# Motorcraft.

# SAFETY DATA SHEET

### 1. Identification

Product identifier	Silicone Spray Lubricant
Other means of identification	
FIR No.	177167
Recommended use	Silicone spray lubricant
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/	Distributor information
Supplier	
Company Name Address Telephone	Ford Motor Company Attention: MSDS Information, P.O. Box 1899 Dearborn, Michigan 48121 USA 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	

## 2. Hazard(s) identification

Physical hazards	Flammable aerosols	Category 2
	Gases under pressure	Dissolved gas
Health hazards	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 1
	Hazardous to the aquatic environment, long-term hazard	Category 1
OSHA defined hazards	Not classified.	
Label elements		>
Signal word	Warning	
Hazard statement	Flammable aerosol. Contains gas under press Causes serious eye irritation. May cause drow	

Precautionary statement Prevention

Response

Flammable aerosol. Contains gas under pressure; may explode if heated. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Avoid breathing mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves. Wear eye/face protection.

If on skin: Wash with plenty of water. 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. Call a poison center/doctor if you feel unwell. Take off contaminated clothing and wash before reuse. Collect spillage.

Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Store in a well-ventilated place. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.	
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 be harmful if absorbed through skin. May cause irritation of respiratory tract.	
Supplemental information	None.	

# 3. Composition/information on ingredients

#### **Mixtures**

Chemical name	Common name and synonyms	CAS number	%
HEPTANE		142-82-5	30 - < 40
ACETONE		67-64-1	20 - < 30
POLY(DIMETHYLSILOXANE)		63148-62-9	10 - < 20
PROPANE		74-98-6	10 - < 20
ISOBUTANE		75-28-5	5 - < 10

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	Remove contaminated clothing. Wash with plenty of soap and water. 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	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.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### 5. Fire-fighting measures

Suitable extinguishing media	Alcohol resistant foam. Water fog. 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	Contents under pressure. Pressurized container may explode when exposed to heat or flame. 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	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
Fire fighting equipment/instructions	In case of fire: Stop leak if safe to do so. Do not move cargo or vehicle if cargo has been exposed to heat. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also consider initial evacuation for 800 meters (1/2 mile) in all directions. ALWAYS stay away from tanks engulfed in flame. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.
General fire hazards	Flammable aerosol. Contents under pressure. Pressurized container may explode when exposed to heat or flame.

## 6. Accidental release measures

o. Accidental release measures			
Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Avoid contact with eyes, skin, and clothing. Avoid breathing mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. 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	Refer to attached safety data sheets and/or instructions for use. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. This product is miscible in water.		
	Large Spills: Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Scoop up used absorbent into drums or other appropriate container. Prevent product from entering drains. Following product recovery, flush area with water.		
	Small Spills: 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.		
7. Handling and storage			
Precautions for safe handling	Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.		
Conditions for safe storage, including any incompatibilities	Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Keep away from heat, sparks and open flame. This material can accumulate static charge which may cause spark and become an ignition source. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Secure cylinders in an upright position at all times, close all valves when not in use. Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Store in accordance with local/regional/national/international regulation.		

# 8. Exposure controls/personal protection

Components	Туре	Value	
ACETONE (CAS 67-64-1)	PEL	2400 mg/m3	
		1000 ppm	
HEPTANE (CAS 142-82-5)	PEL	2000 mg/m3	
		500 ppm	
PROPANE (CAS 74-98-6)	PEL	1800 mg/m3	
		1000 ppm	
US. ACGIH Threshold Limit Values			
Components	Туре	Value	
ACETONE (CAS 67-64-1)	STEL	750 ppm	
	TWA	500 ppm	
HEPTANE (CAS 142-82-5)	STEL	500 ppm	
	TWA	400 ppm	
ISOBUTANE (CAS 75-28-5)	STEL	1000 ppm	
US. NIOSH: Pocket Guide to Chem	ical Hazards		
Components	Туре	Value	
ACETONE (CAS 67-64-1)	TWA	590 mg/m3	

# US. NIOSH: Pocket Guide to Chemical Hazards

Components	т	уре	Va	llue
			25	0 ppm
HEPTANE (CAS 142-82-5)	С	eiling	18	00 mg/m3
			44	0 ppm
	Т	WA	35	0 mg/m3
			85	ppm
ISOBUTANE (CAS 75-28-5	) Т	WA		00 mg/m3
				0 ppm
PROPANE (CAS 74-98-6)	Т	WA		00 mg/m3
			10	00 ppm
Biological limit values				
ACGIH Biological Exposu	re Indices			
Components	Value	Determinant	Specimen	Sampling Time
ACETONE (CAS 67-64-1)	50 mg/l	Acetone	Urine	*
* - For sampling details, ple	ase see the source of	document.		
controls ndividual protection measure Eve/face protection	ventilation, or ot exposure limits/ s, such as persona	her engineering contr guidelines.	ols to control airb ent	e process enclosure, local exhaust orne levels below the recommended
, i			(* 5*55**)	
Skin protection	Quitable shamia	al arata ativa alavea al		an the notantial eviate for avalanced or
Hand protection	Suitable chemical protective gloves should be worn when the potential exists for prolonged or repeated 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. Neoprene gloves are recommended. Nitrile gloves are recommended.			
Other Wear appropriate chemical resistant clothing. Wear appropriate chemical resistant clothing if applicable.			propriate chemical resistant clothing if	
Respiratory protection	protect worker h maintenance sh	ealth, an approved re	spirator must be with the require	ntrations to a level which is adequate to worn. Respirator selection, use and ments of OSHA Respiratory Protection I CSA Z94.4.
Thermal hazards	Wear appropriat	te thermal protective of	lothing, when ne	cessary.
General hygiene considerations	after handling th		eating, drinking,	onal hygiene measures, such as washing and/or smoking. Routinely wash work ants.

# 9. Physical and chemical properties

Appearance		
Physical state	Liquid.	
Form	Liquid.	
Color	Colorless.	
Odor	Hydrocarbon-like.	
Odor threshold	Not available.	
рН	Not available.	
Melting point/freezing point	Not available.	
Initial boiling point and boiling range	Not available.	
Flash point	-4.0 °F (-20.0 °C) ASTM D56	
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.
Va	ipor pressure	Not available.
Va	por density	Not available.
Re	elative density	0.71 - 0.77
Re	elative density temperature	77 °F (25 °C)
So	blubility(ies)	
	Solubility (water)	SLIGHT
Ра	urtition coefficient	Not available.
(n·	-octanol/water)	
Αι	ito-ignition temperature	Not available.
De	ecomposition temperature	Not available.
Vi	scosity	Not available.
Ot	her information	
	Kinematic viscosity	< 1 cSt
	Kinematic viscosity	104 °F (40 °C)
	temperature	. ,
	VOC (Weight %)	58.5 % CAM310
	-	58.5 %

# 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	Heat. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Acids. Strong oxidizing agents. Nitrates. Fluorine. Chlorine.
Hazardous decomposition products	Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

# 11. Toxicological information

Information on like	cely routes	of exposure
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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	HARMFUL OR FATAL IF SWALLOWED. Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.
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 eff	fects

Acute toxicity	Narcotic effects.	
Components Species		Calculated/Test Results
ACETONE (CAS 67-64-1)		
Acute		
Dermal		
LD50	Rabbit	20000 mg/kg
		20 ml/kg
Inhalation		
LC50	Rat	76 mg/l, 4 Hours
FIR No.: 177167		SDS US
Version: 01		5/10

Components	Species	Calculated/Test Results
		50.1 mg/l, 8 Hours
Oral		
LD50	Mouse	3000 mg/kg
	Rabbit	5340 mg/kg
	Rat	5800 mg/kg
HEPTANE (CAS 142-82-5)		
Acute		
Inhalation		
LC50	Rat	103 mg/l, 4 Hours
LD50	Mouse	75 mg/l, 2 Hours
ISOBUTANE (CAS 75-28-5)		
Acute		
Inhalation		
LC50	Mouse	52 mg/l, 1 Hours
PROPANE (CAS 74-98-6)		
Acute		
Inhalation		
LC50	Rat	> 1442.847 mg/l, 15 Minutes
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Causes serious eye irritation.	
Respiratory or skin sensitization	1	
<b>Respiratory sensitization</b>	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	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.	
OSHA Specifically Regulate	d Substances (29 CFR 1910.1001-1050)	
Not listed.		
Reproductive toxicity	This product is not expected to cause rep	productive or developmental effects.
Specific target organ toxicity - single exposure	May cause drowsiness and dizziness.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	If aspirated into lungs during swallowing or vomiting, may cause chemical pneumonia, pulmonary injury or death.	
Chronic effects	Prolonged inhalation may be harmful.	
12. Ecological information		
Ecotoxicity	Very toxic to aquatic life with long lasting	effects.
Ecotoxicity		
Components	Species	Calculated/Test Results

	Species	Calculated/Test Results
4-1)		
EC50	Water flea (Daphnia magna)	21.6 - 23.9 mg/l, 48 hours
LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	4740 - 6330 mg/l, 96 hours
82-5)		
LC50	Mozambique tilapia (Tilapia mossambica)	375 mg/l, 96 hours
	EC50 LC50 32-5)	4-1) EC50 Water flea (Daphnia magna) LC50 Rainbow trout,donaldson trout (Oncorhynchus mykiss) 32-5) LC50 Mozambique tilapia (Tilapia

Components		Species	Calculated/Test Results
POLY(DIMETHYLSILOXANE	E) (CAS 63148	3-62-9)	
Aquatic			
Fish	LC50	Channel catfish (Ictalurus punctatus)	2.36 - 4.15 mg/l, 96 hours
Persistence and degradability	No data is a	available on the degradability of this product	
Bioaccumulative potential			
Partition coefficient n-octa	nol / water (lo	g Kow)	
ACETONE		-0.24	
HEPTANE		4.66	
ISOBUTANE		2.76	
PROPANE		2.36	
Mobility in soil	No data ava	ailable.	
Other adverse effects		dverse environmental effects (e.g. ozone dep ndocrine disruption, global warming potentia	
13. Disposal consideratio	ons		
Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. 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. Do not re-use empty containers.		
14. Transport information	1		
DOT			
<unspecified></unspecified>			
UN number	UN1950		
		_	

<unspecified></unspecified>	
UN number	UN1950
UN proper shipping name	AEROSOLS
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Label(s)	2.1
Packing group	Not applicable.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
ΙΑΤΑ	
<unspecified></unspecified>	
UN number	UN1950
UN proper shipping name	AEROSOLS, FLAMMABLE
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Label(s)	2.1
Packing group	Not applicable.
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></unspecified>	
UN number	UN1950
UN proper shipping name	AEROSOLS
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Label(s)	2.1
Packing group	Not applicable.
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



## 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)

ACETONE (CAS 67-64-1)	Listed.
HEPTANE (CAS 142-82-5)	Listed.
ISOBUTANE (CAS 75-28-5)	Listed.
PROPANE (CAS 74-98-6)	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 - Yes Reactivity Hazard - No

SARA 302 Extremely haz Not listed.	ardous substance	
SARA 311/312 Hazardous chemical	s No	
SARA 313 (TRI reporting) Not regulated.		
Other federal regulations		
Clean Air Act (CAA) Secti	on 112 Hazardous Air Pollutant	s (HAPs) List
Not regulated.		
	on 112(r) Accidental Release Pr	evention (40 CFR 68.130)
ISOBUTANE (CAS 75 PROPANE (CAS 74-9		
Safe Drinking Water Act	Not regulated.	
(SDWA)		
Drug Enforcement A Chemical Code Numl		ential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and
ACETONE (CAS		6532
-		Exempt Chemical Mixtures (21 CFR 1310.12(c))
ACETONE (CAS)	al Mixtures Code Number	35 %WV
ACETONE (CAS		6532
US state regulations	· · · /	
US. California Controlled	Substances. CA Department of	Justice (California Health and Safety Code Section 11100)
Not listed.		
US. Massachusetts RTK ·		
ACETONE (CAS 67-64 HEPTANE (CAS 142-8		
ISOBUTANE (CAS 142-0		
PROPANE (CAS 74-9	8-6)	
•	nd Community Right-to-Know A	Act
ACETONE (CAS 67-64 HEPTANE (CAS 142-8		
ISOBUTANE (CAS 75		
PROPANE (CAS 74-9		
•	and Community Right-to-Know	Law
ACETONE (CAS 67-64 HEPTANE (CAS 142-8		
ISOBUTANE (CAS 75		
PROPANE (CAS 74-9	3-6)	
US. Rhode Island RTK ACETONE (CAS 67-64	4 1)	
ISOBUTANE (CAS 75	-	
PROPANE (CAS 74-9		
US. California Proposition	า 65	
WARNING: This productive harm.	ct contains a chemical known to th	he State of California to cause cancer and birth defects or other
International Inventories		
All components are listed o	r are exempt from listing on the To	oxic Substances Control Act Inventory.
16. Other information, ir	cluding date of preparation	on or last revision
Issue date	05-15-2015	
Version #	01	
HMIS® ratings	Health: 2	
-	Flammability: 4 Physical hazard: 0	

Part number(s)	XL-6
Discialitien	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.
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
NFPA ratings	Health: 2 Flammability: - Instability: 0