

SAFETY DATA SHEET

1. Identification

Product identifier Electric A/C Compressor Oil

Other means of identification

FIR No. 180949

Recommended use A/C Refrigerant Compressor Oil

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Supplier

Company Name Ford Motor Company

Address Attention: MSDS Information, P.O. Box 1899

Dearborn, Michigan 48121

USA

 Telephone
 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

Physical hazards Not classified.

Health hazards Not classified.

Environmental hazards Hazardous to the aquatic environment, acute Category 3

hazard

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.
Signal word None.

Hazard statement Harmful to aquatic life.

Precautionary statement

Prevention Avoid release to the environment.

Response Wash hands after handling.

Storage Store away from incompatible materials.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise

classified (HNOC)

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	%
2,6-DI-TERT-BUTYL-P-CRESOL		128-37-0	0.1-1.0

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 Wash off with soap and water. Get medical attention if irritation develops and persists.

FIR No.: 180949 SDS US

Issue Date: 04-30-2015

Version: 01

1/6

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if

irritation develops and persists.

IngestionMost importantCall a physician or poison control center immediately. Rinse mouth. Do not induce vomiting.Direct contact with eyes may cause temporary irritation.

Most important

symptoms/effects, acute and delayed

Indication of immediate medical attention and special

Treat symptomatically.

medical attention and special treatment needed

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

General information

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from

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

Move containers from fire area if you can do so without risk.

Specific methods

equipment/instructions

the chemical

Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of vapors or mists. Avoid contact with eyes, skin, and clothing. Ensure adequate ventilation. 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

The product is immiscible with water and will spread on the water surface.

Large Spills: Stop the flow of material, if this is without risk. 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. 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

Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid contact with eyes, skin, and clothing. Avoid breathing mist or vapor. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Туре	Value	Form
2,6-DI-TERT-BUTYL-P-CR ESOL (CAS 128-37-0)	TWA	2 mg/m3	Inhalable fraction and vapor.

FIR No.: 180949 SDS US

Issue Date: 04-30-2015

Version: 01

US. NIOSH: Pocket Guide to Chemical Hazards

Components Type Value

TWA

2,6-DI-TERT-BUTYL-P-CR ESOL (CAS 128-37-0)

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, local exhaust ventilation, or other engineering controls to control airborne levels below the recommended

10 mg/m3

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 prolonged or repeated skin exposure. Neoprene gloves are

recommended. Nitrile gloves are recommended.

Other Wear suitable protective clothing. 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

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 Light yellow.
Odor Slight.

Odor threshold Not available.

pH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling Not available.

range

Flash point 503.6 °F (262.0 °C) COC

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.

Vapor pressure Not available.

Vapor density Not available.

Relative density 0.961

Relative density temperature 59 °F (15 °C)

Solubility(ies)

Version: 01

Solubility (water) INSOLUBLE

Partition coefficient Not available.

(n-octanol/water)

FIR No.: 180949 SDS US

3 / 6

Auto-ignition temperature Not available. Not available. **Decomposition temperature** Not available. **Viscosity**

Other information

Kinematic viscosity 68 cSt JIS K-2283 104 °F (40 °C) Kinematic viscosity

temperature

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Material is stable under normal conditions. Chemical stability

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Contact with incompatible materials. Conditions to avoid

Strong oxidizing agents. Halogenated materials. Acids. Incompatible materials

Hazardous decomposition

products

Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular

weight hydrocarbons. Sulfur oxides. Sulfur compounds.

11. Toxicological information

Information on likely routes of exposure

Inhalation May cause irritation to the respiratory system.

Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis. Skin contact

Direct contact with eyes may cause temporary irritation. Eye contact

Ingestion Expected to be a low ingestion hazard. May cause discomfort if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity

Calculated/Test Results Components **Species**

2,6-DI-TERT-BUTYL-P-CRESOL (CAS 128-37-0)

Acute

Oral

LD50 Guinea pig 10700 mg/kg Mouse 1040 mg/kg Rat 890 mg/kg

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation. Serious eye damage/eye Direct contact with eyes may cause temporary irritation.

irritation

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization Knowledge about sensitization hazard is incomplete.

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.

IARC Monographs. Overall Evaluation of Carcinogenicity

2,6-DI-TERT-BUTYL-P-CRESOL (CAS 128-37-0) 3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

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

Specific target organ toxicity -

single exposure

Not classified.

FIR No.: 180949 SDS US Version: 01

Issue Date: 04-30-2015

4/6

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard

Not an aspiration hazard.

12. Ecological information

Ecotoxicity Harmful to aquatic life.

Ecotoxicity

Components Species Calculated/Test Results

2,6-DI-TERT-BUTYL-P-CRESOL (CAS 128-37-0)

Aquatic

Crustacea EC50 Water flea (Daphnia pulex) 1.44 mg/l, 48 hours

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

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 instructionsCollect 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.

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.

14. Transport information

DOT

<Unspecified>

Not regulated as dangerous goods.

IATA

<Unspecified>

Not regulated as dangerous goods.

IMDG

<Unspecified>

Not regulated as dangerous goods.

Transport in bulk according to Not established.

Annex II of MARPOL 73/78 and

the IBC Code

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)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

FIR No.: 180949 SDS US

5/6

Version: 01

Issue Date: 04-30-2015

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous No

chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

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

Not regulated

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

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. Massachusetts RTK - Substance List

2,6-DI-TERT-BUTYL-P-CRESOL (CAS 128-37-0)

US. New Jersey Worker and Community Right-to-Know Act

2,6-DI-TERT-BUTYL-P-CRESOL (CAS 128-37-0)

US. Pennsylvania Worker and Community Right-to-Know Law

2,6-DI-TERT-BUTYL-P-CRESOL (CAS 128-37-0)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

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 04-30-2015

Version # 01

HMIS® ratings Health: 1

Flammability: 1 Physical hazard: 0

NFPA ratings Health: 1

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) YN-32

FIR No.: 180949 SDS US

Version: 01 Issue Date: 04-30-2015