

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

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 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 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 inhaled: Remove person to fresh air and keep comfortable for breathing. 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

Keep cool. Store in a well-ventilated place. Keep container tightly closed. 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
Ethyl 3-ethoxypropionate		763-69-9	13 - 15
4-METHYLPENTAN-2-ONE		108-10-1	5 - 6
ETHYL ACETATE		141-78-6	≤ 10
TITANIUM DIOXIDE		13463-67-7	≤ 10
ETHANOL		64-17-5	1 - 8
PROPAN-2-OL		67-63-0	1 - 6
MICA GROUP MINERALS		12001-26-2	≤ 4
propyl acetate		109-60-4	≤ 4
N-BUTYL ACETATE		123-86-4	≤ 3
1-Methoxypropan-2-ol		107-98-2	≤ 1
CARBON BLACK		1333-86-4	≤ 1
Solvent naphtha (petroleum), medium aliph.		64742-88-7	≤ 1
Quartz (SiO ₂)		14808-60-7	≤ 0.8
ETHYLBENZENE		100-41-4	≤ 0.1
Naphthenic acids, nickel salts		61788-71-4	≤ 0.1

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

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

Call a physician or poison control center immediately. Rinse mouth. 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. 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	Highly 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. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. 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	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. 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	Pregnant or breastfeeding women must not handle this product. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with eyes, skin, and clothing. Do not breathe mist or vapor. Avoid prolonged exposure. When using do not smoke. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Take precautionary measures against static discharges. Explosion-proof general and local exhaust ventilation. Should be handled in closed systems, if possible. Avoid release to the environment. Observe good industrial hygiene practices. Wear appropriate personal protective equipment. For personal protection, see Section 8 of the SDS.
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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	Form
4-METHYLPENTAN-2-ONE (CAS 108-10-1)	PEL	410 mg/m3 100 ppm	
BUTANONE (CAS 78-93-3)	PEL	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	
ETHYLBENZENE (CAS 100-41-4)	PEL	435 mg/m3 100 ppm	
Naphthenic acids, nickel salts (CAS 61788-71-4)	PEL	1 mg/m3	
N-BUTYL ACETATE (CAS 123-86-4)	PEL	710 mg/m3 150 ppm	
PROPAN-2-OL (CAS 67-63-0)	PEL	980 mg/m3 400 ppm	
propyl acetate (CAS 109-60-4)	PEL	840 mg/m3 200 ppm	
Quartz (SiO2) (CAS 14808-60-7)	PEL	0.05 mg/m3	Respirable dust.
Solvent naphtha (petroleum), medium aliph. (CAS 64742-88-7)	PEL	400 mg/m3 100 ppm	
TITANIUM DIOXIDE (CAS 13463-67-7)	PEL	15 mg/m3	Total dust.

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

Components	Type	Value
TOLUENE (CAS 108-88-3)	Ceiling	300 ppm
	TWA	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 (SiO2) (CAS 14808-60-7)	TWA	0.1 mg/m3	Respirable.
		2.4 mppcf	Respirable.

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

Components	Type	Value	Form
TITANIUM DIOXIDE (CAS 13463-67-7)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
1-Methoxypropan-2-ol (CAS 107-98-2)	STEL	100 ppm	
	TWA	50 ppm	
4-METHYLPENTAN-2-ONE (CAS 108-10-1)	STEL	75 ppm	
	TWA	20 ppm	
BUTANONE (CAS 78-93-3)	STEL	300 ppm	
	TWA	200 ppm	
CARBON BLACK (CAS 1333-86-4)	TWA	3 mg/m3	Inhalable fraction.
ETHANOL (CAS 64-17-5)	STEL	1000 ppm	
ETHYL ACETATE (CAS 141-78-6)	TWA	400 ppm	
ETHYLBENZENE (CAS 100-41-4)	TWA	20 ppm	
MICA GROUP MINERALS (CAS 12001-26-2)	TWA	3 mg/m3	Respirable fraction.
N-BUTYL ACETATE (CAS 123-86-4)	STEL	150 ppm	
	TWA	50 ppm	
PROPAN-2-OL (CAS 67-63-0)	STEL	400 ppm	
	TWA	200 ppm	
propyl acetate (CAS 109-60-4)	STEL	150 ppm	
	TWA	100 ppm	
Quartz (SiO2) (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
Solvent naphtha (petroleum), medium aliph. (CAS 64742-88-7)	TWA	200 mg/m3	Non-aerosol.
TITANIUM DIOXIDE (CAS 13463-67-7)	TWA	10 mg/m3	
TOLUENE (CAS 108-88-3)	TWA	20 ppm	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
1-Methoxypropan-2-ol (CAS 107-98-2)	STEL	540 mg/m3	
		150 ppm	
	TWA	360 mg/m3	
4-METHYLPENTAN-2-ONE (CAS 108-10-1)		100 ppm	
	STEL	300 mg/m3	
	TWA	75 ppm	
		205 mg/m3	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
BUTANONE (CAS 78-93-3)	STEL	50 ppm 885 mg/m3	
	TWA	300 ppm 590 mg/m3	
CARBON BLACK (CAS 1333-86-4)	TWA	200 ppm 0.1 mg/m3	
ETHANOL (CAS 64-17-5)	TWA	1900 mg/m3 1000 ppm	
ETHYL ACETATE (CAS 141-78-6)	TWA	1400 mg/m3	
ETHYLBENZENE (CAS 100-41-4)	STEL	400 ppm 545 mg/m3	
	TWA	125 ppm 435 mg/m3	
MICA GROUP MINERALS (CAS 12001-26-2)	TWA	100 ppm 3 mg/m3	Respirable.
Naphthenic acids, nickel salts (CAS 61788-71-4)	TWA	0.015 mg/m3	
N-BUTYL ACETATE (CAS 123-86-4)	STEL	950 mg/m3	
	TWA	200 ppm 710 mg/m3	
PROPAN-2-OL (CAS 67-63-0)	STEL	150 ppm 1225 mg/m3	
	TWA	500 ppm 980 mg/m3	
propyl acetate (CAS 109-60-4)	STEL	400 ppm 1050 mg/m3	
	TWA	250 ppm 840 mg/m3	
Quartz (SiO2) (CAS 14808-60-7)	TWA	200 ppm 0.05 mg/m3	Respirable dust.
	TWA	100 mg/m3	
Solvent naphtha (petroleum), medium aliph. (CAS 64742-88-7)	STEL	560 mg/m3	
	TWA	150 ppm 375 mg/m3	
TOLUENE (CAS 108-88-3)	STEL	100 ppm	
	TWA	150 ppm 375 mg/m3	

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
ETHYLBENZENE (CAS 100-41-4)	0.15 g/g	Sum of mandelic acid and phenylglyoxylic acid	Creatinine in urine	*
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**

1-Methoxypropan-2-ol (CAS 107-98-2)
TOLUENE (CAS 108-88-3)

Can be absorbed through the skin.
Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

TOLUENE (CAS 108-88-3)

Skin designation applies.

US ACGIH Threshold Limit Values: Skin designation

Solvent naphtha (petroleum), medium aliph. (CAS 64742-88-7)

Can be absorbed through the skin.

Appropriate engineering controls

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, appropriate 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 skin exposure. 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

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	24.5 cSt
Viscosity temperature	104 °F (40 °C)
Other information	
VOC	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	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. Amines. Ammonia. Caustics. Chlorine. Isocyanates. Nitrates.
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. May cause irritation to the respiratory system.
Skin contact	May be harmful in contact with skin. Causes skin irritation.
Eye contact	Causes serious eye irritation.
Ingestion	May be harmful if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics	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.
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Information on toxicological effects

Acute toxicity	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. May cause respiratory irritation. May irritate eyes and skin.
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Components	Species	Calculated/Test Results
1-Methoxypropan-2-ol (CAS 107-98-2)		
Acute		
Dermal		
LD50	Rabbit	13 g/kg
Inhalation		
LC50	Guinea pig	15000 mg/l, 10 Hours

Components	Species	Calculated/Test Results
	Rat	15000 mg/l, 4 Hours
		54.6 mg/l, 4 Hours
Oral		
LD50	Dog	4.6 g/kg
	Mouse	10.8 g/kg
	Rabbit	5.3 g/kg
	Rat	36 g/kg
		7.51 g/kg
		5.71 g/kg
Other		
LD50	Dog	1.8 g/kg
	Mouse	5.9 g/kg
		4.9 g/kg
	Rabbit	4.6 g/kg
		1.1 g/kg
	Rat	7.2 g/kg
		3.9 g/kg
4-METHYLPENTAN-2-ONE (CAS 108-10-1)		
Acute		
Dermal		
LD50	Rabbit	> 16000 mg/kg
Inhalation		
LC50	Rat	8.2 mg/l, 4 Hours
Oral		
LD50	Rat	2080 mg/kg
Other		
LD50	Guinea pig	0.919 ml/kg
	Mouse	590 mg/kg
	Rat	1.14 ml/kg
BUTANONE (CAS 78-93-3)		
Acute		
Dermal		
LD50	Rabbit	> 8000 mg/kg
Inhalation		
LC50	Mouse	11000 ppm, 45 Minutes
	Rat	11700 ppm, 4 Hours
Oral		
LD50	Mouse	670 mg/kg
	Rat	4500 - 6800 mg/kg
		2300 - 3500 mg/kg
Other		
LD50	Mouse	1660 g/kg, 24 Hours
	Rat	12290 mg/kg, 24 Hours
CARBON BLACK (CAS 1333-86-4)		
Acute		
Oral		
LD50	Rat	> 8000 mg/kg

Components	Species	Calculated/Test Results
ETHANOL (CAS 64-17-5)		
<u>Acute</u>		
Inhalation		
LC50	Mouse	39 mg/l, 4 Hours
	Rat	20000 ppm, 10 Hours
Oral		
LD50	Dog	5.5 g/kg
	Guinea pig	5.6 g/kg
	Mouse	3450 mg/kg
	Rat	7060 mg/kg
		17.8 g/kg
		11.5 g/kg
		10.6 g/kg
		9.9 g/kg
		6.2 g/kg
Other		
LD50	Mouse	8285 mg/kg
		1973 mg/kg
		933 mg/kg
	Rat	3750 mg/kg
		1440 mg/kg
ETHYL ACETATE (CAS 141-78-6)		
<u>Acute</u>		
Inhalation		
LC50	Rat	16000 ppm, 6 Hours
LD50	Mouse	1500 ppm, 4 Hours
	Rabbit	2500 ppm, 4 Hours
	Rat	4000 ppm, 4 Hours
Oral		
LD50	Mouse	0.44 g/kg
	Rabbit	4.94 g/kg
		4.9 g/kg
	Rat	11.3 ml/kg
		5.6 g/kg
Other		
LD50	Cat	3 g/kg
	Guinea pig	3 g/kg
ETHYLBENZENE (CAS 100-41-4)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	17800 mg/kg
Oral		
LD50	Rat	3500 mg/kg
		5.46 g/kg
Other		
LD50	Mouse	2272 mg/kg

Components	Species	Calculated/Test Results
N-BUTYL ACETATE (CAS 123-86-4)		
<u>Acute</u>		
Inhalation		
LC50	Wistar rat	160 mg/l, 4 Hours
Oral		
LD50	Rat	14130 mg/kg 14000 mg/kg
PROPAN-2-OL (CAS 67-63-0)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	12800 mg/kg
Oral		
LD50	Dog	4797 mg/kg
	Mouse	3600 mg/kg 4.5 g/kg
	Rabbit	6410 mg/kg 8 g/kg
	Rat	5.03 g/kg 5045 mg/kg 4.7 g/kg
Other		
LD50	Mouse	4477 mg/kg 1509 mg/kg
	Rat	2735 mg/kg 1099 mg/kg
propyl acetate (CAS 109-60-4)		
<u>Acute</u>		
Oral		
LD50	Mouse	8300 mg/kg
	Rabbit	6.64 g/kg
	Rat	9370 mg/kg
TOLUENE (CAS 108-88-3)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	12124 mg/kg 14.1 ml/kg
Inhalation		
LC50	Mouse	5320 ppm, 8 Hours 400 ppm, 24 Hours
	Rat	26700 ppm, 1 Hours 12200 ppm, 2 Hours 8000 ppm, 4 Hours
Oral		
LD50	Rat	5000 mg/kg 2.6 g/kg
Other		
LD50	Mouse	2250 mg/kg 640 mg/kg

Components	Species	Calculated/Test Results
		59 mg/kg
		1.15 g/kg
	Rat	1960 mg/kg
		1332 mg/kg
		1.64 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.
ETHYLBENZENE (CAS 100-41-4)		2B Possibly carcinogenic to humans.
Naphthenic acids, nickel salts (CAS 61788-71-4)		1 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.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)		
Quartz (SiO ₂) (CAS 14808-60-7)		Cancer
US. National Toxicology Program (NTP) Report on Carcinogens		
Naphthenic acids, nickel salts (CAS 61788-71-4)		Known To Be Human Carcinogen.
Quartz (SiO ₂) (CAS 14808-60-7)		Known To Be Human Carcinogen.
Reproductive toxicity	Possible reproductive hazard. 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. Heart. Liver. Circulatory system. Urinary system. 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 (Pimephales promelas) 492 - 593 mg/l, 96 hours
BUTANONE (CAS 78-93-3)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia magna) 4025 - 6440 mg/l, 48 hours
Fish	LC50	Sheepshead minnow (Cyprinodon variegatus) > 400 mg/l, 96 hours
ETHANOL (CAS 64-17-5)		
Aquatic		
Crustacea	EC50	Water flea (Daphnia magna) 7.7 - 11.2 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas) > 100 mg/l, 96 hours

Components	Species	Calculated/Test Results
ETHYL ACETATE (CAS 141-78-6)		
Aquatic		
Fish LC50	Indian catfish (<i>Heteropneustes fossilis</i>)	200.32 - 225.42 mg/l, 96 hours
ETHYLBENZENE (CAS 100-41-4)		
Aquatic		
Crustacea EC50	Water flea (<i>Daphnia magna</i>)	1.37 - 4.4 mg/l, 48 hours
Fish LC50	Atlantic silverside (<i>Menidia menidia</i>)	4.4 - 5.7 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
Solvent naphtha (petroleum), medium aliph. (CAS 64742-88-7)		
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
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	Rainbow trout,donaldson trout (<i>Oncorhynchus mykiss</i>)	5.89 - 7.81 mg/l, 96 hours

Persistence and degradability No data is available on the degradability of any ingredients in the mixture.

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
ETHYLBENZENE	3.15
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. 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 D035: Waste Methyl ethyl ketone 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	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.

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)

1-Methoxypropan-2-ol (CAS 107-98-2)	Listed.
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.
NITROCELLULOSE (CAS 9004-70-0)	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 1910.1001-1052)

Quartz (SiO ₂) (CAS 14808-60-7)	Cancer lung effects immune system effects kidney effects
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Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical

Classified hazard categories	Yes Flammable (gases, aerosols, liquids, or solids) Skin corrosion or irritation Serious eye damage or eye irritation Carcinogenicity Reproductive toxicity Specific target organ toxicity (single or repeated exposure)
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SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
4-METHYLPENTAN-2-ONE	108-10-1	5 - 6
ETHYLBENZENE	100-41-4	≤ 0.1
Naphthenic acids, nickel salts	61788-71-4	≤ 0.1

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
PROPAN-2-OL	67-63-0	1 - 6
TOLUENE	108-88-3	20 - 30

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

4-METHYLPENTAN-2-ONE (CAS 108-10-1)
 ETHYLBENZENE (CAS 100-41-4)
 Naphthenic acids, nickel salts (CAS 61788-71-4)
 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.

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 07-18-2018
Revision date 07-18-2018
Version 03
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, 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) PMPC-19500-XXXXA, PMPM-19500-XXXXG, PMPP-19500-XXXXA