

HE-300

MONSANTO PRODUCT NAME

SANTOVAC® 5 VACUUM PUMP FLUID

MONSANTO COMPANY
800 NORTH LINDBERGH BLVD.
ST. LOUIS, MO 63167

Emergency Phone No.
(Call Collect)
(314) 694-1000

PRODUCT IDENTIFICATION

SANTOVAC 5 vacuum pump fluid is a proprietary formulation and therefore has no CAS number. Its composition is a trade secret of Monsanto Company. All components of SANTOVAC 5 vacuum pump fluid appear on the inventory of chemical substances published by the U. S. Environmental Protection Agency (EPA) under authority of the Toxic Substance Control Act (TSCA).

Chemical Family:
DOT Hazard Class/I.D. No.:

Polyphenyl ether
This product is not classified as a hazardous material by the U. S. Department of Transportation.

Label Requirements:
U. S. Surface Freight
Classification:

Product Label
Chemicals, N.O.I.B.N.

Reportable Quantity (RQ)
Under U.S. EPA CERCLA
Regulations:

Not Listed

PRECAUTIONARY MEASURES FIRST AID STATEMENTS

HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICES. THESE PRACTICES INCLUDE AVOIDING UNNECESSARY EXPOSURE AND REMOVAL OF THE MATERIAL FROM EYES, SKIN, AND CLOTHING

OCCUPATIONAL CONTROL PROCEDURES

Eye Protection: SANTOVAC 5 vacuum pump fluid does not present significant eye irritation or eye toxicity requiring special protection. Avoid eye contact as good industrial practice.

Skin Protection: Although SANTOVAC 5 vacuum pump fluid does not present a significant skin concern, skin contamination should be minimized as good industrial practice. Wearing of protective gloves is recommended. Wash hands and contaminated skin after handling.

Respiratory Protection: Avoid breathing mist and/or vapor. Use NIOSH/MSHA approved equipment when airborne exposure is excessive. Consult respirator manufacturer to determine appropriate type equipment for given application. The respirator use limitations specified by NIOSH/MSHA or the manufacturer must be observed. High airborne concentrations may require use of self-contained breathing apparatus or supplied air respirator. Respiratory protection programs must be in compliance with 29 CFR 1910.134.

Ventilation: Provide general ventilation to minimize exposure. Dilution ventilation acceptable, but local mechanical exhaust ventilation preferred at sources of air contamination such as open process equipment.

**MONSANTO MATERIAL SAFETY DATA
SANTOVAC® 5 VACUUM PUMP FLUID**

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OCCUPATIONAL CONTROL PROCEDURES - CONTINUED

Airborne Exposure Limits:

Product: SANTOVAC 5 vacuum pump fluid

OSHA PEL: None Established
ACGIH TLV®: None Established

FIRE PROTECTION INFORMATION

Flash Point: 550°F Method: Cleveland Open Cup

Fire Point: 660°F

Autoignition Temperature: 1135°F

Extinguishing Media: Water spray, foam, dry chemical, CO2, or any Class B extinguishing agent.

Special Fire Fighting Procedures: Fire fighters or others exposed to products of combustion should wear full protective clothing including self-contained breathing apparatus. Fire fighting equipment should be thoroughly decontaminated after use.

Unusual Fire and Explosion Hazards: None.

REACTIVITY DATA

Product is stable under normal storage and handling conditions.

Materials to Avoid: Exposure to highly oxidizing agents should be avoided.

Hazardous Decomposition Products: No uniquely hazardous decomposition products are expected. If the product is burned, complete combustion produces carbon monoxide (CO), smoke, soot, and lower molecular weight hydrocarbons.

Hazardous Polymerization: Does not occur.

HEALTH EFFECTS SUMMARY

The following information presents both human experience and the results of scientific experiments used by qualified experts to assess the effects of SANTOVAC 5 vacuum pump fluid on the health of industrially exposed individuals and to support the Precautionary Statements and Occupational Control Procedures recommended in this document. To avoid misunderstanding, the data provided in this section should be interpreted by individuals trained in evaluation of this type of information.

Human Experience

Dermal contact is expected to be the primary route of occupational exposure to SANTOVAC 5 vacuum pump fluid. 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 fluid is not expected to produce significant adverse human health effects.

HEALTH EFFECTS SUMMARY - CONTINUED

Toxicological Data

Data from Monsanto studies indicate the following:

Oral LD50 (Rat): Greater than 10,000 mg/kg, Practically Nontoxic
Dermal LD50 (Rabbit): Greater than 5,000, Practically Nontoxic
Eye Irritation (Rabbit): (FHSA) 0.1 on a scale of 110.0, Practically Nonirritating
Skin Irritation (Rabbit): (FHSA) 0.4 on a scale of 8.0, Practically Nonirritating

Patch testing of 50 human volunteers with SANTOVAC 5 vacuum pump fluid produced no positive reactions following initial application, any of 15 serial applications or after a challenge application 2 weeks later. SANTOVAC 5 vacuum pump fluid is not considered a primary irritant, a fatiguing agent or a sensitizing agent.

PHYSICAL DATA

Appearance: Light yellow essentially clear liquid

Odor: Odorless to slight phenolic

Boiling Point @ 760 mm Hg: = 889°F (476°C)

Pour Point: = -40°F (5°C)

Specific Gravity @ 25/25°C: 1.195-1.201

pH: Neutral

Vapor Density (Air=1): = 15.5

Solubility: Soluble in acetone and light aromatic solvents; insoluble in water

Note: These physical data are typical values for this material but may vary from sample to sample. Typical values should not be construed as specifications or as guaranteed analysis of any specific lot or as specification items.

SPILL, LEAK, AND DISPOSAL INFORMATION

Emergency Spill and Leak Information: Wipe surfaces with rags or cellulose waste or absorb on clay-type absorbent and dispose of by incineration.

Disposal Information: Dispose of by incineration. This material should not be dumped, spilled, or rinsed, or washed into sewers or public waterways.

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DATE 4/24/88

SUPERSEDES 1/24/84

MSDS NUMBER S00010060

FOR ADDITIONAL NON-EMERGENCY INFORMATION, CONTACT:

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Monsanto Chemical Company
(314) 694-1000
(A Unit of Monsanto Company)**

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