MERCEDES-BENZ PART #: A 001 989 78 03 09 & A 001 989 78 03 11

Shell ATF 134 FE

MSDS# 11776 Version 1.0

Effective Date 07/06/2010

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Material Safety Data Sheet

1. MATERIAL AND COMPANY IDENTIFICATION

Material Name Shell ATF 134 FE Uses Transmission oil.

Manufacturer/Supplier : SOPUS Products

700 Milam

Houston TX 77002-2806

USA

MSDS Request

Emergency Telephone Number

Spill Information : 877-242-7400 : 877-504-9351 **Health Information**

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Identity	CAS No.	Concentration	
Distillates (petroleum),	64742-55-8	60.00 - 100.00 %	-
hydrotreated light paraffinic			
Distillates (petroleum),	64742-52-5	10.00 - 30.00 %	
hydrotreated heavy naphthenic			

The highly refined mineral oil contains <3% (w/w) DMSO-extract, according to IP346.

3. HAZARDS IDENTIFICATION

Appearance and Odour : Blue. Liquid at room temperature. Slight hydrocarbon.						
Health Hazards Safety Hazards Environmental Hazards	Not classified as dangerous for supply or conveyance.Not classified as flammable but will burn.Not classified as dangerous for the environment.					

Health Hazards : Not expected to be a health hazard when used under normal

conditions.

Health Hazards Inhalation

: Under normal conditions of use, this is not expected to be a

primary route of exposure.

Skin Contact : Prolonged or repeated skin contact without proper cleaning can

clog the pores of the skin resulting in disorders such as oil

acne/folliculitis.

: May cause slight irritation to eyes. Eve Contact

: Low toxicity if swallowed. Ingestion

Other Information Used oil may contain harmful impurities.

Signs and Symptoms : Oil acne/folliculitis signs and symptoms may include formation

of black pustules and spots on the skin of exposed areas. Ingestion may result in nausea, vomiting and/or diarrhoea.

Aggravated Medical : Pre-existing medical conditions of the following organ(s) or { error: Shell ATF 134 FE grafic MSDS# 11776 file not Version 1.0 found: Effective Date 07/06/2010 According to OSHA Hazard Communication Standard, 29 CFR

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Condition organ system(s) may be aggravated by exposure to this

material: Skin.

Environmental Hazards : Not classified as dangerous for the environment.

Under normal conditions of use or in a foreseeable emergency, **Additional Information**

> this product does not meet the definition of a hazardous chemical when evaluated according to the OSHA Hazard

Communication Standard, 29 CFR 1910.1200.

4. FIRST AID MEASURES

General Information Not expected to be a health hazard when used under normal

conditions.

Inhalation No treatment necessary under normal conditions of use. If

symptoms persist, obtain medical advice.

Skin Contact Remove contaminated clothing. Flush exposed area with water

and follow by washing with soap if available. If persistent

irritation occurs, obtain medical attention.

Eye Contact Flush eye with copious quantities of water. If persistent

irritation occurs, obtain medical attention.

Ingestion In general no treatment is necessary unless large quantities

are swallowed, however, get medical advice.

Advice to Physician Treat symptomatically.

5. FIRE FIGHTING MEASURES

Clear fire area of all non-emergency personnel.

Flash point > 190 °C / 374 °F (COC)

Upper / lower Typical 1 - 10 %(V)(based on mineral oil)

Flammability or **Explosion limits**

Auto ignition temperature > 320 °C / 608 °F

Specific Hazards

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic

compounds.

Suitable Extinguishing

Media

Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

Unsuitable Extinguishing Do not use water in a jet.

Media

Protective Equipment for

Firefighters

Proper protective equipment including breathing apparatus must be worn when approaching a fire in a confined space.

6. ACCIDENTAL RELEASE MEASURES

Avoid contact with spilled or released material. For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. See Chapter 13 for information on disposal. Observe the relevant local and international regulations.

Avoid contact with skin and eyes. Use appropriate containment **Protective measures**

> to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or

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other appropriate barriers.

Clean Up Methods : Slippery when spilt. Avoid accidents, clean up immediately.

Prevent from spreading by making a barrier with sand, earth or other containment material. Reclaim liquid directly or in an absorbent. Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly.

Additional Advice : Local authorities should be advised if significant spillages

cannot be contained.

7. HANDLING AND STORAGE

General Precautions : Use local exhaust ventilation if there is risk of inhalation of

vapours, mists or aerosols. Properly dispose of any contaminated rags or cleaning materials in order to prevent fires. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine

appropriate controls for safe handling, storage and disposal of

this material.

Handling : Avoid prolonged or repeated contact with skin. Avoid inhaling

vapour and/or mists. When handling product in drums, safety footwear should be worn and proper handling equipment

should be used.

Storage : Keep container tightly closed and in a cool, well-ventilated

place. Use properly labelled and closeable containers. Storage

Temperature: 0 - 50 °C / 32 - 122 °F

Recommended Materials : For containers or container linings, use mild steel or high

density polyethylene.

Unsuitable Materials : PVC.

Additional Information : Polyethylene containers should not be exposed to high

temperatures because of possible risk of distortion.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

Material	Source	Туре	ppm	mg/m3	Notation
Distillates (petroleum) , solvent- dewaxed heavy paraffinic	OSHA Z1	PEL	500 ppm	2,000 mg/m3	
Distillates (petroleum) , solvent- dewaxed heavy paraffinic	OSHA Z1A	TWA	400 ppm	1,600 mg/m3	

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Distillates (petroleum) , solvent- dewaxed heavy paraffinic	ACGIH	TWA(Mist.)		5 mg/m3	
Distillates (petroleum) , solvent- dewaxed heavy paraffinic	ACGIH	STEL(Mist.)		10 mg/m3	
Distillates (petroleum) , hydrotreate d light paraffinic	ACGIH	TWA(Mist.)		5 mg/m3	
Distillates (petroleum) , hydrotreate d light paraffinic	ACGIH	STEL(Mist.)		10 mg/m3	
Distillates (petroleum) , hydrotreate d heavy naphthenic	OSHA Z1	PEL	500 ppm	2,000 mg/m3	
Distillates (petroleum) , hydrotreate d heavy naphthenic	OSHA Z1A	TWA	400 ppm	1,600 mg/m3	
Oil mist, mineral	ACGIH	TWA(Mist.)		5 mg/m3	
Oil mist, mineral	ACGIH	STEL(Mist.)		10 mg/m3	

Additional Information : Shell has adopted as Interim Standards the OSHA Z1A values

that were established in 1989 and later rescinded.

Exposure Controls: The level of protection and types of controls necessary will vary

depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances.

Appropriate measures include: Adequate ventilation to control airborne concentrations. Where material is heated, sprayed or

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mist formed, there is greater potential for airborne

concentrations to be generated.

Personal Protective

Equipment

Respiratory Protection

Personal protective equipment (PPE) should meet

recommended national standards. Check with PPE suppliers. No respiratory protection is ordinarily required under normal

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conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material. If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for combined particulate/organic gases and vapours [boiling point

>65°C(149 °F)].

Hand Protection Where hand contact with the product may occur the use of

gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended.

Wear safety glasses or full face shield if splashes are likely to **Eye Protection**

Protective Clothing Skin protection not ordinarily required beyond standard issue

work clothes.

Monitoring Methods Monitoring of the concentration of substances in the breathing

> zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also

be appropriate.

Environmental Exposure

Controls

Minimise release to the environment. An environmental assessment must be made to ensure compliance with local

environmental legislation.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Blue. Liquid at room temperature.

Odour Slight hydrocarbon. Not applicable.

Initial Boiling Point and

Boiling Range

Pour point Typical -54 °C / -65 °F Flash point : > 190 °C / 374 °F (COC)

Upper / lower Flammability

or Explosion limits

: Typical 1 - 10 %(V) (based on mineral oil)

> 280 °C / 536 °F estimated value(s)

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: > 320 °C / 608 °F Auto-ignition temperature

Vapour pressure : $< 0.5 \text{ Pa at } 20 \text{ }^{\circ}\text{C} / 68 \text{ }^{\circ}\text{F} \text{ (estimated value(s))}$

Specific gravity : 0.853

Density : Typical 846 kg/m3 at 15 °C / 59 °F

Water solubility : Negligible.

n-octanol/water partition : > 6 (based on information on similar products)

coefficient (log Pow)

Kinematic viscosity : > 20 mm2/s at 40 °C / 104 °F Vapour density (air=1) : > 1 (estimated value(s)) : Data not available Evaporation rate (nBuAc=1)

10. STABILITY AND REACTIVITY

: Stable. Stability

Conditions to Avoid : Extremes of temperature and direct sunlight.

Materials to Avoid Strong oxidising agents.

Hazardous Decomposition Hazardous decomposition products are not expected to form

Products during normal storage.

11. TOXICOLOGICAL INFORMATION

Basis for Assessment : Information given is based on data on the components and the

toxicology of similar products.

Expected to be of low toxicity: LD50 > 5000 mg/kg, Rat **Acute Oral Toxicity Acute Dermal Toxicity** Expected to be of low toxicity: LD50 > 5000 mg/kg, Rabbit **Acute Inhalation Toxicity** Not considered to be an inhalation hazard under normal

conditions of use.

Skin Irritation Expected to be slightly irritating. Prolonged or repeated skin

contact without proper cleaning can clog the pores of the skin

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resulting in disorders such as oil acne/folliculitis.

Inhalation of vapours or mists may cause irritation.

Eye Irritation Expected to be slightly irritating.

Respiratory Irritation

Sensitisation Not expected to be a skin sensitiser.

Repeated Dose Toxicity Not expected to be a hazard.

Not considered a mutagenic hazard. Mutagenicity

Carcinogenicity Product contains mineral oils of types shown to be non-

carcinogenic in animal skin-painting studies. Highly refined

mineral oils are not classified as carcinogenic by the

International Agency for Research on Cancer (IARC). Other components are not known to be associated with carcinogenic

effects.

Reproductive and **Developmental Toxicity Additional Information**

Not expected to be a hazard.

Used oils may contain harmful impurities that have

accumulated during use. The concentration of such impurities will depend on use and they may present risks to health and the environment on disposal. ALL used oil should be handled with caution and skin contact avoided as far as possible.

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12. ECOLOGICAL INFORMATION

Ecotoxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components and the ecotoxicology of similar products.

Acute Toxicity : Poorly soluble mixture. May cause physical fouling of aquatic

organisms. Expected to be practically non toxic: LL/EL/IL50 > 100 mg/l (to aquatic organisms) (LL/EL50 expressed as the nominal amount of product required to prepare aqueous test extract). Mineral oil is not expected to cause any chronic effects to aquatic organisms at concentrations less than 1 mg/l.

Mobility : Liquid under most environmental conditions. Floats on water. If

it enters soil, it will adsorb to soil particles and will not be

mobile.

Persistence/degradability : Expected to be not readily biodegradable. Major constituents

are expected to be inherently biodegradable, but the product contains components that may persist in the environment. Contains components with the potential to bioaccumulate.

Bioaccumulation : Contains components with the potential to bioaccumulate **Other Adverse Effects** : Product is a mixture of non-volatile components, which are

: Product is a mixture of non-volatile components, which are not expected to be released to air in any significant quantities. Not

expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential.

13. DISPOSAL CONSIDERATIONS

Material Disposal : Recover or recycle if possible. It is the responsibility of the

waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Do not dispose into the environment, in

drains or in water courses.

Container Disposal : Dispose in accordance with prevailing regulations, preferably

to a recognised collector or contractor. The competence of the collector or contractor should be established beforehand.

Local Legislation : Disposal should be in accordance with applicable regional,

national, and local laws and regulations.

14. TRANSPORT INFORMATION

US Department of Transportation Classification (49CFR)

This material is not subject to DOT regulations under 49 CFR Parts 171-180.

IMDG

This material is not classified as dangerous under IMDG regulations.

IATA (Country variations may apply)

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This material is not classified as dangerous under IATA regulations.

15. REGULATORY INFORMATION

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

Federal Regulatory Status

Notification Status

EINECS

All components listed or polymer exempt.

TSCA

All components listed.

DSL

All components listed.

Shell classifies this material as an "oil" under the CERCLA Petroleum Exclusion, therefore releases to the environment are not reportable under CERCLA.

SARA Hazard Categories (311/312)

No SARA 311/312 Hazards.

State Regulatory Status

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)

This material does not contain any chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

New Jersey Right-To-Know Chemical List

Distillates (petroleum), hydrotreated light paraffinic (64742- Listed. 55-8)

Pennsylvania Right-To-Know Chemical List

Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)
Distillates (petroleum), hydrotreated heavy naphthenic (64742-52-5)

Listed.

16. OTHER INFORMATION

NFPA Rating (Health, : 0, 1, 0 Fire, Reactivity)

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MSDS Revisions : A vertical bar (|) in the left margin indicates an amendment

from the previous version.

MSDS Regulation : The content and format of this MSDS is in accordance with the

OSHA Hazard Communication Standard, 29 CFR 1910.1200.

MSDS Distribution : The information in this document should be made available to

all who may handle the product.

Disclaimer : The information contained herein is based on our current

knowledge of the underlying data and is intended to describe the product for the purpose of health, safety and environmental requirements only. No warranty or guarantee is expressed or implied regarding the accuracy of these data or the results to

be obtained from the use of the product.