 - CRT: Listed date/Developmental toxin**

4-METHYLPENTAN-2-ONE (CAS 108-10-1) Listed: March 28, 2014

**International Inventories**

All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.

## 16. Other information, including date of preparation or last revision

| | |
|---|---|
| **Issue date** | 07-30-2018 |
| **Revision date** | 07-30-2018 |
| **Version** | 02 |
| **HMIS® ratings** | Health: 3<br>Flammability: 2<br>Physical hazard: 1 |
| **NFPA ratings** | Health: 2<br>Flammability: 2<br>Instability: 0 |
| **Preparation Information and Disclaimer** | This document was prepared by FCSD-Toxicology, Ford Motor Company, Fairlane Business Park IV, 17225 Federal Drive, Allen Park, MI 48101, USA, based in part on information provided by the manufacturer. The information on this data sheet represents our current data and is accurate to the best of our knowledge as to the proper handling of this product under normal conditions and in accordance with the application specified on the packaging and/or technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user. To the extent that there are any differences between this product's Safety Data Sheet (SDS) and the consumer packaged product labels, the SDS should be followed. |
| **Revision information** | This document has undergone significant changes and should be reviewed in its entirety. |
| **Part number(s)** | PM-5 |