

MATERIAL SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Material Name: Santovac5.
Catalogue Number: M001.
Other Names: Polyphenyl ether.
Recommended Use: Lubricant.

Supplier Name: ProSciTech
Street Address: 1/11 Carlton Street, Kirwan, Qld. 4817 Australia
Telephone Number: (07) 4773 9444 **Fax Number:** (07) 4773 2244
Emergency Contact: (07) 4773 9444 8:30am – 5:00pm, Monday to Friday

SECTION 2 - HAZARDS IDENTIFICATION

Hazard Classification: Not classified as hazardous according to criteria of NOHSC.
Hazardous and/or Dangerous Nature: NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.
Risk Phrases:
Safety Phrases:

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE: **Chemical Identity:** -
 Common Name(s): -
 CAS Number(s): -

MIXTURE:

Ingredients	Cas Number(s)	Proportion (%)
Santovac® 5 polyphenyl ether is a proprietary lubricant. The specific chemical identity of this product is withheld because it is trade secret information of Santovac® Fluids, Inc.	-	-

SECTION 4 - FIRST AID MEASURES

Swallowed: IF SWALLOWED, Immediate first aid is not likely to be required. A physician or Poison Control Center can be contacted for advice.
Eye: Immediate first aid is not likely to be required. However, this material can be removed with water. Wash heavily contaminated clothing before reuse.
Skin: Immediate first aid is not likely to be required. However, this material can be removed with water. Wash heavily contaminated clothing before reuse.
Inhaled: Immediate; first aid is not likely to be required. However, if symptoms occur, remove to fresh air. Remove material from eyes, skin and clothing.
First Aid Facilities: Eyebath/eyewash & Safety shower.
Medical Attention & Special Treatment:

ADDITIONAL INFORMATION:

SECTION 5 - FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

In case of fire, use water spray (fog), foam, dry chemical, or CO₂.

Hazards from Combustion Products:

Continued use at temperatures above 425°C may result in the formation of benzene and phenol. If the product is burned, complete combustion produces carbon dioxide and water and partial combustion produces carbon monoxide, smoke, soot and low molecular weight hydrocarbons.

Precautions for Fire Fighters:

Fire fighters and others exposed to products of combustion should wear self-contained breathing apparatus. Equipment should be thoroughly decontaminated after use.

Hazchem Code: Not available.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Emergency Procedures:

Containment and clean up:

Contain large spills with dikes and transfer the material to appropriate containers for reclamation or disposal. Absorb remaining material or small spills with an inert material and then place in a chemical waste container. Flush residual spill area with water.

SECTION 7 - HANDLING & STORAGE**Precautions for Safe Handling:**

Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure and removal of material from eyes, skin and clothing.

Conditions for Safe Storage:

Emptied container retains vapour and product residue. Observe all labelled safeguards until container is cleaned, reconditioned, or destroyed.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards: No exposure standard allocated.

Biological Limit Values: No biological limit allocated.

Engineering Controls:

Provide natural or mechanical ventilation to minimize exposure. If practical, use local mechanical exhaust ventilation at sources of air contamination such as open process equipment.

Personal Protective Equipment:

Skin Protection Description: Although it does not present a significant skin concern, minimize skin contamination by following good industrial practice. Wearing protective gloves is recommended. Wash hands and contaminated skin thoroughly after handling.

Eye/Face Protection: This product does not cause significant eye irritation or eye toxicity requiring special protection. Use good industrial practice to avoid eye contact.

Respiratory Protection: Avoid breathing mist. Use NIOSH/MSHA approved respiratory protection equipment when airborne exposure is excessive. Consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH/MSHA or the manufacturer. Respiratory protection programs must comply with 29 CFR 1910.134.

SECTION 9 - PHYSICAL & CHEMICAL PROPERTIES

Appearance:	Light yellow to clear liquid.
Odour:	Odourless to slight phenolic.
pH:	Neutral
Vapour pressure (mm of Hg at 25°C):	Not available.
Vapour density:	15.5 (air=1)
Boiling point/range (°C):	~476°C @ 760 mm Hg.
Freezing/melting point (°C):	Not available.
Solubility:	soluble in acetone and light aromatic solvents; insoluble in water
Specific gravity or density:	Not available.
Flash Point:	287°C.
Flammable (explosive) limits:	Not available.
Ignition temperature:	612°C.
Additional Information:	

SECTION 10 - STABILITY AND REACTIVITY

Chemical stability:	Stable under normal conditions of use.
Conditions to avoid:	Contact with incompatible materials.
Incompatible Materials:	Exposure to materials which are highly oxidizing should be avoided.
Hazardous Decomposition Products:	Continued use at temperatures above 425°C may result in the formation of benzene and phenol. If the product is burned, complete combustion produces carbon dioxide and water and partial combustion produces carbon monoxide, smoke, soot and low molecular weight hydrocarbons.
Hazardous Reactions:	Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

Exposure and Health Effects: Occupational exposure to this material has not been reported to cause significant adverse health effects. On the basis of available information, exposure to Santovac 5 polyphenyl ether lubricant is not expected to produce significant adverse human health effects when recommended safety precautions are followed.

Ingestion:

Occupational exposure to this material has not been reported to cause significant adverse health effects.

Inhalation:

Occupational exposure to this material has not been reported to cause significant adverse health effects.

Skin Contact:

Occupational exposure to this material has not been reported to cause significant adverse health effects.

Eye Contact:

Occupational exposure to this material has not been reported to cause significant adverse health effects.

Human/Animal data: Single exposure (acute) studies indicate:

Skin Effects:

Dermal - Practically Nontoxic (Rabbit LD50 > 34,600 mg/kg)

Ingestion Effects:

Oral - Practically Nontoxic (Rat LD50 > 34,600 mg/kg)

Oral - Practically Nontoxic (Rabbit LD50 > 34,600 mg/kg)

Inhalation Effects:

Practically Nontoxic (Rat 4-hr LC50 > 47 mg/l. No deaths and no signs of toxicity were observed in animals exposed to 47 mg/l, the highest atmospheric concentration achievable by heating the material to 329 deg C in this study.)

Irritation:

Eye Irritation - Not irritating (Rabbit, 0.0/110.0)

Skin Irritation - Not irritating (Rabbit, 24-hr exposure, 0.0/8.0)

Other Toxicological Information: Laboratory studies have been conducted on similar polyphenyl ether formulations and these data are considered representative of Santovac 5 Lubricant.

In a controlled skin contact study, no skin irritation (primary or cumulative) or skin allergy was observed in humans following repeated exposures to a polyphenyl ether formulation similar to Santovac 5 Lubricant.

Increases in liver weights and liver/body weight ratios with accompanying increase in liver cell size, considered to be related in increased liver metabolic activity and increases in adrenal weight were noted in rats following repeated skin exposure (4-weeks) to a second polyphenyl ether formulation. This same formulation produced no genetic changes in standard tests using animal or bacterial cells.

Carcinogenicity:

Not available.

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity: Not available.

Persistence and degradability: Not available.

Mobility: Not available.

Additional Information: Not available.

SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal Methods:

Product to be disposed of, spilled liquid product, or spills absorbed on a solid medium may be classified as "hazardous waste" (DO18) due to the presence of benzene over 0.5 mg/L. Waste should be analyzed in accordance with Method 1311 Toxicity Characteristic Leaching Procedure (TCLP) and/or compared to the criteria of 40 CFR 261.24 to insure proper disposal.

Waste product may also be classified as waste oil under state and federal regulations. Any discarded product, whether "hazardous waste" or not, should be incinerated in accordance with all local, state, or federal laws and regulations. Consult your attorney or appropriate regulatory officials for information on such disposal.

Special Precautions:**SECTION 14 - TRANSPORT INFORMATION**

UN Number:	Not regulated.
UN Proper Shipping Name:	Not regulated.
Class and Subsidiary risk:	Not regulated.
Packing Group:	Not regulated.
Special Precautions for User:	Not available.
Hazchem Code:	Not available.

SECTION 15 - REGULATORY INFORMATION

Poison Schedule Number: None allocated.

SECTION 16 - OTHER INFORMATION

Date of preparation of MSDS: August 10

Comments:

List of Publications referenced when creating this MSDS;

- Hazardous Substances Information System Consolidated Lists: Safe Work Australia.
- APPROVED CRITERIA FOR CLASSIFYING HAZARDOUS SUBSTANCES [NOHSC:1008(2004)] 3rd Edition: National Occupational Health and Safety Commission.
- Dangerous Goods - Initial Emergency Response Guide (SAA/SNZ HB76:1997).
- IATA Dangerous Goods Regulations.
- Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)].
- Australia Standard for the Uniform Scheduling of Drugs and Poisons [SUSPD] (Australian Government Department of Health and Ageing).

This Material Safety Data Sheet (MSDS) has been prepared in compliance with the National code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [NOHSC:2011(2003)]. It is the user's responsibility to determine the suitability of this information for adoption of necessary safety precautions. The information published in this MSDS has been compiled from the publications listed in Section 16: to the best of our ability and knowledge these publications are considered accurate. We reserve the right to revise Material Safety Data Sheets as new information becomes available. Copies may be made for non-profit use.

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