SAFETY DATA SHEET

1. Identification

Product identifier **Carburetor Tune-Up Cleaner**

Other means of identification

FIR No. 511049

Recommended use Carburetor cleaner

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 Not classified.

Health hazards

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Carcinogenicity	Category 2
Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
Specific target organ toxicity, repeated exposure	Category 1
Aspiration hazard	Category 1

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 May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. Suspected of causing cancer. Causes 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. 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. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Response	If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. 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 exposed or concerned: Get medical advice/attention. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. Collect spillage.
Storage	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)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
POLY(OXY-1,2-ETHANEDIYL), .ALPHA.-UNDECYL-.OMEGA.-HYDROXY-, BRANCHED AND LINEAR		127036-24-2	2 - < 4
Quaternary Ammonium Compounds, Coco Alkylbis(hydroxyethyl)methyl, Ethoxylated, Chlorides		61791-10-4	1 - < 3
Propane-1,2-diol		57-55-6	0.9 - < 2
Ammonia, aqueous solution		1336-21-6	0.8 - < 3
Distillates (petroleum), hydrotreated light		64742-47-8	26
NAPHTHALENE		91-20-3	20
Alcohols C9-11 Ethoxylated		68439-46-3	11
OLEIC ACID		112-80-1	8
2-BUTOXYETHANOL		111-76-2	3
Benzenesulfonic acid, C10-16-alkyl derivs.		68584-22-5	2 - 3

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	Aspiration may cause pulmonary edema and pneumonitis. Headache. Nausea, vomiting. Diarrhea. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. 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. Keep victim under observation. Symptoms may be delayed.
General information	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.

5. Fire-fighting measures

Suitable extinguishing media	Alcohol resistant foam. Powder. Dry chemicals. 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	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	Cool containers exposed to heat with water spray and remove container, if no risk is involved.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Will burn if involved in a fire. No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Avoid contact with eyes, skin, and clothing. Do not breathe mist/vapors. 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. Ensure adequate ventilation. 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	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. 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. 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	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. Use only in well-ventilated areas. When using, do not eat, drink or smoke. Avoid release to the environment. Should be handled in closed systems, if possible. Observe good industrial hygiene practices. Wash hands thoroughly after handling. 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 and sources of ignition. Store in tightly closed container. 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 Permissible Exposure Limits (PEL) for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
2-BUTOXYETHANOL (CAS 111-76-2)	PEL	240 mg/m3
		50 ppm
Ammonia, aqueous solution (CAS 1336-21-6)	PEL	35 mg/m3
		50 ppm
NAPHTHALENE (CAS 91-20-3)	PEL	50 mg/m3
		10 ppm

US. ACGIH Threshold Limit Values (TLV)

Components	Type	Value
2-BUTOXYETHANOL (CAS 111-76-2)	TWA	20 ppm

US. ACGIH Threshold Limit Values (TLV)

Components	Type	Value
Ammonia, aqueous solution (CAS 1336-21-6)	STEL	35 ppm
	TWA	25 ppm
NAPHTHALENE (CAS 91-20-3)	TWA	10 ppm

NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended

Components	Type	Value
2-BUTOXYETHANOL (CAS 111-76-2)	IDLH	1.1 %
		700 ppm
Ammonia, aqueous solution (CAS 1336-21-6)	IDLH	15 %
		300 ppm
NAPHTHALENE (CAS 91-20-3)	IDLH	0.9 %
		250 ppm

US. NIOSH: Pocket Guide to Chemical Hazards Recommended Exposure Limits (REL)

Components	Type	Value
2-BUTOXYETHANOL (CAS 111-76-2)	TWA	24 mg/m3
		5 ppm
Ammonia, aqueous solution (CAS 1336-21-6)	STEL	27 mg/m3
		35 ppm
	TWA	18 mg/m3
		25 ppm
Distillates (petroleum), hydrotreated light (CAS 64742-47-8)	TWA	100 mg/m3
NAPHTHALENE (CAS 91-20-3)	STEL	75 mg/m3
		15 ppm
	TWA	50 mg/m3
		10 ppm

US. OARS. Workplace Environmental Exposure Level (WEEL) Guide

Components	Type	Value	Form
Propane-1,2-diol (CAS 57-55-6)	TWA	10 mg/m3	Aerosol.

Biological limit values

ACGIH Biological Exposure Indices (BEI)

Components	Value	Determinant	Specimen	Sampling Time
2-BUTOXYETHANOL (CAS 111-76-2)	200 mg/g	Butoxyacetic acid (BAA), with hydrolysis	Creatinine in urine	*

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

Exposure guidelines

US - California OELs: Skin designation

2-BUTOXYETHANOL (CAS 111-76-2)	Can be absorbed through the skin.
NAPHTHALENE (CAS 91-20-3)	Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

2-BUTOXYETHANOL (CAS 111-76-2)	Skin designation applies.

US - Tennessee OELs: Skin designation

2-BUTOXYETHANOL (CAS 111-76-2)	Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

NAPHTHALENE (CAS 91-20-3)	Danger of cutaneous absorption

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

2-BUTOXYETHANOL (CAS 111-76-2)	Can be absorbed through the skin.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

2-BUTOXYETHANOL (CAS 111-76-2)	Can be absorbed through the skin.

Appropriate engineering controls Provide eyewash station and safety shower. 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 Suitable chemical protective gloves should be worn when the potential exists for 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. Use protective gloves made of: Polyvinyl chloride (PVC).

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. 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	10.8
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	>200.0 °F (>93.3 °C)
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.

Upper/lower flammability or explosive limits

Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	0.922 (Water=1)

Solubility(ies)

Solubility (water)	Immiscible
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.

Decomposition temperature	Not available.
Viscosity	16.27 cSt

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	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
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 skin irritation. 2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.
Eye contact	Causes serious eye irritation.
Ingestion	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	Aspiration may cause pulmonary edema and pneumonitis. Headache. Nausea, vomiting. Diarrhea. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity	May be fatal if swallowed and enters airways.

Components	**Species**	**Calculated/Test Results**
2-BUTOXYETHANOL (CAS 111-76-2)		
Acute		
Dermal		
LD50	Rabbit	400 mg/kg
Inhalation		
LC50	Mouse	700 ppm, 7 Hours
	Rat	486 ppm, 4 Hours
		450 ppm, 4 Hours
Oral		
LD50	Guinea pig	1.2 g/kg
	Mouse	1519 mg/kg
		1.2 g/kg
	Rabbit	0.32 g/kg
	Rat	560 mg/kg
		1.48 g/kg
Other		
LD50	Mouse	1130 mg/kg
	Rabbit	280 mg/kg
	Rat	550 mg/kg
		340 mg/kg

Components	Species	Calculated/Test Results
Ammonia, aqueous solution (CAS 1336-21-6)		
Acute		
Oral		
LD50	Rat	350 mg/kg
NAPHTHALENE (CAS 91-20-3)		
Acute		
Dermal		
LD50	Rabbit	> 2 g/kg
	Rat	> 20 g/kg
Oral		
LD50	Guinea pig	1200 mg/kg
	Rat	2400 mg/kg
		2200 mg/kg
		490 mg/kg
		2.6 g/kg
Other		
LD50	Mouse	969 mg/kg
		710 mg/kg
		533 mg/kg
		150 mg/kg
		100 mg/kg
Propane-1,2-diol (CAS 57-55-6)		
Acute		
Oral		
LD50	Dog	19 g/kg
	Guinea pig	18.4 g/kg
	Mouse	23.9 g/kg
	Rabbit	18 g/kg
	Rat	30 g/kg
Other		
LD50	Mouse	6630 mg/kg
		17.3 g/kg
	Rat	6660 mg/kg
		6423 mg/kg
		22.5 g/kg
		14 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 Suspected of causing cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

NAPHTHALENE (CAS 91-20-3) 2B Possibly carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

NAPHTHALENE (CAS 91-20-3)	Known To Be Human Carcinogen. Reasonably Anticipated to be a Human Carcinogen.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure May cause respiratory irritation.

Specific target organ toxicity - repeated exposure Causes damage to organs through prolonged or repeated exposure. Liver. Kidneys. Lymph system. Skin. Blood. Eyes. Central nervous system. Respiratory system. Hematopoietic system.

Aspiration hazard May be fatal if swallowed and enters airways.

Chronic effects Prolonged inhalation may be harmful. Causes damage to organs through prolonged or repeated exposure. Prolonged exposure may cause chronic effects.

12. Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects.

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)

2-BUTOXYETHANOL	0.83
Ammonia, aqueous solution	-2.66
NAPHTHALENE	3.3
OLEIC ACID	7.64
Propane-1,2-diol	-0.92

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations. Don't pollute. Conserve resources. Return used oil to collection centers.

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 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

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

2-BUTOXYETHANOL (CAS 111-76-2)	Listed.
Ammonia, aqueous solution (CAS 1336-21-6)	Listed.
Distillates (petroleum), hydrotreated light (CAS 64742-47-8)	Listed.
NAPHTHALENE (CAS 91-20-3)	Listed.

SARA 304 Emergency release notification

Ammonia; Ammonia (anhydrous) (CAS 1336-21-6)	100 LBS

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

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		

SARA 311/312 Hazardous chemical Yes

Classified hazard categories
Skin corrosion or irritation
Serious eye damage or eye irritation
Carcinogenicity
Specific target organ toxicity (single or repeated exposure)
Aspiration hazard

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
NAPHTHALENE	91-20-3	20

Other federal regulations

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

NAPHTHALENE (CAS 91-20-3)

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

Ammonia, aqueous solution (CAS 1336-21-6)

Safe Drinking Water Act (SDWA) Contains component(s) regulated under the Safe Drinking Water Act.

US state regulations

California Proposition 65

WARNING: This product can expose you to chemicals including ETHYLENE OXIDE, 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

ETHYLENE OXIDE (CAS 75-21-8) Listed: July 1, 1987

California Proposition 65 - CRT: Listed date/Developmental toxin

ETHYLENE OXIDE (CAS 75-21-8) Listed: August 7, 2009

California Proposition 65 - CRT: Listed date/Female reproductive toxin

ETHYLENE OXIDE (CAS 75-21-8) Listed: February 27, 1987

California Proposition 65 - CRT: Listed date/Male reproductive toxin

ETHYLENE OXIDE (CAS 75-21-8) Listed: August 7, 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 11-07-2023

Version 01

HMIS® ratings	Health: 2 Flammability: 1 Physical hazard: 0
NFPA ratings	Health: 2 Flammability: 1 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)	PM-3