# SAFETY DATA SHEET

### 1. Identification

Ford

Motorcraft.

Product identifier	Engine Shampoo and Degreaser
Other means of identification	
FIR No.	200950
Recommended use	Engine shampoo and degreaser
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	Aerosols	Category 3
Health hazards	Skin corrosion/irritation	Category 1
	Serious eye damage/eye irritation	Category 1
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	

Label elements



Signal word	Danger
Hazard statement	Pressurized container: May burst if heated. Causes severe skin burns and eye damage. Causes serious eye damage.
Precautionary statement	
Prevention	Keep away from heat/sparks/open flames/hot surfaces No smoking. Pressurized container: Do not pierce or burn, even after use. Do not breathe dust or mists. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.
Response	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTER/doctor. Wash contaminated clothing before reuse.
Storage	Store locked up. 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)	May cause damage to organs through prolonged or repeated exposure. Kidneys. Liver. Respiratory system.
Supplemental information	None.

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	Common name and synonyms	CAS number	%
2-(2-Butoxyethoxy)ethanol		112-34-5	3 - 7
4-nonylphenol, Branched, Ethoxylated		127087-87-0	3 - 7
BUTANE		106-97-8	2 - 5
PROPANE		74-98-6	1 - 4
Ammonia, aqueous solution		1336-21-6	0.1 - 1
disodium metasilicate		6834-92-0	0.1 - 1

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

#### 4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. 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. Call a physician or poison control center immediately.
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	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Chemical 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	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
5. Fire-fighting measures	
Suitable extinguishing media	Water fog. 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	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. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	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.
6 Accidental release mass	

#### 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. 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	Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Absorb in vermiculite, dry sand or earth and place into containers. 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. 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	Do not get in eyes, on skin, or on clothing. Avoid breathing mist or vapor. Avoid prolonged exposure. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Observe good industrial hygiene practices. Wear appropriate personal protective equipment. Do not re-use empty containers. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. For personal protection, see Section 8 of the SDS. Do not breathe mist/vapors. Use only in well-ventilated areas.
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. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).
8. Exposure controls/perso	onal 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 Permissible E	Exposure Limits (PEL) for Ai	r Contaminants (29 CFR 1910	.1000)
Components	Туре	Value	
Ammonia, aqueous solution (CAS 1336-21-6)	PEL	35 mg/m3	
		50 ppm	
PROPANE (CAS 74-98-6)	PEL	1800 mg/m3	
		1000 ppm	
US. ACGIH Threshold Limit Value	s (TLV)		
Components	Туре	Value	Form
2-(2-Butoxyethoxy)ethanol (CAS 112-34-5)	TWA	10 ppm	Inhalable fraction and vapor.
Ammonia, aqueous solution (CAS 1336-21-6)	STEL	35 ppm	
	TWA	25 ppm	
BUTANE (CAS 106-97-8)	STEL	1000 ppm	
NIOSH. Immediately Dangerous to	Life or Health (IDLH) Value	s, as amended	
Components	Туре	Value	
Ammonia, aqueous solution (CAS 1336-21-6)	IDLH	15 %	
		300 ppm	
BUTANE (CAS 106-97-8)	IDLH	1.6 %	
		2000 ppm	
		1600 ppm	
PROPANE (CAS 74-98-6)	IDLH	2.1 %	
		2100 ppm	
US. NIOSH: Pocket Guide to Chen	nical Hazards Recommende	d Exposure Limits (REL)	
Components	Туре	Value	
Ammonia, aqueous solution (CAS 1336-21-6)	STEL	27 mg/m3	
		35 ppm	
	TWA	18 mg/m3	

US. NIOSH: Pocket Guide Components	to Chemical Hazards Recommended Type	Exposure Limits (REL) Value	
		25 ppm	
BUTANE (CAS 106-97-8)	TWA	1900 mg/m3	
		800 ppm	
PROPANE (CAS 74-98-6)	TWA	1800 mg/m3	
		1000 ppm	
Biological limit values	No biological exposure limits noted	for the ingredient(s).	
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 Eye/face protection	s, such as personal protective equip Wear safety glasses with side shield	<b>ment</b> Is (or goggles).	
Skin protection			
Hand protection	Suitable chemical protective gloves The choice of an appropriate glove features and is different from one pr	should be worn when the potential exists for skin exposure. does not only depend on its material but also on other quality oducer to the other. Nitrile gloves are recommended.	
Other	Wear appropriate chemical resistant clothing if applicable.		
Respiratory protection	If engineering controls do not mainta protect worker health, an approved maintenance should be in accordan Standard 29 CFR 1910.134 and/or (	ain airborne concentrations to a level which is adequate to respirator must be worn. Respirator selection, use and ce with the requirements of OSHA Respiratory Protection Canadian Standard CSA Z94.4.	
Thermal hazards	Wear appropriate thermal protective	clothing, when necessary.	
General hygiene considerations	When using do not smoke. Always on after handling the material and befor clothing and protective equipment to the second	bserve good personal hygiene measures, such as washing re eating, drinking, and/or smoking. Routinely wash work p remove contaminants.	

# 9. Physical and chemical properties

Appearance	
Physical state	Liquid.
Form	Aerosol.
Color	Various.
Odor	Not available.
Odor threshold	Not available.
рН	12.9
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	-20.2 °F (-29.0 °C) Pensky-Martens Closed Cup
Evaporation rate	0.1 (BuAc=1)
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or exp	losive limits
Explosive limit - lower (%)	0.9 %
Explosive limit - upper (%)	9.5 %
Vapor pressure	101.3 kPa
Vapor density	1 (Air=1)
Relative density	0.96 (Water=1)
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.

Not available.
20.5 mm²/s
104 °F (40 °C)
5.81 kJ/g
12.9
519 g/l

### 10. Stability and reactivity

Reactivity	Reacts violently with strong acids. This product may react with oxidizing agents.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials. Do not mix with other chemicals.
Incompatible materials	Acids. Strong oxidizing agents. Oxidizing agents. Chlorine. Fluorine. 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 irritation to the respiratory system. Prolonged inhalation may be harmful.	
Skin contact	Causes severe skin burns.	
Eye contact	Causes serious eye damage.	
Ingestion	Causes digestive tract burns.	
Symptoms related to the physical, chemical and toxicological characteristics	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.	

#### Information on toxicological effects

#### Acute toxicity

Components	Species	Calculated/Test Results
Ammonia, aqueous solution (CAS	1336-21-6)	
Acute		
Oral		
LD50	Rat	350 mg/kg
BUTANE (CAS 106-97-8)		
Acute		
Inhalation		
LC50	Mouse	680 mg/l, 2 Hours
	Rat	658 mg/l, 4 Hours
disodium metasilicate (CAS 6834-	92-0)	
Acute		
Oral		
LD50	Mouse	2400 mg/kg
	Rat	1280 mg/kg
PROPANE (CAS 74-98-6)		
Acute		
Inhalation		
LC50	Rat	> 1464 mg/l, 15 Minutes
		> 1443 mg/l, 15 Minutes
Skin corrosion/irritation	Causes severe skin burns and eye damage.	

Serious eye damage/eye irritation	Causes serious eye damage.			
Respiratory or skin sensitizatio	n Not a reapirate	an consitizor		
		Not a respiratory sensitizer.		
Skin sensitization	This product is	s not expected to cause skin sensitizatio	on.	
Germ cell mutagenicity	No data availa mutagenic or g	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.		
Carcinogenicity	Not classifiable	e as to carcinogenicity to humans.		
IARC Monographs. Overall Not listed. OSHA Specifically Regulate Not listed.	Evaluation of C ed Substances (	carcinogenicity (29 CFR 1910.1001-1053)		
Reproductive toxicity	This product is	This product is not expected to cause reproductive or developmental effects		
Specific target organ toxicity - single exposure	Not classified.	Not classified.		
Specific target organ toxicity - repeated exposure	Not classified.	Not classified.		
Aspiration hazard	Not an aspirat	Not an aspiration hazard.		
Chronic effects	Prolonged inha exposure. Kidi	Prolonged inhalation may be harmful. Causes damage to organs through prolonged or repeated exposure. Kidneys. Liver.		
12. Ecological information	1			
Ecotoxicity	The product is possibility that	not classified as environmentally hazar large or frequent spills can have a harr	dous. However, this does not exclude the nful or damaging effect on the environment.	
Ecotoxicity				
Components		Species	Calculated/Test Results	
disodium metasilicate (CAS 6	834-92-0)			
Aquatic				
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	>= 0.28 - <= 0.57 mg/l, 48 hours	
Fish	LC50	Western mosquitofish (Gambusia affinis)	1800 mg/l, 96 hours	
Persistence and degradability Bioaccumulative potential	No data is ava	ilable on the degradability of any ingredi	ients in the mixture.	
Partition coefficient n-octa	nol / water (log	Kow)		
2-(2-Butoxyethoxy)ethanol Ammonia, aqueous solution BUTANE		0.56 -2.66 2.89		
PROPANE		2.36		
Mobility in soil	No data availa			
Other adverse effects	Potential.	ontains volatile organic compounds whi	ch have a photochemical ozone creation	
13. Disposal consideration	าร			
Disposal instructions	Contents under pressure. Do not puncture, incinerate or crush. Dispose of this material and its container to hazardous or special waste collection point. 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	D002: Waste Corrosive material [pH $\leq$ 2 or $=>12.5$ , or corrosive to steel] 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 emptied. Empt disposal. Do n	containers may retain product residue, ty containers should be taken to an app ot re-use empty containers.	follow label warnings even after container is roved waste handling site for recycling or	
FIR No.: 200950			SDS US	

## 14. Transport information

DOT	
UN number	UN1950
UN proper shipping name	Aerosols
Transport hazard class(es)	
Class	2.2
Subsidiary hazard	8
Label(s)	2.2, 8
Packing group	-
Environmental hazards	
Marine pollutant	No.
Special precautions for	Read safety instructions, SDS and emergency procedures before handling.
user	
ΙΑΤΑ	
UN number	UN1950
UN proper shipping name	Aerosols, non-flammable
Transport hazard class(es)	
Class	2.2
Subsidiary hazard	8
Packing group	-
Environmental hazards	No.
Special precautions for	Read safety instructions, SDS and emergency procedures before handling.
user	
IMDG	
UN number	UN1950
UN proper shipping name	AEROSOLS, NON-FLAMMABLE, CORROSIVE CONTAINING SUBSTANCES IN CLASS 8, PACKING GROUP 3
Transport hazard class(es)	
Class	2.2
Subsidiary hazard	8
Packing group	-
Environmental hazards	
Marine pollutant	No.
EmS	F-D, S-U
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



FIR No.: 200950 Version: 02 Issue Date: 04-03-2025

### 15. Regulatory information

US federal regulations	This produ Standard, 2	ct is a "Hazardoı 29 CFR 1910.12	us Chemical" as define 00.	d by the OSHA Hazard	l Communication
Toxic Substances Con	trol Act (TSCA)				
TSCA Section 12(b	o) Export Notifica	tion (40 CFR 70	)7, Subpt. D)		
Not regulated.	<i>,</i> .	·	,		
CERCLA Hazardous S	ubstance List (40	CFR 302.4)			
2-(2-Butoxyethoxy)	ethanol (CAS 112-	34-5)	Listed.		
Ammonia, aqueous solution (CAS 1336-		30-21-0)	Listed.		
PROPANE (CAS 74	PROPANE (CAS 100-97-6)		Listed.		
SARA 304 Emergency	release notificati	on			
Ammonia, aqueous OSHA Specifically Reg	solution (CAS 13 Julated Substanc	36-21-6) <b>es (29 CFR 191</b> )	100 LBS <b>0.1001-1053)</b>		
Not listed.		·			
Superfund Amendments a	nd Reauthorizatio	on Act of 1986 (	SARA)		
SARA 302 Extremely h	azardous substa	nce	, <i>,</i> ,		
Chemical name	CAS number	Reportable quantity (pounds)	Threshold planning quantity (pounds)	Threshold planning quantity, lower value (pounds)	Threshold planning quantity, upper value (pounds)
Ammonia, aqueous solution	1336-21-6	100	500	(P =)	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
SARA 311/312 Hazardo chemical	ous Yes				
Classified hazard categories	Skin corros Serious ey	sion or irritation e damage or eye	e irritation		
SARA 313 (TRI reportin Chemical name	ng)	C	AS number	% by wt.	
4-nonviphenol Brar	ched Ethoxylated	1 1	27087-87-0	3-7	
Other federal regulations				•	
Clean Air Act (CAA) Se	ection 112 Hazard	lous Air Polluta	unts (HAPs) List		
2-(2-Butoxyethoxy) Clean Air Act (CAA) Se	ethanol (CAS 112- ection 112(r) Acci	34-5) dental Release	Prevention (40 CFR (	68.130)	
Ammonia, aqueous BUTANE (CAS 106 PROPANE (CAS 74	solution (CAS 13 -97-8) 1-98-6)	36-21-6)	·		
Safe Drinking Water A (SDWA)	ct Contains c	omponent(s) reg	gulated under the Safe	Drinking Water Act.	
US state regulations					
California Proposition	65				
	: This product ca State of Califor information go	n expose you to nia to cause can to www.P65War	chemicals including E icer and birth defects o nings.ca.gov.	THYLENE OXIDE, which r other reproductive ha	ch is known to the rm. For more
California Proposi	tion 65 - CRT: Lis	ted date/Carcir	nogenic substance		
ETHYLENE O> California Proposi	لالله (CAS 75-21-4 tion 65 - CRT: Lis	3) sted date/Devel	Listed: July 1, 198 opmental toxin	7	
ETHYLENE O	(IDE (CAS 75-21-	3) Stod dato/Eomal	Listed: August 7, 2	2009	
ETHYLENE O	(IDE (CAS 75-21-	B)	Listed: February 2	7, 1987	
California Proposi	tion 65 - CRT: Lis	sted date/Male r	reproductive toxin		
ETHYLENE O	(IDE (CAS 75-21-8	3)	Listed: August 7, 2	2009	
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	04-03-2025
Revision date	04-03-2025
Version	02
HMIS® ratings	Health: 3 Flammability: 2 Physical hazard: 1
NFPA ratings	Health: 3 Flammability: - 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.
Revision information	This document has undergone significant changes and should be reviewed in its entirety.
Part number(s)	ZC-20