Shell Canada Limited

Material Safety Data Sheet

Effective Date: 2006-06-05
Supersedes: 2003-06-05

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT:	**TELLUS* T 22**
SYNONYMS:	LOW TEMPERATURE HYDRAULIC OIL
PRODUCT USE:	Hydraulic Fluid

SUPPLIER	**TELEPHONE NUMBERS**	
Shell Canada Limited (SCL)	**Shell Emergency Number**	1-800-661-7378
P.O. Box 100, Station M	**CANUTEC 24 HOUR EMERGENCY NUMBER**	613-996-6666
400-4th Ave. S.W.	For general information:	1-800-661-1600
Calgary, AB Canada	For MSDS information:	403-691-3982
T2P 2H5	(From 7:30 to 4:30 Mountain Time)	

This MSDS was prepared by the Toxicology and Product Stewardship Section of Shell Canada Limited.

*An asterisk in the product name designates a trade-mark(s) of Shell Canada Limited, used under license by Shell Canada Products.

2. COMPOSITION / INFORMATION ON INGREDIENTS

THIS PRODUCT IS NOT A WHMIS CONTROLLED SUBSTANCE.
See Section 8 for Occupational Exposure Guidelines.

3. HAZARDS IDENTIFICATION

Physical Description: Viscous Liquid Lightly Coloured Hydrocarbon Odour

Routes of Exposure: Exposure will most likely occur through skin contact or from inhalation of mechanically or thermally generated oil mists.

Hazards:

This product is not expected to be irritating and has a low level of toxicity under normal use.
Inhalation of oil mist or vapours from hot oil may cause irritation of the upper respiratory tract.

For further information on health effects, see Section 11.

4. FIRST AID

Eyes: Flush eyes with water for at least 15 minutes while holding eyelids open. If irritation occurs and persists, obtain medical attention.

Skin: Wipe excess from skin. Wash contaminated skin with mild soap and water for 15 minutes. If irritation occurs and persists, obtain medical attention. If material is injected under the skin, get medical attention promptly to prevent serious damage; do not wait for symptoms to develop.

Ingestion: Not normally required; obtain medical attention if large amounts have been ingested. Do not induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.

Inhalation: Remove victim from further exposure. Additional first aid treatment is not ordinarily required.

Notes to Physician: In general, lubricating oils have low oral toxicity. High pressure injection under the skin may have serious consequences and may require urgent treatment.

5. FIRE FIGHTING MEASURES

Extinguishing Media: Dry Chemical
Carbon Dioxide
Foam
Water Fog

Firefighting Instructions: Material will not burn unless preheated. Product will float and can be reignited on surface of water. Do not use a direct stream of water as it may spread fire. Use water to cool fire exposed containers. Water may be used to flush spills away from exposure. Do not enter confined fire space without adequate protective clothing and an approved positive pressure self-contained breathing apparatus.

Hazardous Combustion Products: Carbon monoxide, carbon dioxide and dense smoke are produced on combustion.

6. ACCIDENTAL RELEASE MEASURES

Eliminate all ignition sources. Isolate hazard area and restrict access. Wear appropriate breathing apparatus (if applicable) and protective clothing. Stop leak only if safe to do so. Spilled material is slippery. Dike and contain land spills; contain spills to water by booming. For large spills remove by mechanical means and place in containers. Absorb residue or small spills with absorbent material and remove to non-leaking containers for disposal. Flush area with water to remove trace residue. Dispose of recovered material as noted under Disposal Considerations. Notify appropriate environmental agency(ies).

7. HANDLING AND STORAGE

Handling: Avoid excessive heat, formation of oil mist, breathing of vapours and mist of hot oil and prolonged or repeated contact with skin. Wash with soap and water prior to eating, drinking, smoking, applying cosmetics or using toilet facilities. Launder contaminated clothing prior to reuse. Use good personal hygiene.

Storage: Store in a cool, dry, well ventilated area, away from heat and ignition sources.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

The following information, while appropriate for this product, is general in nature. The selection of personal protective equipment will vary depending on the conditions of use.

OCCUPATIONAL EXPOSURE LIMITS (Current ACGIH TLV/TWA unless otherwise noted):
Oil mist (mineral): 5 mg/m3 (STEL: 10 mg/m3)

Mechanical Ventilation: Not normally required. Local ventilation is recommended if oil mist is present or if exposure limit is exceeded. Make up air should always be supplied to balance air exhausted (either generally or locally).

PERSONAL PROTECTIVE EQUIPMENT:

Eye Protection: No special eye protection is routinely necessary. Wear safety glasses as appropriate.

Skin Protection:	Not normally needed. Chemically-resistant gloves should be worn for frequent or prolonged contact with this product.
Respiratory Protection:	Not normally required under intended conditions of use. If airborne concentration is high (e.g. when product is heated), use a NIOSH-approved chemical cartridge respirator with organic vapour cartridges in combination with a P95 particulate filter.

9. PHYSICAL DATA

Physical State:	Viscous Liquid	**Odour:**	Hydrocarbon Odour
Appearance:	Lightly Coloured	**Odour Threshold:**	Not available
Pour Point, ℃ :	Pour Point < -45 ℃	**Boiling Point, ℃ :**	
Vapour Pressure (absolute):		**Vapour Density (air = 1):**	Not available
Density:	858.8 kg/m3 @ 15 ℃	**Flash Point, ℃ :**	Cleveland Open Cup approximately 166 ℃
Specific Gravity (Water = 1):		**Lower Flammable Limit:**	Not available
pH:	Not applicable	**Upper Flammable Limit:**	Not available
Viscosity:	20.9 - 23.1 cSt @ 40 ℃	**Autoignition Temperature, ℃:**	Not available
Evaporation Rate (n-BuAc = 1):	Not available	**Partition Coefficient (log K_{ow}):**	Not available
Water Solubility:	Insoluble	**Molecular Weight:**	
Other Solvents:	Hydrocarbon Solvents	**Formula:**	

10. STABILITY AND REACTIVITY

Chemically Stable:	Yes	**Hazardous Polymerization:**	No
Sensitive to Mechanical Impact:	No	**Sensitive to Static Discharge:**	No
Incompatible Materials:	Avoid strong oxidizing agents.		
Conditions of Reactivity:	Avoid excessive heat, formation of vapours or mists.		

11. TOXICOLOGICAL INFORMATION

Routes of Exposure:	Exposure will most likely occur through skin contact or from inhalation of mechanically or thermally generated oil mists.
Irritancy:	This product is not a primary skin irritant after exposure of short duration, is not a skin sensitizer and is not irritating to the eyes.
Acute Toxicity:	This product is not expected to be irritating and has a low level of toxicity under normal use.
Chronic Effects:	Prolonged or repeated contact may cause various forms of dermatitis including folliculitis and oil acne. Long term intensive exposure to oil mist may cause benign lung fibrosis.

12. ECOLOGICAL INFORMATION

Environmental Effects:	Block off drains and ditches. Do not allow product or runoff from fire control to enter storm or sanitary sewers, lakes, rivers, streams, or public waterways. Provincial regulations require and federal regulations may require that environmental and/or other agencies be notified of a spill incident. Spill area must be cleaned and restored to original condition or to the satisfaction of authorities.
Biodegradability:	Not readily biodegradable.

13. DISPOSAL CONSIDERATIONS

Waste management priorities (depending on volumes and concentration of waste) are: 1. recycle (reprocess), 2. energy recovery (e.g. cement kilns, thermal power generation), 3. incineration, 4. disposal at a licenced waste disposal facility. Do not attempt to combust waste on-site.

14. TRANSPORTATION INFORMATION

Canadian Road and Rail Shipping Classification:
This product is not regulated under the Canadian Transportation of Dangerous Goods Regulations for transport by road and rail.

15. REGULATORY INFORMATION

This product has been classified in accordance with the hazard criteria of the *Controlled Products Regulations (*CPR*)* and the MSDS contains all the information required by the CPR.

	THIS PRODUCT IS NOT A WHMIS CONTROLLED SUBSTANCE.
DSL/NDSL Status:	This product and/or all components are listed on the U.S. EPA TSCA Inventory.
Other Regulatory Status:	Provincial criteria are likely and should be requested when notifying provincial authorities. No Canadian federal standard; however, for general discharge guidance, federal installations limited to 15 mg/L for total oil and grease.

16. ADDITIONAL INFORMATION

Revisions: This MSDS has been reviewed and updated.
Changes have been made to:
Section 5
Section 8