

MATERIAL SAFETY DATA SHEET

Product Name: PQ-44 QUATERNARY PINE OIL

Product No. 035.00

SAVIN PRODUCTS COMPANY, INC

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: PQ-44 QUATERNARY PINE OIL

Emergency phone: Chemtrec: 800-424-9300

Product Information: 781-961-2744

Company: SAVIN PRODUCTS COMPANY, INC
214 HIGH STREET
RANDOLPH, MA 02368

Date Prepared: 3-17-04

Supersedes: 9-30-03

Prepared by: KJS

2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CAS No.</u>	<u>Exposure Limits</u>	<u>Typical % by Weight</u>
1. Nonylphenol Ethoxylate	9016-45-9	OSHA PEL None ACGIH TLV None	1 - 5
2. Dialkyl(C8-C10) dimethyl ammonium Chloride (Quaternary)	68424-95-1	OSHA PEL None ACGIH None	1 - 5
3. Isopropyl alcohol	67-63-0	OSHA PEL: TWA 400 ppm (980 mg/m ³) TLV: 400 ppm (as TWA); (ACGIH 1998).	5 - 15
4. Tetrasodium salt of Ethylenediamine tetraacetic acid	64-02-8	OSHA PEL None ACGIH TLV None	1 - 5
5. Pine Oil	8002-09-3	OSHA PEL None ACGIH TLV None	1 - 5

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER: FLAMMABLE! Causes severe eye irritation. May cause skin irritation with prolonged contact. Inhalation of mist can cause irritation to respiratory tract. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Avoid breathing mist.. Do Not Take Internally! Avoid exposure to heat and open flame.

EFFECTS of OVEREXPOSURE:

CARCINOGENICITY:

NTP: No

IARC: No

OSHA: No

EYES: Causes severe eye irritation.

SKIN: Repeated or prolonged contact may cause skin irritation.

INHALATION: Mist may cause irritation to mucous membranes and respiratory tract.

INGESTION: Harmful if swallowed. Can result in irritation, to mouth, throat, esophagus and stomach.

CHRONIC EFFECTS and MEDICAL CONDITIONS: The effects of long-term, low-level exposures to this product have not been determined. Safe handling of this material on a long-term basis should emphasize the avoidance of all effects from repetitive acute exposure. This product may aggravate existing eye, skin and respiratory conditions.

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4. FIRST AID MEASURES

EYES: Flush with copious amounts of water for at least 15 minutes, lifting upper and lower lids occasionally. Get immediate medical attention.

SKIN: Immediately flush with large quantity of cool water. Remove contaminated clothing. Launder contaminated clothing before reuse.

INHALATION: Remove to fresh air. If breathing is difficult, oxygen may be given, preferably with a physician's advice. If not breathing, give artificial respiration. Get medical attention.

INGESTION: If swallowed, promptly drink a large quantity of milk, egg whites, gelatin solution; or if these are not available, drink large quantities of water. Do not induce vomiting. If vomiting does occur, give fluids again and keep head below hips to help prevent aspiration. Do not give anything by mouth to an unconscious person. Get immediate medical attention.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES:

Flash Point: 91°F Test: Tag Closed Cup (Method D-56)
Explosive Limits: LEL: N/A UEL: N/A

EXTINGUISHING MEDIA: Use water spray, dry chemical, CO₂ or foam.

SPECIAL PROCEDURES & UNUSUAL HAZARDS: Combustion may produce noxious and irritating gases which require fresh air source in fire fighting. Heated solvent vapors can travel to an ignition source and flash back.

FIREFIGHTING INSTRUCTIONS: Firefighters should wear NIOSH approved, positive pressure, self-contained breathing apparatus and full protective clothing when appropriate. Cool fire-exposed containers with water spray.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILLS: Dilute small spills with plenty of water and discharge to sewer if permitted.

LARGE SPILLS: Limit access to area. Dike and contain spill with inert material (sand, earth, etc.) and transfer the liquid and solid separately to containers for recovery or disposal. Keep spill out of sewers and open bodies of water.

CAUTION: Floor may become slippery in the spill area.

7. HANDLING AND STORAGE

Store in a cool dry place. Keep container tightly closed when not in use. Guard against container damage and puncture. Pick up spills immediately. Always add product to water when making dilute solutions. Guard against freezing. Store to avoid contamination of water, food & animal feed.

FOR COMMERCIAL USE ONLY!

KEEP AWAY FROM CHILDREN!

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE PROTECTION: Avoid splashing. Wear chemical-resistant safety goggles if necessary. Contact lenses must not be worn.

PROTECTIVE GLOVES: Depending on conditions of use, protective gloves, apron, boots, head and face protection should be worn. This equipment should be cleaned thoroughly after each use.

RESPIRATORY PROTECTION: Avoid inhaling spray, mist or dust. Where exposure through inhalation may occur from use, NIOSH/MSHA approved respiratory protection equipment is recommended.

VENTILATION: Ventilation is required in case of mist conditions. Either local exhaust or general room ventilation is usually adequate.

OTHER PROTECTIVE EQUIPMENT: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

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9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear, thin, amber, foamy liquid
BOILING POINT: N/A
FREEZE/MELT POINT: N/A
VAPOR PRESSURE (mm): N/A
VAPOR DENSITY (air=1): N/A
EVAPORATION RATE: N/A
SOLUBILITY IN WATER: Complete.
SPECIFIC GRAVITY: 0.99 @ 20°C
Density: 8.29 lb/gal @20C
pH(as is): 10.1
ODOR: MILD

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY : Stable. Keep away from excessive heat.
INCOMPATIBILITY: Strong acids, strong oxidizers and excessive heat.
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Monoxide, Carbon Dioxide, Nitrogen Oxides, and other toxic gases.
HAZARDOUS POLYMERIZATION: None

11. TOXICOLOGICAL INFORMATION

LD50 (oral-rat): 8.95 g/kg LD50 (dermal-rabbit): No Fatalities @ 2 g/kg
Eye irritation (rabbit): Instillation to the eye of rabbits, without washing, produced severe irritation which did not clear in 21 days, post dose. (Primary irritation index=43.0). An identical test with washing produced severe irritation which cleared by day 10, post dose. (Primary irritation index=43.0).
Skin irritation (rabbit): Application to the skin of rabbits, with and without abrasion produced severe irritation. (Primary irritation index=5.5).

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL/CHEMICAL FATE INFORMATION: N/A

13. DISPOSAL CONSIDERATIONS

RCRA: This product, if disposed as shipped, is considered a hazardous waste as specified in 40 CFR 261.22. Dispose in accordance with all applicable federal, state and local regulations.

14. TRANSPORT INFORMATION

SHIPPING NAME: FLAMMABLE LIQUIDS, n.o.s. (Isopropyl Alcohol)
HAZARD CLASS: 3
ID #: UN 1993
PACKING GROUP: III
LABEL: FLAMMABLE LIQUID

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15. REGULATORY INFORMATION

This material does not contain nor was it manufactured using ozone-depleting chemicals.

U.S. FEDERAL REGULATIONS:

TSCA STATUS: All ingredients on Toxic Substance Control Act Inventory.

CERCLA REPORTABLE QUANTITY: N/A

FIFRA: EPA Registration # 6836-87-712

SARA TITLE III:

Section 302 Extremely Hazardous Substances:	None.
Section 311/312 Hazardous Categories:	Fire Hazard/Immediate (Acute)
Section 313 Toxic Chemicals:	None

16. OTHER INFORMATION

All label precautions must be observed when handling, storing and transporting empty containers due to product residues. Do not reuse this container unless it is professionally cleaned and reconditioned.

REFERENCES:

- U.S. Dept. of Health and Human Services, NIOSH: Registry of Toxic Effects of Chemical Substances, 1985-86 Editions.
- Sax, N. Irving and Lewis, R.J.: Dangerous Properties of Industrial Materials, 7th Edition, Van Nostrand Reinhold Co., 1989.
- Lewis, R.J.: Hawley's Condensed Chemical Dictionary, 12th Edition, Van Nostrand Reinhold Co., 1993.
- U.S. Dept. of Transportation, U.S. Coast Guard: CHRIS Hazardous Chemical Data, 1982.
- U.S. Dept. of Labor, OSHA: Air Contaminants - Permissible Exposure Limits, 1989.
- National Fire Protection Association (NFPA): Fire Protection Guide on Hazardous Materials (NFPA 325M/49/491M/704), 9th Edition, 1986.
- National Fire Protection Association (NFPA): Hazardous Materials Response Handbook, Henry, M.F., Editor, 1989.
- Merck & Co., Inc.: The Merck Index, 11th Edition, 1989.

Information herein is given in good faith as authoritative and valid; no warranty, express or implied can be made.