

## Safety Data Sheet

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### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product Identifier

**Material Name** : Shell TF 0870 B  
**Product Code** : 001E7540

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Product Use** : Transmission oil.

**Uses Advised Against** : This product must not be used in applications other than the above without first seeking the advice of the supplier.

#### 1.3 Details of the Supplier of the safety data sheet

**Manufacturer/Supplier** : Shell Austria Gesellschaft m.b.H.  
Lobgrundstrasse 3  
1220 Wien  
Austria

**Telephone** : (+43) 1797970

**Fax** : (+43) 1797971199

**Email Contact for Safety Data Sheet** : If you have any enquiries about the content of this MSDS please email lubricantSDS@shell.com

#### 1.4 Emergency Telephone Number

: (+43) 1797972444

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### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

67/548/EEC or 1999/45/EC	
Hazard Characteristics	R-phrases(s)
Not classified as dangerous under EC criteria.	

**Sensitiser not sufficient to classify** : Contains calcium sulphonate. Contains ethoxylated amine. May produce an allergic reaction.

**Safety Data Sheet****Labeling according to Directive 1999/45/EC / 67/548/EEC**

EC Symbols : No Hazard Symbol required

EC Classification : Not classified as dangerous under EC criteria.

EC Risk Phrases : Not classified.

EC Safety Phrases : Not classified.

**2.3 Other Hazards**

**Health Hazards** : Not expected to be a health hazard when used under normal conditions. Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis. Used oil may contain harmful impurities.

**Safety Hazards** : Not classified as flammable but will burn.

**Environmental Hazards** : Not classified as dangerous for the environment.

**3. COMPOSITION/INFORMATION ON INGREDIENTS****3.2 Mixtures**

**Mixture Description** : Blend of severely hydrotreated slack wax, polyolefins and additives. Highly refined mineral oil.

**Hazardous Components****Classification of components according to Regulation (EC) No 1272/2008**

Chemical Name	CAS No.	EINECS	REACH Registration No.	Conc.
Calcium sulphonate				0,10 - 0,50%
Ethoxylated amine	61791-44-4	263-177-5		0,10 - 0,50%

Chemical Name	Hazard Class & Category	Hazard Statement
Calcium sulphonate	Skin Sens., 1;	H317;
Ethoxylated amine	Acute Tox., 4; Skin Corr., 1B; Skin Sens., 1; Aquatic Acute, 1;	H302; H314; H317; H400;

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### Classification of components according to 67/548/EEC

Chemical Name	CAS No.	EINECS	REACH Registration No.	Symbol(s)	R-phrase(s)	Conc.
Calcium sulphonate				Xi	R43	0,10 - 0,50%
Ethoxylated amine	61791-44-4	263-177-5		C, Xn, N	R22; R34; R43; R50	0,10 - 0,50%

**Additional Information** : The highly refined mineral oil contains <3% (w/w) DMSO-extract, according to IP346. The highly refined mineral oil is only present as additive diluent.

Refer to Ch 16 for full text of R- and H- phrases.

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## 4. FIRST AID MEASURES

### 4.1 Description of 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.
- 4.2 Most important symptoms and effects, both acute and delayed** : 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.
- 4.3 Indication of any immediate medical attention and special treatment needed** : Treat symptomatically.

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## 5. FIRE FIGHTING MEASURES

Clear fire area of all non-emergency personnel.

**5.1 Extinguishing Media** : Foam, water spray or fog. Dry chemical powder, carbon

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- dioxide, sand or earth may be used for small fires only.
- Unsuitable Extinguishing Media** : Do not use water in a jet.
- 5.2 Special hazards arising from the substance or mixture** : Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds.
- 5.3 Advice for firefighters** : Proper protective equipment including breathing apparatus must be worn when approaching a fire in a confined space.

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### 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.

- 6.1 Personal Precautions, Protective Equipment and Emergency Procedures** : Avoid contact with skin and eyes.
- 6.2 Environmental Precautions** : Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers.
- 6.3 Methods and Material for Containment and Clean Up** : 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.
- 6.4 Reference to other sections** : For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. For guidance on disposal of spilled material see Chapter 13 of this Material Safety Data Sheet.

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### 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.

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- 7.1 Precautions for Safe 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.
- 7.2 Conditions for safe storage, including any incompatibilities** : Keep container tightly closed and in a cool, well-ventilated place. Use properly labelled and closeable containers. Store at ambient temperature.
- Additional Information** : Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion.  
Storage class according to TRGS 510: 10  
Fire hazard classification: B
- Recommended Materials** : For containers or container linings, use mild steel or high density polyethylene.
- Unsuitable Materials** : PVC.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

If the American Conference of Governmental Industrial Hygienists (ACGIH) value is provided on this document, it is provided for information only.

### 8.1 Control Parameters

#### Occupational Exposure Limits

Material	Source	Type	ppm	mg/m3	Notation
Oil mist, mineral	ACGIH	TWA(Inhalable fraction.)		5 mg/m3	

### Biological Exposure Index (BEI)

Data not available

- PNEC related information** : Substance is a hydrocarbon with a complex, unknown or variable composition. Conventional methods of deriving PNECs are not appropriate and it is not possible to identify a single representative PNEC for such substances.

### 8.2 Exposure Controls

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**General Information** : 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 mist formed, there is greater potential for airborne concentrations to be generated.

### Occupational Exposure Controls

- Personal Protective Equipment** : Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.
- Eye Protection** : Wear safety glasses or full face shield if splashes are likely to occur. Approved to EU Standard EN166.
- 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.
- Body protection** : Skin protection not ordinarily required beyond standard issue work clothes.
- Respiratory Protection** : No respiratory protection is ordinarily required under normal 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)] meeting EN14387.
- Thermal Hazards** : Not applicable.
- Monitoring Methods** : Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to

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confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate.

### Environmental Exposure Controls

**Environmental exposure control measures** : Minimise release to the environment. An environmental assessment must be made to ensure compliance with local environmental legislation.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance	: Amber. Liquid at room temperature.
Odour	: Slight hydrocarbon.
pH	: Not applicable.
Initial Boiling Point and Boiling Range	: > 280 °C / 536 °F estimated value(s)
Pour point	: Typical -60 °C / -76 °F
Flash point	: Typical 230 °C / 446 °F (COC)
Upper / lower Flammability or Explosion limits	: Typical 1 - 10 %(V)
Auto-ignition temperature	: > 320 °C / 608 °F
Vapour pressure	: < 0,5 Pa at 20 °C / 68 °F (estimated value(s))
Specific gravity	: Typical 0,833 at 15 °C / 59 °F
Density	: Typical 833 kg/m <sup>3</sup> at 15 °C / 59 °F
Water solubility	: Negligible.
Solubility in other solvents	: Data not available
n-octanol/water partition coefficient (log Pow)	: > 6 (based on information on similar products)
Dynamic viscosity	: Data not available
Kinematic viscosity	: Typical 28 mm <sup>2</sup> /s at 40 °C / 104 °F
Vapour density (air=1)	: > 1 (estimated value(s))
Evaporation rate (nBuAc=1)	: Data not available
Decomposition Temperature	: Data not available
Flammability	: Data not available

### 9.2 Other Information

Other Information	: not a VOC
Volatile organic carbon content	: 0 %

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### 10. STABILITY AND REACTIVITY

- 10.1 Reactivity** : The product does not pose any further reactivity hazards in addition to those listed in the following sub-paragraph.
- 10.2 Chemical stability** : Stable.
- 10.3 Possibility of Hazardous Reactions** :  
Reacts with strong oxidising agents.
- 10.4 Conditions to Avoid** : Extremes of temperature and direct sunlight.
- 10.5 Incompatible Materials** : Strong oxidising agents.
- 10.6 Hazardous Decomposition Products** : Hazardous decomposition products are not expected to form during normal storage.

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### 11. TOXICOLOGICAL INFORMATION

#### 11.1 Information on Toxicological effects

- Basis for Assessment** : Information given is based on data on the components and the toxicology of similar products.
- Likely Routes of Exposure** : Skin and eye contact are the primary routes of exposure although exposure may occur following accidental ingestion.
- Acute Oral Toxicity** : Expected to be of low toxicity: LD50 > 5000 mg/kg , Rat
- 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 corrosion/irritation** : Expected to be slightly irritating. Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.
- Serious eye damage/irritation** : Expected to be slightly irritating.
- Respiratory Irritation** : Inhalation of vapours or mists may cause irritation.
- Respiratory or skin sensitisation** : Not expected to be a skin sensitiser.
- Aspiration Hazard** : Not considered an aspiration hazard.
- Germ cell mutagenicity** : Not considered a mutagenic hazard.
- Carcinogenicity** : Components are not known to be associated with carcinogenic effects.
- Reproductive and Developmental Toxicity** : Not expected to be a hazard.
- Specific target organ** : Not expected to be a hazard.

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<b>toxicity - single exposure Specific target organ toxicity - repeated exposure Additional Information</b>	:	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

<b>Basis for Assessment</b>	:	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.
<b>12.1 Toxicity Acute Toxicity</b>	:	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.
<b>12.2 Persistence and degradability</b>	:	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.
<b>12.3 Bioaccumulative Potential</b>	:	Contains components with the potential to bioaccumulate.
<b>12.4 Mobility</b>	:	Liquid under most environmental conditions. Floats on water. If it enters soil, it will adsorb to soil particles and will not be mobile.
<b>12.5 Result of PBT and vPvB assesment</b>	:	The substance does not fulfill all screening criteria for persistence, bioaccumulation and toxicity and hence is not considered to be PBT or vPvB.
<b>12.6 Other Adverse Effects</b>	:	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.

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### 13. DISPOSAL CONSIDERATIONS

#### 13.1 Waste Treatment Methods

- 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.  
EU Waste Disposal Code (EWC): 13 02 06 synthetic engine, gear and lubricating oils. Classification of waste is always the responsibility of the end user.

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### 14. TRANSPORT INFORMATION

**Land transport (ADR/RID):**

**ADR**

This material is not classified as dangerous under ADR regulations.

**RID**

This material is not classified as dangerous under RID regulations.

**Inland waterways transport (ADN):**

This material is not classified as dangerous under ADN regulations.

**Sea transport (IMDG Code):**

This material is not classified as dangerous under IMDG regulations.

**Air transport (IATA):**

This material is either not classified as dangerous under IATA regulations or needs to follow country specific requirements.

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### 15. REGULATORY INFORMATION

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

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### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### Other regulatory Information

**Authorisations and/or restrictions on use** : Product is not subject to Authorisation under REACh.

#### Chemical Inventory Status

EINECS : All components listed or polymer exempt.  
TSCA : All components listed.

#### National Legislation

Water Pollution Class : WGK 2 - hazard to waters (appendix 2, VwVwS, preparations).  
Other Information : Technische Anleitung Luft: Product not listed by name. Observe section 5.2.5 in connection with section 5.4.9

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## 16. OTHER INFORMATION

#### R-phrases(s)

Not classified.  
R22 Harmful if swallowed.  
R34 Causes burns.  
R43 May cause sensitisation by skin contact.  
R50 Very toxic to aquatic organisms.

#### CLP Hazard Statements

H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H317 May cause an allergic skin reaction.  
H400 Very toxic to aquatic life.

#### Identified Uses according to the Use Descriptor System

**Recommended Restrictions on Use** : This product must not be used in applications other than the above without first seeking the advice of the supplier.

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### (Advice Against)

### Other Information

- MSDS Distribution** : The information in this document should be made available to all who may handle the product.
- MSDS Version Number** : 1.0
- MSDS Effective Date** : 11.07.2012
- MSDS Revisions** : A vertical bar (|) in the left margin indicates an amendment from the previous version.
- MSDS Regulation** : Regulation 1907/2006/EC
- Disclaimer** : This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.