Date of Issue: 05/03/2001



BP OIL NEW ZEALAND LTD MATERIAL SAFETY DATA SHEET

BP Turbo Oil 25, 2197, 2380, 2389

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Identification of substance/preparation

BP Turbo Oil 25, 2197, 2380, 2389 Alternative Names: Issue date: 05/03/2001

Application

Lubricating oil for aviation turbine engines. This synthetic lubricant should not be mixed with petroleum based oils or used in aircraft or automomobile piston engines. For specific application advice see appropriate Technical Data Sheet or consult your BP representative

Company Identification

BP Oil New Zealand Limited 20 Customhouse Quay Wellington 1 New Zealand

Emergency Telephone Number

64 4 495 5000 NZ National Poisons Centre Emergency Number 64 3 474 7000.

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Composition

Synthetic base stock. (90 - 100%)

Tris(methylphenyl) phosphate CAS No. 1330-78-5 EINECS No. 215-548-8 (<3%) (contains <0.1% ortho isomer)

Mixed aromatic amines (<5%)

Hazardous Components

No component is present at sufficient concentration to require a hazardous classification.

3. HAZARDS IDENTIFICATION

This material is not considered to be hazardous but should be handled in accordance with good industrial hygiene and safety practices.

4. FIRST-AID MEASURES

http://amtulld002.bp.com/alignmsds/oavfin.nsf/7ff80d7b66c2265680256ba0002d710e/8475... 5/5/2006

Eyes

Wash eye thoroughly with copious quantities of water ensuring eyelids are held open. Obtain medical advice if any pain or redness develops or persists.

Skin

Wash skin thoroughly with soap and water as soon as reasonably practicable. Remove heavily contaminated clothing and wash underlying skin.

Ingestion

If contamination of the mouth occurs wash out thoroughly with water. Except as a deliberate act the ingestion of large amounts of product is unlikely. If it should occur do not induce vomiting obtain medical advice.

Inhalation

If inhalation of mists fumes or vapour causes irritation to the nose or throat or coughing remove to fresh air. If symptoms persist obtain medical advice.

Medical Advice

Treatment should in general be symptomatic and directed to relieving any effects.

5. FIRE-FIGHTING MEASURES

Use foam dry powder or water fog. DO NOT USE water jets.

Fires in confined spaces should be dealt with by trained personnel wearing approved breathing apparatus. Water may be used to cool nearby heat exposed areas/objects/packages. Avoid spraying directly into storage containers because of the danger of boil-over.

Combustion Products

Toxic fumes may be evolved on burning or exposure to heat. See Stability and Reactivity Section 10 of this Safety Data Sheet.

6. ACCIDENTAL RELEASE MEASURES

Contain and recover spilled material using sand or other suitable inert absorbent material.

It is advised that stocks of suitable absorbent material should be held in quantities sufficient to deal with any spillage which may be reasonably anticipated.

Spilled material may make surfaces slippery.

Protect drains from potential spills to minimise contamination. Do not wash product into drainage system. In the case of large spills contact the appropriate authorities.

In the case of spillage on water the product may emulsify when shaken or mixed and recovery may be difficult. In the case of spillage on water prevent the spread of product by the use of suitable barrier equipment. Recover product from the surface. Protect environmentally sensitive areas and water supplies.

7. HANDLING AND STORAGE

Handling Precautions

Avoid contact with eyes. If splashing is likely to occur wear a full face visor or chemical goggles as appropriate. Avoid frequent or prolonged skin contact with fresh or used product.

Good working practices high standards of personal hygiene and plant cleanliness must be maintained at all times.

Wash hands thoroughly after contact.

Use disposable cloths and discard when soiled. Do not put soiled cloths into pockets.

Fire Prevention

Product contaminated rags paper or material used to absorb spillages represent a fire hazard and should not be allowed to accumulate. Dispose of safely immediately after use.

Storage Conditions

Store under cover away from heat and sources of ignition. Avoid temperatures above 60°C

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits

There is no appropriate occupational exposure limit for this material.

Ensure good ventilation.

Avoid as far as reasonably practicable inhalation of vapour mists or fumes generated during use.

If vapour mists or fumes are generated their concentration in the workplace air should be controlled to the lowest reasonably practicable level.

Protective Clothing

Wear face visor or goggles in circumstances where eye contact can accidentally occur.

If skin contact is likely wear impervious protective clothing and/or gloves.

Protective clothing should be regularly dry cleaned. Change heavily contaminated clothing as soon as reasonably practicable dry clean launder and preferably starch before re-use. Wash any contaminated underlying skin with soap and water.

Respiratory Protection

If operations are such that exposure to vapour mist or fume may be anticipated then suitable approved respiratory equipment should be worn.

The use of respiratory equipment must be strictly in accordance with the manufacturers' instructions and any statutory requirements governing its selection and use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Typical Values Grades:	Test Method	Units	BPTO 25	BPTO 2197	BPTO 2380	BPTO 2389
Physical state Colour Odour			liquid amber mild fatty odour	liquid dark amber mild fatty odour	liquid amber mild fatty odour	liquid amber mild fatty odour
Kinematic viscosity @ 40°C	ASTM D 445	mm²/s	25	27	24	12.5
Flash point (COC) Pour point Solubility in water Explosion limits Specific Gravity @ 15.6°C (water = 1)	ASTM D 92 ASTM D 97	°C °C g/l %	>204 <-60 <1% 1 - 12 990	>204 -57 <1% 1 - 12 995	>204 <1% 1 - 12 980	220 <1% 1 - 12 950

10. STABILITY AND REACTIVITY

Products of this type are stable and unlikely to react in a hazardous manner under normal conditions of use. Hazardous polymerisation reactions will not occur. This material is combustible.

Materials to Avoid

Avoid contact with strong oxidizing agents.

Hazardous Decomposition Products

Thermal decomposition products will vary with conditions.

Incomplete combustion will generate smoke carbon dioxide and hazardous gases including carbon monoxide and oxides of sulphur nitrogen and phosphorus.

11. TOXICOLOGICAL INFORMATION

Eyes

Unlikely to cause more than transient stinging or redness if accidental eye contact occurs.

Skin

Unlikely to cause harm to the skin on brief or occasional contact but prolonged or repeated exposure may lead to dermatitis.

Ingestion

Unlikely to cause harm if accidentally swallowed in small doses though larger quantities may cause nausea and diarrhoea.

Inhalation

At normal ambient temperatures this product will be unlikely to present an inhalation hazard because of its low volatility.

May cause irritation to eyes nose and throat due to exposure to vapour mists or fumes.

May be harmful by inhalation if exposure to vapour mists or fumes resulting from thermal decomposition products occurs.

12. ECOLOGICAL INFORMATION Mobility

Spillages may penetrate the soil causing ground water contamination.

Persistence and degradability

No data available.

Bioaccumulative potential

There is no evidence to suggest bioaccumulation will occur.

Aquatic toxicity

Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

13. DISPOSAL CONSIDERATIONS

Dispose of via an authorised person/ licensed waste disposal contractor in accordance with local regulations. Incineration may be carried out under controlled conditions provided that local regulations for emissions are met.

14. TRANSPORT INFORMATION

Not classified as hazardous for transport (NZ Standard 5433 UN IATA/ICAO IMO).

15. REGULATORY INFORMATION

Not classified using the criteria in the NZ Toxic Substances and Dangerous Goods Regulations.

16. OTHER INFORMATION

Compiled by:

Product Stewardship Group BP Oil Technology Centre

http://amtulld002.bp.com/alignmsds/oavfin.nsf/7ff80d7b66c2265680256ba0002d710e/8475... 5/5/2006

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SHEET REVISIONS DATE SECTIONS REVISED - - SHEET NO: SAV0104 ISSUE DATE: 05/03/2001 REVISION OF SHEET DATED: -