

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. 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.

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.

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.

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-TRIMETHYLBENZEN E (CAS 526-73-8)	TWA	25 ppm	
1,2,4-TRIMETHYLBENZEN E (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-TRIMETHYLBENZEN E (CAS 526-73-8)	TWA	125 mg/m3 25 ppm
1,2,4-TRIMETHYLBENZEN E (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
Ammonia, aqueous solution (CAS 1336-21-6)	STEL	27 mg/m3
		35 ppm
	TWA	18 mg/m3
CUMENE (CAS 98-82-8)	TWA	245 mg/m3
		50 ppm
	STEL	75 mg/m3
NAPHTHALENE (CAS 91-20-3)	TWA	15 ppm
		50 mg/m3
	TWA	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.

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 (<i>Pimephales promelas</i>)	7.19 - 8.28 mg/l, 96 hours
2-BUTOXYETHANOL (CAS 111-76-2)			
Aquatic			
Fish	LC50	Inland silverside (<i>Menidia beryllina</i>)	1250 mg/l, 96 hours
Ammonia, aqueous solution (CAS 1336-21-6)			
Aquatic			
Fish	LC50	Western mosquitofish (<i>Gambusia affinis</i>)	15 mg/l, 96 hours
CUMENE (CAS 98-82-8)			
Aquatic			
Crustacea	EC50	Brine shrimp (<i>Artemia</i> sp.)	3.55 - 11.29 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (<i>Oncorhynchus mykiss</i>)	2.7 mg/l, 96 hours
NAPHTHALENE (CAS 91-20-3)			
Aquatic			
Crustacea	EC50	Water flea (<i>Daphnia magna</i>)	1.09 - 3.4 mg/l, 48 hours
Fish	LC50	Pink salmon (<i>Oncorhynchus gorbuscha</i>)	0.95 - 1.62 mg/l, 96 hours
Solvent naphtha (petroleum), heavy arom. (CAS 64742-94-5)			
Aquatic			
Crustacea	EC50	Water flea (<i>Daphnia pulex</i>)	2.7 - 5.1 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (<i>Oncorhynchus mykiss</i>)	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 (<i>Daphnia pulex</i>)	2.7 - 5.1 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (<i>Oncorhynchus mykiss</i>)	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 (<i>Gambusia affinis</i>) 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)
Acute toxicity (any route of exposure)
Skin corrosion or irritation
Serious eye damage or eye irritation
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
Flammability: 2
Physical hazard: 1
NFPA ratings Health: 2
Flammability: 2
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