

1. Identification

Product identifier	Lacquer Touch-up Paint
Other means of identification	
FIR No.	009836
Recommended use	Automotive exterior touch-up paint
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/Distributor information	
Supplier	
Company Name	Ford Motor Company
Address	Attention: MSDS Information, P.O. Box 1899 Dearborn, Michigan 48121 USA
Telephone	1-800-392-3673
MSDS Information	1-800-448-2063 msds@brownart.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 2
Health hazards	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Carcinogenicity	Category 1A
	Reproductive toxicity (the unborn child)	Category 2
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Specific target organ toxicity, repeated exposure	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	Danger
Hazard statement	Highly flammable liquid and vapor. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. May cause cancer. Suspected of damaging the unborn child. May cause damage to organs through prolonged or repeated exposure. 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. Do not breathe mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Response	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 inhaled: Remove person to fresh air and keep comfortable for breathing. 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. Call a poison center/doctor if you feel unwell. Take off contaminated clothing and wash before reuse. In case of fire: Use appropriate media to extinguish. Collect spillage.
Storage	Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	May cause irritation of respiratory tract. May be harmful if absorbed through skin. Aspiration may cause pulmonary edema and pneumonitis.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
BUTANONE		78-93-3	20 - 30
TOLUENE		108-88-3	20 - 30
ETHANOL		64-17-5	5 - < 10
ETHYL ACETATE		141-78-6	5 - < 10
TITANIUM DIOXIDE		13463-67-7	5 - < 10
4-METHYLPENTAN-2-ONE		108-10-1	3 - < 5
PROPAN-2-OL		67-63-0	3 - < 5
MICA GROUP MINERALS		12001-26-2	1 - < 3
N-BUTYL ACETATE		123-86-4	1 - < 3
propyl acetate		109-60-4	1 - < 3
CARBON BLACK		1333-86-4	< 1
Quartz (SiO ₂)		14808-60-7	< 1

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
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	Rinse mouth. Rinse mouth. Call a physician or poison control center immediately. Do not induce vomiting.
Most important symptoms/effects, acute and delayed	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.
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 under observation. Symptoms may be delayed.
General information	Take off all contaminated clothing immediately. IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). 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. Foam. Carbon dioxide (CO ₂). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
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. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. 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

Highly flammable liquid and vapor.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid inhalation of vapors. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. 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. Use appropriate containment to avoid environmental contamination. Transfer by mechanical means such as vacuum truck to a salvage tank or other suitable container for recovery or safe disposal. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil, etc.) away from spilled material.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent product from entering drains. 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. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases. Use appropriate containment to avoid environmental contamination.

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Explosion-proof general and local exhaust ventilation. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not breathe mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

For additional information on equipment bonding and grounding, refer to the Canadian Electrical Code in Canada, (CSA C22.1), or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents" or National Fire Protection Association (NFPA) 77, "Recommended Practice on Static Electricity" or National Fire Protection Association (NFPA) 70, "National Electrical Code".

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. Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Store in a cool, dry place out of direct sunlight. Store in original 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****US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Components	Type	Value	Form
4-METHYLPENTAN-2-ONE (CAS 108-10-1)	PEL	410 mg/m3	
BUTANONE (CAS 78-93-3)	PEL	100 ppm 590 mg/m3 200 ppm	
CARBON BLACK (CAS 1333-86-4)	PEL	3.5 mg/m3	
ETHANOL (CAS 64-17-5)	PEL	1900 mg/m3 1000 ppm	
ETHYL ACETATE (CAS 141-78-6)	PEL	1400 mg/m3 400 ppm	
N-BUTYL ACETATE (CAS 123-86-4)	PEL	710 mg/m3	
PROPAN-2-OL (CAS 67-63-0)	PEL	150 ppm 980 mg/m3	
propyl acetate (CAS 109-60-4)	PEL	400 ppm 840 mg/m3	
TITANIUM DIOXIDE (CAS 13463-67-7)	PEL	200 ppm 15 mg/m3	Total dust.

US. OSHA Table Z-2 (29 CFR 1910.1000)

Components	Type	Value
TOLUENE (CAS 108-88-3)	Ceiling TWA	300 ppm 200 ppm

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
MICA GROUP MINERALS (CAS 12001-26-2)	TWA	20 mppcf	
Quartz (SiO ₂) (CAS 14808-60-7)	TWA	0.3 mg/m3	Total dust.
		0.1 mg/m3 2.4 mppcf	Respirable. Respirable.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
4-METHYLPENTAN-2-ONE (CAS 108-10-1)	STEL	75 ppm	
BUTANONE (CAS 78-93-3)	TWA STEL	20 ppm 300 ppm	
CARBON BLACK (CAS 1333-86-4)	TWA	200 ppm 3 mg/m3	Inhalable fraction.
ETHANOL (CAS 64-17-5)	STEL	1000 ppm	
ETHYL ACETATE (CAS 141-78-6)	TWA	400 ppm	
MICA GROUP MINERALS (CAS 12001-26-2)	TWA	3 mg/m3	Respirable fraction.
N-BUTYL ACETATE (CAS 123-86-4)	STEL	200 ppm	

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
PROPAN-2-OL (CAS 67-63-0)	TWA	150 ppm	
	STEL	400 ppm	
propyl acetate (CAS 109-60-4)	TWA	200 ppm	
	STEL	250 ppm	
Quartz (SiO ₂) (CAS 14808-60-7)	TWA	200 ppm	Respirable fraction.
	TWA	0.025 mg/m ³	
TITANIUM DIOXIDE (CAS 13463-67-7)	TWA	10 mg/m ³	
TOLUENE (CAS 108-88-3)	TWA	20 ppm	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
4-METHYLPENTAN-2-ONE (CAS 108-10-1)	STEL	300 mg/m ³	
	TWA	75 ppm 205 mg/m ³ 50 ppm	
BUTANONE (CAS 78-93-3)	STEL	885 mg/m ³ 300 ppm	
	TWA	590 mg/m ³ 200 ppm	
CARBON BLACK (CAS 1333-86-4)	TWA	0.1 mg/m ³	
ETHANOL (CAS 64-17-5)	TWA	1900 mg/m ³ 1000 ppm	
ETHYL ACETATE (CAS 141-78-6)	TWA	1400 mg/m ³	
MICA GROUP MINERALS (CAS 12001-26-2)	TWA	400 ppm 3 mg/m ³	Respirable.
	STEL	950 mg/m ³	
N-BUTYL ACETATE (CAS 123-86-4)	TWA	200 ppm 710 mg/m ³ 150 ppm	
	STEL	1225 mg/m ³	
PROPAN-2-OL (CAS 67-63-0)	TWA	500 ppm 980 mg/m ³ 400 ppm	
	STEL	1050 mg/m ³	
propyl acetate (CAS 109-60-4)	TWA	250 ppm 840 mg/m ³ 200 ppm	
	STEL	1050 mg/m ³	
Quartz (SiO ₂) (CAS 14808-60-7)	TWA	0.05 mg/m ³	Respirable dust.
	STEL	560 mg/m ³ 150 ppm	
TOLUENE (CAS 108-88-3)	TWA	375 mg/m ³ 100 ppm	

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
4-METHYLPENTAN-2-ONE (CAS 108-10-1)	1 mg/l	Methyl isobutyl ketone	Urine	*
BUTANONE (CAS 78-93-3)	2 mg/l	MEK	Urine	*

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
PROPAN-2-OL (CAS 67-63-0)	40 mg/l	Acetone	Urine	*
TOLUENE (CAS 108-88-3)	0.3 mg/g	o-Cresol, with hydrolysis	Creatinine in urine	*
	0.03 mg/l	Toluene	Urine	*
	0.02 mg/l	Toluene	Blood	*

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

Exposure guidelines**US - California OELs: Skin designation**

TOLUENE (CAS 108-88-3) Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

TOLUENE (CAS 108-88-3) Skin designation applies.

Appropriate engineering controls

Explosion-proof general and local exhaust ventilation. 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**

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. Suitable chemical protective gloves should be worn when the potential exists for prolonged or repeated skin exposure. Butyl rubber gloves are recommended.

Other

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

Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. 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

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 Not available.

Odor Not available.

Odor threshold Not available.

pH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling range 147.92 - 394.88 °F (64.4 - 201.6 °C)

Flash point 35.6 °F (2.0 °C) TCC

Evaporation rate < 1 (ETHER=1)

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Explosive limit - lower (%) 1 %

Explosive limit - upper (%)	19 %
Vapor pressure	1.6 kPa @20°C
Vapor density	> 1 (AIR=1)
Relative density	0.9 - 0.96
Relative density temperature	39.2 °F (4 °C)
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Kinematic viscosity	24.5 cSt
Kinematic viscosity temperature	104 °F (40 °C)
VOC (Weight %)	5.65 lb/gal 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	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Nitrates. Ammonia. Amines. Isocyanates. Caustics.
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	May cause damage to organs through prolonged or repeated exposure by inhalation. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful. May cause irritation to the respiratory system.
Skin contact	Causes skin irritation. May be harmful in contact with skin.
Eye contact	Causes serious eye irritation.
Ingestion	May be harmful if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics	Headache. May cause drowsiness and 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	Narcotic effects. May irritate eyes and skin. May cause respiratory irritation. In high concentrations, vapors are anesthetic and may cause headache, fatigue, dizziness and central nervous system effects. May be harmful if swallowed and enters airways.
-----------------------	--

Components	Species	Calculated/Test Results
4-METHYLPENTAN-2-ONE (CAS 108-10-1)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 16000 mg/kg
<i>Inhalation</i>		
LC50	Rat	8.2 mg/l, 4 Hours
<i>Oral</i>		
LD50	Rat	2080 mg/kg

Components	Species	Calculated/Test Results
BUTANONE (CAS 78-93-3)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 8000 mg/kg
<i>Inhalation</i>		
LC50	Mouse	11000 ppm, 45 Minutes
	Rat	11700 ppm, 4 Hours
<i>Oral</i>		
LD50	Mouse	670 mg/kg
	Rat	2300 - 3500 mg/kg
CARBON BLACK (CAS 1333-86-4)		
Acute		
<i>Oral</i>		
LD50	Rat	> 8000 mg/kg
ETHANOL (CAS 64-17-5)		
Acute		
<i>Inhalation</i>		
LC50	Mouse	39 mg/l, 4 Hours
	Rat	20000 ppm, 10 Hours
<i>Oral</i>		
LD50	Dog	5.5 g/kg
	Guinea pig	5.6 g/kg
	Mouse	3450 mg/kg
	Rat	6.2 g/kg
ETHYL ACETATE (CAS 141-78-6)		
Acute		
<i>Inhalation</i>		
LC50	Rat	16000 ppm, 6 Hours
LD50	Mouse	1500 ppm, 4 Hours
	Rabbit	2500 ppm, 4 Hours
	Rat	4000 ppm, 4 Hours
<i>Oral</i>		
LD50	Mouse	0.44 g/kg
	Rabbit	4.9 g/kg
	Rat	11.3 ml/kg
		5.6 g/kg
N-BUTYL ACETATE (CAS 123-86-4)		
Acute		
<i>Inhalation</i>		
LC50	Wistar rat	160 mg/l, 4 Hours
<i>Oral</i>		
LD50	Rat	14000 mg/kg
PROPAN-2-OL (CAS 67-63-0)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	12800 mg/kg
<i>Oral</i>		
LD50	Dog	4797 mg/kg
	Mouse	3600 mg/kg

Components	Species	Calculated/Test Results
	Rabbit	5.03 g/kg
	Rat	4.7 g/kg
propyl acetate (CAS 109-60-4)		
Acute		
<i>Oral</i>		
LD50	Mouse	8300 mg/kg
	Rabbit	6.64 g/kg
	Rat	9370 mg/kg
TOLUENE (CAS 108-88-3)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	12124 mg/kg 14.1 ml/kg
<i>Inhalation</i>		
LC50	Mouse	5320 ppm, 8 Hours 400 ppm, 24 Hours
	Rat	26700 ppm, 1 Hours 12200 ppm, 2 Hours 8000 ppm, 4 Hours
<i>Oral</i>		
LD50	Rat	2.6 g/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	May cause cancer.	
IARC Monographs. Overall Evaluation of Carcinogenicity		
4-METHYLPENTAN-2-ONE (CAS 108-10-1)	2B Possibly carcinogenic to humans.	
CARBON BLACK (CAS 1333-86-4)	2B Possibly carcinogenic to humans.	
Quartz (SiO ₂) (CAS 14808-60-7)	1 Carcinogenic to humans.	
TITANIUM DIOXIDE (CAS 13463-67-7)	2B Possibly carcinogenic to humans.	
TOLUENE (CAS 108-88-3)	3 Not classifiable as to carcinogenicity to humans.	
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)		
Not listed.		
US. National Toxicology Program (NTP) Report on Carcinogens		
Quartz (SiO ₂) (CAS 14808-60-7)	Known To Be Human Carcinogen.	
Reproductive toxicity	Suspected of damaging the unborn child.	
Specific target organ toxicity - single exposure	May cause drowsiness and dizziness.	
Specific target organ toxicity - repeated exposure	May cause damage to organs through prolonged or repeated exposure. Liver. Urinary system. Circulatory system. Heart. Reproductive organs.	
Aspiration hazard	May be harmful if swallowed and enters airways.	
Chronic effects	May cause damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.	

12. Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects.

Ecotoxicity

Components	Species	Calculated/Test Results
4-METHYLPENTAN-2-ONE (CAS 108-10-1)		
Aquatic		
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>) 492 - 593 mg/l, 96 hours
BUTANONE (CAS 78-93-3)		
Aquatic		
Crustacea	EC50	Water flea (<i>Daphnia magna</i>) 4025 - 6440 mg/l, 48 hours
Fish	LC50	Sheepshead minnow (<i>Cyprinodon variegatus</i>) > 400 mg/l, 96 hours
ETHANOL (CAS 64-17-5)		
Aquatic		
Crustacea	EC50	Water flea (<i>Daphnia magna</i>) 7.7 - 11.2 mg/l, 48 hours
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>) > 100 mg/l, 96 hours
ETHYL ACETATE (CAS 141-78-6)		
Aquatic		
Fish	LC50	Indian catfish (<i>Heteropneustes fossilis</i>) 200.32 - 225.42 mg/l, 96 hours
N-BUTYL ACETATE (CAS 123-86-4)		
Aquatic		
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>) 17 - 19 mg/l, 96 hours
PROPAN-2-OL (CAS 67-63-0)		
Aquatic		
Fish	LC50	Bluegill (<i>Lepomis macrochirus</i>) > 1400 mg/l, 96 hours
propyl acetate (CAS 109-60-4)		
Aquatic		
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>) 56 - 64 mg/l, 96 hours
TITANIUM DIOXIDE (CAS 13463-67-7)		
Aquatic		
Crustacea	EC50	Water flea (<i>Daphnia magna</i>) > 1000 mg/l, 48 hours
Fish	LC50	Mummichog (<i>Fundulus heteroclitus</i>) > 1000 mg/l, 96 hours
TOLUENE (CAS 108-88-3)		
Aquatic		
Crustacea	EC50	Water flea (<i>Daphnia magna</i>) 5.46 - 9.83 mg/l, 48 hours
Fish	LC50	Coho salmon, silver salmon (<i>Oncorhynchus kisutch</i>) 8.11 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)**

4-METHYLPENTAN-2-ONE	1.31
BUTANONE	0.29
ETHANOL	-0.31
ETHYL ACETATE	0.73
N-BUTYL ACETATE	1.78
PROPAN-2-OL	0.05
propyl acetate	1.23
TOLUENE	2.73

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. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. 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	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	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

<Unspecified>

UN number	UN1263
UN proper shipping name	PAINT
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
Packing group	II
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

IATA

<Unspecified>

UN number	UN1263
UN proper shipping name	PAINT
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
Packing group	II
Environmental hazards	No.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Forbidden.
Cargo aircraft only	Forbidden.

IMDG

<Unspecified>

UN number	UN1263
UN proper shipping name	PAINT
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
Packing group	II
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)

4-METHYLPENTAN-2-ONE (CAS 108-10-1)	Listed.
BUTANONE (CAS 78-93-3)	Listed.
ETHANOL (CAS 64-17-5)	Listed.
ETHYL ACETATE (CAS 141-78-6)	Listed.
N-BUTYL ACETATE (CAS 123-86-4)	Listed.
PROPAN-2-OL (CAS 67-63-0)	Listed.
propyl acetate (CAS 109-60-4)	Listed.
TOLUENE (CAS 108-88-3)	Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
TOLUENE	108-88-3	20 - 30
4-METHYLPENTAN-2-ONE	108-10-1	3 - < 5
PROPAN-2-OL	67-63-0	3 - < 5

Other federal regulations

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

4-METHYLPENTAN-2-ONE (CAS 108-10-1)
TOLUENE (CAS 108-88-3)

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

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

4-METHYLPENTAN-2-ONE (CAS 108-10-1)	6715
BUTANONE (CAS 78-93-3)	6714
TOLUENE (CAS 108-88-3)	6594

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

4-METHYLPENTAN-2-ONE (CAS 108-10-1)	35 %WV
BUTANONE (CAS 78-93-3)	35 %WV
TOLUENE (CAS 108-88-3)	35 %WV

DEA Exempt Chemical Mixtures Code Number

4-METHYLPENTAN-2-ONE (CAS 108-10-1)	6715
BUTANONE (CAS 78-93-3)	6714
TOLUENE (CAS 108-88-3)	594

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. Massachusetts RTK - Substance List

4-METHYLPENTAN-2-ONE (CAS 108-10-1)
BUTANONE (CAS 78-93-3)
CARBON BLACK (CAS 1333-86-4)
ETHANOL (CAS 64-17-5)
ETHYL ACETATE (CAS 141-78-6)
MICA GROUP MINERALS (CAS 12001-26-2)
N-BUTYL ACETATE (CAS 123-86-4)
PROPAN-2-OL (CAS 67-63-0)
propyl acetate (CAS 109-60-4)
Quartz (SiO₂) (CAS 14808-60-7)
TITANIUM DIOXIDE (CAS 13463-67-7)
TOLUENE (CAS 108-88-3)

US. New Jersey Worker and Community Right-to-Know Act

4-METHYLPENTAN-2-ONE (CAS 108-10-1)
BUTANONE (CAS 78-93-3)
CARBON BLACK (CAS 1333-86-4)
ETHANOL (CAS 64-17-5)
ETHYL ACETATE (CAS 141-78-6)
MICA GROUP MINERALS (CAS 12001-26-2)
N-BUTYL ACETATE (CAS 123-86-4)
PROPAN-2-OL (CAS 67-63-0)
propyl acetate (CAS 109-60-4)
Quartz (SiO₂) (CAS 14808-60-7)
TITANIUM DIOXIDE (CAS 13463-67-7)
TOLUENE (CAS 108-88-3)

US. Pennsylvania Worker and Community Right-to-Know Law

4-METHYLPENTAN-2-ONE (CAS 108-10-1)
BUTANONE (CAS 78-93-3)
CARBON BLACK (CAS 1333-86-4)
ETHANOL (CAS 64-17-5)
ETHYL ACETATE (CAS 141-78-6)
MICA GROUP MINERALS (CAS 12001-26-2)
N-BUTYL ACETATE (CAS 123-86-4)
PROPAN-2-OL (CAS 67-63-0)
propyl acetate (CAS 109-60-4)
Quartz (SiO₂) (CAS 14808-60-7)
TITANIUM DIOXIDE (CAS 13463-67-7)
TOLUENE (CAS 108-88-3)

US. Rhode Island RTK

4-METHYLPENTAN-2-ONE (CAS 108-10-1)
BUTANONE (CAS 78-93-3)

ETHYL ACETATE (CAS 141-78-6)
N-BUTYL ACETATE (CAS 123-86-4)
PROPAN-2-OL (CAS 67-63-0)
TOLUENE (CAS 108-88-3)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

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 05-21-2015

Version # 01

HMIS® ratings Health: 2
Flammability: 3
Physical hazard: 1

NFPA ratings Health: 2
Flammability: 3
Instability: 1

Preparation Information and Disclaimer

This document was prepared by FCSD-Toxicology, Ford Motor Company, Diagnostic Service Center II, 1800 Fairlane 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.

Part number(s) (MY)U2J-19500-XX, PM-19K507-AL, PMP-19500-XXXXX, PMP-19K507-XXXXA, PMPC-19500-XXXXA, PMPM-19500-XXXXG, PMPP-19500-XXXXA