

Revision Date: 18May2008

Page 1 of 9

# **MATERIAL SAFETY DATA SHEET**

## **SECTION 1**

## PRODUCT AND COMPANY IDENTIFICATION

Not classified as hazardous according to criteria of National Occupational Health and Safety Commission.

## **PRODUCT**

Product Name: MOBIL JET OIL II

Product Description: Synthetic Esters and Additives 201550101020, 430207-85 Intended Use: Aviation lubricating oil, Turbine oil

## **COMPANY IDENTIFICATION**

Supplier: MOBIL OIL AUSTRALIA PTY LTD

A.B.N. 88 004 052 984 12 Riverside Quay Southbank

Victoria 3006 Australia

24 Hour Environmental / Health Emergency 1-800-023-005

Telephone

Product Technical Information1-800-033-863Supplier General Contact1-800-631-296

## **SECTION 2**

## **HAZARDS IDENTIFICATION**

Hazard Classification: NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOOD.

Refer to Section 15, Regulatory Information, for hazard classification criteria.

POISON SCHEDULE NUMBER: None Allocated.

## **HEALTH HAZARDS**

This product is not expected to produce adverse health effects under normal conditions of use and with appropriate personal hygiene practices. Product may decompose at elevated temperatures or under fire conditions and give off irritating and/or harmful (carbon monoxide) gases/vapours/fumes. Symptoms from acute exposure to these decomposition products in confined spaces may include headache, nausea, eye, nose, and throat irritation. High-pressure injection under skin may cause serious damage.

**Note:** This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.



Revision Date: 18May2008

Page 2 of 9

## **SECTION 3**

## **COMPOSITION / INFORMATION ON INGREDIENTS**

Reportable Hazardous Substance(s) or Complex Substance(s)

Name	CAS#	Concentration*	Symbols/Risk Phrases
ALKYLATED DIPHENYL AMINES	68411-46-1	< 2%	None
N-PHENYL-1-NAPHTHYLAMINE	90-30-2	1%	Xn;R22, Xi;R43
TRICRESYL PHOSPHATE	1330-78-5	1 - 3%	Xn;R21/22

<sup>\*</sup> All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. Other ingredients determined not to be hazardous up to 100%.

## **SECTION 4**

## **FIRST AID MEASURES**

#### **INHALATION**

Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.

#### **SKIN CONTACT**

Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

#### **EYE CONTACT**

Flush thoroughly with water. If irritation occurs, get medical assistance.

#### **INGESTION**

Seek immediate medical attention. If medical attention will be delayed, contact a Regional Poison Centre or emergency medical professional regarding the induction of vomiting or use of activated charcoal/syrup of ipecac. Do not induce vomiting or give anything by mouth to a groggy or unconscious person.

## SECTION 5

#### FIRE FIGHTING MEASURES

## **EXTINGUISHING MEDIA**

Appropriate Extinguishing Media: Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames

Inappropriate Extinguishing Media: Straight streams of water

## **FIRE FIGHTING**

**Fire Fighting Instructions:** Evacuate area. Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply. Fire-fighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.



Revision Date: 18May2008

Page 3 of 9

Unusual Fire Hazards: May generate irritating and harmful gases/vapours/fumes when burning.

**Hazardous Combustion Products:** Carbon Monoxide, Phosphorus Oxides, Aldehydes, Smoke, Fume, Incomplete combustion products

## **FLAMMABILITY PROPERTIES**

Flash Point [Method]: 270C (518F) [ ASTM D-92]

Flammable Limits (Approximate volume % in air): LEL: N/D UEL: N/D

**Autoignition Temperature:** N/D

**SECTION 6** 

## **ACCIDENTAL RELEASE MEASURES**

#### **NOTIFICATION PROCEDURES**

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

#### **SPILL MANAGEMENT**

Land Spill: Stop leak if you can do so without risk. Recover by pumping or with suitable absorbent.

**Water Spill:** Stop leak if you can do so without risk. Confine the spill immediately with booms. Warn other shipping. Remove from the surface by skimming or with suitable absorbents. Seek the advice of a specialist before using dispersants.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

## **ENVIRONMENTAL PRECAUTIONS**

Large Spills: Dyke far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

## **SECTION 7**

## **HANDLING AND STORAGE**

## **HANDLING**

Prevent small spills and leakage to avoid slip hazard.

Static Accumulator: This material is a static accumulator.

## **Storage**

Store in a cool, dry place with adequate ventilation. Keep away from incompatible materials, open flames and high temperatures. Do not store in open or unlabelled containers.

## **SECTION 8**

## **EXPOSURE CONTROLS / PERSONAL PROTECTION**



Revision Date: 18May2008

Page 4 of 9

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

## **Biological limits**

No biological limits allocated.

#### **ENGINEERING CONTROLS**

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider:

No special requirements under ordinary conditions of use and with adequate ventilation.

#### PERSONAL PROTECTION

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

**Respiratory Protection:** If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include:

Particulate

No protection is ordinarily required under normal conditions of use and with adequate ventilation.

For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapour warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

**Hand Protection:** Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include:

Nitrile

If prolonged or repeated contact is likely, chemical-resistant gloves are recommended. If contact with forearms is likely, wear gauntlet-style gloves.

Eye Protection: If contact is likely, safety glasses with side shields are recommended.

**Skin and Body Protection:** Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include:

If prolonged or repeated contact is likely, chemical, and oil resistant clothing is recommended.

**Specific Hygiene Measures:** 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. Discard contaminated clothing and footwear that cannot be cleaned.



Revision Date: 18May2008

Page 5 of 9

\_\_\_\_\_

Practise good housekeeping.

## **ENVIRONMENTAL CONTROLS**

See Sections 6, 7, 12, 13.

## **SECTION 9**

## PHYSICAL AND CHEMICAL PROPERTIES

Typical physical and chemical properties are given below. Consult the Supplier in Section 1 for additional data.

## **GENERAL INFORMATION**

Physical State: Liquid Colour: Amber Odour: Characteristic Odour Threshold: N/D

## IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION

Relative Density (at 15 C): 1

Flash Point [Method]: 270C (518F) [ ASTM D-92]

Flammable Limits (Approximate volume % in air): LEL: N/D UEL: N/D

Autoignition Temperature: N/D Boiling Point / Range: N/D Vapour Density (Air = 1): N/D Vapour Pressure: [N/D at 20cC]

Evaporation Rate (N-Butyl Acetate = 1): N/D

pH: N/A

Log Pow (n-Octanol/Water Partition Coefficient): N/D

Solubility in Water: Negligible

Viscosity: 27.6 cSt (27.6 mml/sec) at 40 C | 5.1 cSt (5.1 mml/sec) at 100C

Oxidising properties: See Sections 2, 15, 16.

## OTHER INFORMATION

Freezing Point: N/D Melting Point: N/A

Pour Point: -59°C (-74°F)

## **SECTION 10**

## STABILITY AND REACTIVITY

STABILITY: Material is stable under normal conditions.

**CONDITIONS TO AVOID:** Excessive heat.

**INCOMPATIBLE MATERIALS:** Strong oxidisers

**HAZARDOUS DECOMPOSITION PRODUCTS:** Material does not decompose at ambient temperatures.

HAZARDOUS REACTIONS: Will not occur.

## **SECTION 11**

## **TOXICOLOGICAL INFORMATION**



Revision Date: 18May2008

Page 6 of 9

## **Acute Toxicity**

Route of Exposure	Conclusion / Remarks	
INHALATION		
Toxicity (Rat): LC50 > 5000 mg/mi	Minimally Toxic. Based on test data for structurally similar materials.	
Irritation: No end point data.	Negligible hazard at ambient/normal handling temperatures.  Based on test data for structurally similar materials.	
INGESTION		
Toxicity (Rat): LD50 > 2000 mg/kg	Minimally Toxic. Based on test data for structurally similar materials.	
Skin		
Toxicity (Rabbit): LD50 > 2000 mg/kg	Minimally Toxic. Based on test data for structurally similar materials.	
Irritation (Rabbit): No end point data.	Negligible irritation to skin at ambient temperatures. Based on test data for structurally similar materials.	
Eye		
Irritation (Rabbit): No end point data.	May cause mild, short-lasting discomfort to eyes. Based on test data for structurally similar materials.	

## **CHRONIC/OTHER EFFECTS**

## For the product itself:

A literature report of a generic jet engine oil containing tri-cresyl phosphate (TCP) with concentrations of orthophenol isomers well in excess of those found in this ExxonMobil product noted delayed peripheral nerve system damage in test animals. A current study of an ExxonMobil Jet Oil formulated with a relatively low ortho-phenol isomer content produced no peripheral nerve system damage in test animals. Oral exposure of male rats to a lubricant formulation with 3% TCP resulted in no adverse reproductive effects.

## **Contains:**

Phenyl-alpha-naphthylamine (PAN): Undiluted PAN is a skin sensitizer. Human testing with lubricants containing 1.0% PAN caused no reactions indicative of sensitization.

Additional information is available by request.

## IARC Classification:

The Following Ingredients are Cited on the Lists Below: None.

-- REGULATORY LISTS SEARCHED--

1 = IARC 1 2 = IARC 2A 3 = IARC 2B

## SECTION 12 ECOLOGICAL INFORMATION

The information given is based on data available for the material, the components of the material, and similar materials.

## **ECOTOXICITY**

Material -- Not expected to be harmful to aquatic organisms.

Material -- Not expected to demonstrate chronic toxicity to aquatic organisms.



Revision Date: 18May2008

Page 7 of 9

#### **ECOLOGICAL DATA**

#### **ECOTOXICITY**

Test	Duration	Organism Type	Test Results
Aquatic - Chronic Toxicity	21 day(s)	Water Flea	NOELR 1 mg/l

## SECTION 13 DISPOSAL CONSIDERATIONS

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

## **DISPOSAL RECOMMENDATIONS**

Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. Product is suitable for burning in an enclosed, controlled burner for fuel value or disposal by supervised incineration.

**Empty Container Warning** Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

SECTION 14 TRANSPORT INFORMATION

LAND (ADG): Not Regulated for Land Transport

SEA (IMDG): Not Regulated for Sea Transport according to IMDG-Code

AIR (IATA): Not Regulated for Air Transport

## SECTION 15 REGULATORY INFORMATION

Material is not hazardous as defined by the Approved Criteria for Classifying Hazardous Substances NOHSC:1008.

**Contains:** N-PHENYL-1-NAPHTHYLAMINE May produce an allergic reaction.

Product is not regulated according to Australian Dangerous Goods Code.

No Poison Schedule number allocated by the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) established under the Therapeutic Goods Act.



Revision Date: 18May2008

Page 8 of 9

## REGULATORY STATUS AND APPLICABLE LAWS AND REGULATIONS

Complies with the following national/regional chemical inventory requirements: TSCA, AICS, KECI, EINECS, IECSC

**Special Cases:** 

Inventory	Status
NDSL	Restrictions Apply

## SECTION 16 OTHER INFORMATION

## **KEY TO ABBREVIATIONS AND ACRONYMS:**

N/D = Not determined, N/A = Not applicable, STEL = Short-Term Exposure Limit, TWA = Time-Weighted Average

## KEY TO THE RISK CODES CONTAINED IN SECTION 2 AND 3 OF THIS DOCUMENT (for information only):

R21; Harmful in contact with skin.

R22; Harmful if swallowed.

R43; May cause sensitisation by skin contact.

## THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:

Revision Changes:

Section 05: Fire Fighting Measures - Fire Fighting Instruction was modified.

Section 06: Notification Procedures - Header was modified.

Section 13: Empty Container Warning was modified.

Section 09: Phys/Chem Properties Note was modified.

Section 08: Hand Protection was modified.

Section 07: Handling and Storage - Storage was modified.

Section 06: Accidental Release - Spill Management - Water was modified.

Section 15: National Chemical Inventory Listing was modified.

Composition: Component Table was modified. Section 11: Chronic Tox - Product was modified.

Hazard Identification: Australia Posion Schedule was deleted.

\_\_\_\_\_

The information and recommendations contained herein are, to the best of ExxonMobil's knowledge and belief, accurate and reliable as of the date issued. You can contact ExxonMobil to insure that this document is the most current available from ExxonMobil. The information and recommendations are offered for the user's consideration and examination. It is the user's responsibility to satisfy itself that the product is suitable for the intended use. If buyer repackages this product, it is the user's responsibility to insure proper health, safety and other necessary information is included with and/or on the container. Appropriate warnings and safe-handling procedures should be provided to handlers and users. Alteration of this document is strictly prohibited. Except to the extent required by law, republication or retransmission of this document, in whole or in part, is not permitted. The term, "ExxonMobil" is used for convenience, and may include any one or more of ExxonMobil Chemical Company, Exxon Mobil Corporation, or any affiliates in which they directly of indirectly hold any interest.

.....

DGN: 2003056XAU (552669)

Prepared By: Exxon Mobil Corporation

EMBSI, Clinton NJ USA

Contact Point: See Section 1 for Local Contact number



Revision Date: 18May2008 Page 9 of 9

End of (M)SDS