SAFETY DATA SHEET

1. Identification

Motorcraft

Product identifier	Premium Windshield Wash Concentrate
Other means of identification FIR No.	189309
Recommended use	Windshield washer fluid
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	Acute toxicity, oral	Category 3
	Acute toxicity, dermal	Category 3
	Acute toxicity, inhalation	Category 3
	Reproductive toxicity	Category 1B
	Specific target organ toxicity, single exposure	Category 1
	Specific target organ toxicity, repeated exposure	Category 1
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	
Label elements		



Danger

Hazard statement

Signal word

Highly flammable liquid and vapor. Toxic if swallowed. Toxic in contact with skin. Toxic if inhaled. May damage fertility or the unborn child. Causes damage to organs. Causes damage to organs through prolonged or repeated exposure.

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/vapors. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement Prevention

Response	If swallowed: Immediately call a poison center/doctor. Rinse mouth. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. 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. Take off immediately all contaminated clothing and wash it before reuse. In case of fire: Use appropriate media to extinguish.
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 be fatal or cause blindness if swallowed. Cannot be made nonpoisonous. May irritate eyes and skin. May cause irritation of respiratory tract.
Supplemental information	None.

3. Composition/information on ingredients

- **Mixtures Chemical name** Common name and synonyms CAS number % METHANOL 67-56-1 99.99 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. Skin contact Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical advice/attention if you feel unwell. Get medical attention if irritation develops and persists. Wash contaminated clothing before reuse. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if Eve contact 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 Headache. Dizziness. Nausea, vomiting. Direct contact with eyes may cause temporary irritation. symptoms/effects, acute and Prolonged exposure may cause chronic effects. delayed Indication of immediate 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 medical attention and special ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under treatment needed observation. Symptoms may be delayed. **General information** Take off immediately all contaminated clothing. 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). Do not use water jet as an extinguisher, as this will spread the fire. Unsuitable extinguishing media Specific hazards arising from 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 the chemical decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
- Special protective equipment
and precautions for
firefightersSelf-contained breathing apparatus and full protective clothing must be worn in case of fire.Fire fighting
equipment/instructionsIn case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can
do so without risk.Specific methodsUse standard firefighting procedures and consider the hazards of other involved materials.General fire hazardsHighly 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/vapors. 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. This product is miscible in water.
	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. For waste disposal, see section 13 of the SDS.
Environmental precautions	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/vapors. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Use only outdoors or in a well-ventilated area. 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. Observe good industrial hygiene practices. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. 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.

Components	Туре	Value	
METHANOL (CAS 67-56-1)	PEL	260 mg/m3	
		200 ppm	
US. ACGIH Threshold Limit Value	s (TLV)		
Components	Туре	Value	
METHANOL (CAS 67-56-1)	STEL	250 ppm	
	TWA	200 ppm	
NIOSH. Immediately Dangerous to	Life or Health (IDLH) Values	s, as amended	
Components	Туре	Value	
METHANOL (CAS 67-56-1)	IDLH	6 %	
		6000 ppm	

US OSHA Table 7-1 Permissible Exposure Limits (PEL) for Air Contaminants (29 CER 1910 1000)

METHANOL (CAS 67-56-1)	ST	EL	32	5 mg/m3
				0 ppm
	TΜ	/A	26	0 mg/m3
			20	0 ppm
ological limit values				
ACGIH Biological Exposu	re Indices (BEI)			
Components	Value	Determinant	Specimen	Sampling Time
METHANOL (CAS 67-56-1)	15 mg/l	Methanol	Urine	*
* - For sampling details, plea	ase see the source d	ocument.		
posure guidelines				
US - California OELs: Skir	n designation			
METHANOL (CAS 67-5 US - Minnesota Haz Subs:	,		e absorbed throu	ugh the skin.
METHANOL (CAS 67-5	56-1)	••	esignation applie	es.
US - Tennessee OELs: Ski	-	Conh		
METHANOL (CAS 67-5 US ACGIH Threshold Limi			e absorbed throu	ign the skin.
METHANOL (CAS 67-5		-	r of cutaneous a	bsorption
US NIOSH Pocket Guide to	o Chemical Hazards			
METHANOL (CAS 67-5	6-1)	Can be	e absorbed throu	ugh the skin.
propriate engineering ntrols	Provide eyewash station and safety shower. Use adequate ventilation to control airborne concentrations below the exposure limits/guidelines. If user operations generate a vapor, duand/or mist, use process enclosure, appropriate local exhaust ventilation, or other engineerin controls to control airborne levels below the recommended exposure limits/guidelines.			
dividual protection measure Eye/face protection		I protective equipm ses with side shields		
Skin protection				
Hand protection	The choice of an	appropriate glove do	es not only depe	hen the potential exists for skin exposure end on its material but also on other qua er. Nitrile or butyl rubber gloves are
Other	Wear appropriate	chemical resistant o	clothing if applica	able.
Respiratory protection	protect worker he maintenance sho	alth, an approved re	spirator must be with the require	entrations to a level which is adequate to worn. Respirator selection, use and ements of OSHA Respiratory Protection d CSA Z94.4.
Thermal hazards	Wear appropriate	thermal protective o	lothing, when ne	ecessary.
eneral hygiene nsiderations	personal hygiene	measures, such as	washing after ha	n using do not smoke. Always observe g Indling the material and before eating, ng and protective equipment to remove

Appearance	
Physical state	Liquid.
Form	Liquid.
Color	Blue
Odor	Alcoholic.
Odor threshold	Not available.
рН	Not available.
Melting point/freezing point	-144.4 °F (-98 °C)
Initial boiling point and boiling range	148.46 °F (64.7 °C)

Flash point	52.0 °F (11.1 °C) Closed Cup
Evaporation rate	>1 (BuAc=1)
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or exp	losive limits
Explosive limit - lower (%)	6 % v/v
Explosive limit - upper (%)	36 % v/v
Vapor pressure	13.2 kPa @ 20° C
Vapor density	>1 (Air=1)
Relative density	0.8 (Water=1)
Relative density temperature	59 °F (15 °C)
Solubility(ies)	
Solubility (water)	100 %
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
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.
Hazardous decomposition	Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular

Hazardous decomposition
productsUpon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular
weight hydrocarbons.

11. Toxicological information

Information on likely routes of exposure

information on likely routes of	exposure			
Inhalation	Toxic if inhaled. May cause irritation to the respiratory system. May cause damage to organs by inhalation.			
Skin contact	Toxic in contact with skin. Prolonged skin contact may cause temporary irritation.			
Eye contact	Based on available data, the classification criteria are not met. Direct contact with eyes may cause temporary irritation.			
Ingestion	Toxic if swallowed. HARMFUL OR FATAL IF SWALLOWED.			
Symptoms related to the physical, chemical and toxicological characteristics	Headache. Dizziness. Nausea, vomiting.			
Information on toxicological ef	fects			
Acute toxicity	Toxic if inhaled. Toxic in contact with skin. Toxic if swallowed.			
Additionality		Wallowed.		
Components	Species	Calculated/Test Results		
-				
Components				
Components METHANOL (CAS 67-56-1)	Species			
Components METHANOL (CAS 67-56-1) <u>Acute</u>				
Components METHANOL (CAS 67-56-1) <u>Acute</u> Dermal	Species	Calculated/Test Results		
Components METHANOL (CAS 67-56-1) <u>Acute</u> Dermal LD50	Species	Calculated/Test Results		
Components METHANOL (CAS 67-56-1) <u>Acute</u> Dermal LD50 Inhalation	Species Rabbit	Calculated/Test Results		
Components METHANOL (CAS 67-56-1) <u>Acute</u> Dermal LD50 Inhalation	Species Rabbit	Calculated/Test Results 15800 mg/kg 85.41 mg/l, 4.5 Hours		
Components METHANOL (CAS 67-56-1) <u>Acute</u> Dermal LD50 Inhalation	Species Rabbit Cat	Calculated/Test Results 15800 mg/kg 85.41 mg/l, 4.5 Hours 43.68 mg/l, 6 Hours		

Components	Species	Calculated/Test Results
Oral LD50	Dog	8000 mg/kg
	Monkey	2 g/kg
	Mouse	7300 mg/kg
	Rabbit	14.4 g/kg
	Rat	5628 mg/kg
Skin corrosion/irritation	Prolonged skin contact may cause temporary ir	ritation.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary i	irritation.
Respiratory or skin sensitization		
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	This product is not expected to cause skin sens	
Germ cell mutagenicity	No data available to indicate product or any con mutagenic or genotoxic.	
Carcinogenicity	Not classifiable as to carcinogenicity to humans	3.
Not listed.	valuation of Carcinogenicity Substances (29 CFR 1910.1001-1053)	
Reproductive toxicity	May damage fertility or the unborn child.	
Specific target organ toxicity - single exposure	Causes damage to organs. Respiratory tract. C	central nervous system. Liver. Visual organs.
Specific target organ toxicity - repeated exposure	Causes damage to organs through prolonged or repeated exposure. Central nervous system. Liver. Kidneys. Visual organs.	
Aspiration hazard	Not an aspiration hazard.	
Chronic effects	Prolonged inhalation may be harmful. Causes d exposure.	lamage to organs through prolonged or repeated
12. Ecological information		
Ecotoxicity		hazardous. However, this does not exclude the a harmful or damaging effect on the environment.
Persistence and degradability Bioaccumulative potential	No data is available on the degradability of any i	ingredients in the mixture.
Partition coefficient n-octand	ol / water (log Kow) -0.77	
Mobility in soil	No data available. This product is miscible in wa	ater and may not disperse in soil.
Other adverse effects	No other adverse environmental effects (e.g. oz potential, endocrine disruption, global warming	
13. Disposal consideration	S	
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. 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 regula	ations.
Hazardous waste code	D001: Waste Flammable material with a flash point <140 F 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).	

14. Transport information

DOT UN1230 **UN number** UN proper shipping name Methanol, solution (METHANOL RQ = 5001 LBS) Transport hazard class(es) 3 Class Subsidiary risk -3 Label(s) П Packing group **Environmental hazards** Marine pollutant No. Read safety instructions, SDS and emergency procedures before handling. Special precautions for user IB2, T7, TP2 **Special provisions** Packaging exceptions 150 Packaging non bulk 202 Packaging bulk 242 ΙΑΤΑ **UN number** UN1230 UN proper shipping name Methanol solution (METHANOL) Transport hazard class(es) Class 3 6.1 Subsidiary risk Packing group Ш **Environmental hazards** No. **ERG Code** 3L Special precautions for Read safety instructions, SDS and emergency procedures before handling. user Other information Passenger and cargo Allowed with restrictions. aircraft Cargo aircraft only Allowed with restrictions. IMDG **UN number** UN1230 UN proper shipping name METHANOL SOLUTION (METHANOL) Transport hazard class(es) 3 Class Subsidiary risk 6.1 Packing group Ш **Environmental hazards** Marine pollutant No. F-E. S-D EmS Read safety instructions, SDS and emergency procedures before handling. Special precautions for user Transport in bulk according to Not established. Annex II of MARPOL 73/78 and the IBC Code DOT



IATA; IMDG	6	>	
15. Regulatory information	n		
US federal regulations	This product is a "Haz Standard, 29 CFR 19 ²		fined by the OSHA Hazard Communication
Toxic Substances Control	Act (TSCA)		
TSCA Section 12(b) Ex	port Notification (40 CF	FR 707, Subpt. D)	
Not regulated.			
CERCLA Hazardous Substa	ance List (40 CFR 302.4	t)	
METHANOL (CAS 67-56 SARA 304 Emergency relea	-	Listed.	
Not regulated. OSHA Specifically Regulate	ed Substances (29 CFR	R 1910.1001-1053)	
Not listed.			
Superfund Amendments and Ro SARA 302 Extremely hazar Not listed.		986 (SARA)	
SARA 311/312 Hazardous chemical	Yes		
Classified hazard categories	Acute toxicity (any rou Reproductive toxicity	erosols, liquids, or solids ite of exposure) oxicity (single or repeate	
SARA 313 (TRI reporting)			
Chemical name		CAS number	% by wt.
METHANOL		67-56-1	99.99
Other federal regulations			
Clean Air Act (CAA) Section		ollutants (HAPs) List	
METHANOL (CAS 67-56 Clean Air Act (CAA) Section	,	ease Prevention (40 Cl	FR 68.130)
Not regulated.			
Safe Drinking Water Act (SDWA)	Contains component(s) regulated under the S	afe Drinking Water Act.
US state regulations			
California Proposition 65			
			h is known to the State of California to cause information go to www.P65Warnings.ca.gov.
California Proposition	65 - CRT: Listed date/D	evelopmental toxin	
METHANOL (CAS 6	37-56-1)	Listed: March	16, 2012
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	08-14-2023
Version	01

HMIS® ratings NFPA ratings	Health: 2 Flammability: 3 Physical hazard: 0 Health: 1 Flammability: 3 Instability: 0
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)	ZC-32-C1