

PURITAN MEDICAL PRODUCTS COMPANY LLC

Safety Data Sheet

Rev. 03 April 20, 2015

1. Product and company identification

Product name: Self-Saturating Popule® pre-filled with 91% Isopropyl Alcohol and 9% Distilled Water

Product number: 4545

Company identification:

Puritan Medical Products Company LLC
P.O. Box 149, 31 School Street
Guilford, Maine 04443-0149 U.S.A.

Contact numbers:

Tel: +1 207-876-3311
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2. Hazards Identification

This material is hazardous according to regulatory guidelines (see (M)SDS Section 15).

Classification:

Flammable liquid: Category 2

Eye irritation: Category 2A

Special target organ toxicant (central nervous system): Category 3.

Label: Pictogram



Signal word: Danger

Hazard Statements:

H225: Highly flammable liquid and vapor. H319: Causes eye irritation. H336: May cause drowsiness or dizziness.

Precautionary Statements:

P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking. P233: Keep container tightly closed. P240: Ground bond container and receiving equipment. P241: Use explosion-proof electrical, ventilating, and lighting equipment. P242: Use only non-sparking tools. P243: Take precautionary measures against static discharge. P261: Avoid breathing mist/vapors. P264: Wash skin thoroughly after handling. P271: Use only outdoors or in a well-ventilated area. P280: Wear protective gloves and eye/face protection. P303 + P361 + P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304 + P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P312: Call a POISON CENTER or doctor/physician if you feel unwell. P337 + P313: If eye irritation persists: Get medical advice/attention. P370 + P378: In case of fire: Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish. P403 + P235: Store in well-ventilated place. Keep cool. P405: Store locked up. P501: Dispose of contents and container in accordance with local regulations.

Physical / Chemical Hazards:

Material can release vapors that readily form flammable mixtures. Vapor accumulation could flash and/or explode if ignited.

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Health Hazards:

May be irritating to the skin, nose, throat, and lungs. May cause central nervous system depression. If swallowed, may be aspirated and cause lung damage.

Environmental Hazards:

NFPA Hazard ID: Health: 2 Flammability: 3 Reactivity: 0

HMIS Hazard ID: Health: 2* Flammability: 3 Reactivity: 0

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.

3. Composition/information on ingredients

This material is defined as a substance.

Hazardous Substance(s) or Complex Substance(s) required for disclosure.

Name	Concentration*	GHS Hazard Codes
ISOPROPYL ALCOHOL	100%	H225, H305, H336, H319(2A)

* All concentrations are percent by weight unless material is a gas. Gas concentrations are in percent by volume.

As per paragraph (i) of 29 CFR 1910.1200, formulation is considered a trade secret and specific chemical identity and exact percentage (concentration) of composition may have been withheld. Specific chemical identity and exact percentage will be provided to health professionals, employees, or designated representatives in accordance with applicable provisions of paragraph (i).

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.

Eye contact: Flush thoroughly with water for at least 15 minutes. Get medical assistance.

Ingestion: Seek immediate medical attention. Do not induce vomiting.

Note to Physician: If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately.

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. If a leak or spill has not ignited, use water spray to disperse the vapors and to protect personnel attempting to stop a leak. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Firefighters 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.

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Unusual Fire Hazards: Highly flammable. Vapors are flammable and heavier than air. Vapors may travel across the ground and reach remote ignition sources causing a flashback fire danger. Hazardous material. Firefighters should consider protective equipment indicated in Section 8.

Hazardous Combustion Products: Smoke, Fume, Incomplete combustion product, Oxides of carbon

Flammability Properties:

Flash Point [Method]: 12°C (54°F) [ASTM D-56]

Flammable Limits (Approximate volume % in air): LEL: 2.0 UEL: 13

Auto ignition Temperature: >350°C (662°F) [Technical literature]

6. Accidental release measures

Notification Procedures: In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. US regulations require reporting releases of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.

Protective Measures: Avoid contact with spilled material. Warn or evacuate occupants in surrounding and downwind areas if required due to toxicity or flammability of the material. See section 5 for fire fighting information. See the Hazard Identification Section for Significant Hazards. See Section 4 for First Aid Advice. See Section 8 for advice on the minimum requirements for personal protective equipment. Additional protective measures may be necessary, depending on the specific circumstances and/or the expert judgement of the emergency responders.

Spill Management:

Land Spill: Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do it without risk. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Prevent entry into waterways, sewer, basements or confined areas. A vapor suppressing foam may be used to reduce vapors. Use clean non-sparking tools to collect absorbed material. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. **Large spills:** Water spray may reduce vapor; but may not prevent ignition in closed spaces. Recover by pumping or with

Water Spill: Stop leak if you can do it without risk. Eliminate sources of ignition. Warn other shipping. Seek the advice of a specialist before using dispersants. Water spill and land spill commendations are based on the most likely spill scenario for this material; however, geographical conditions, wind, temperature, (and in the case of 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: Dike far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

7. Handling and Storage

Handling: Avoid contact with eyes. Prevent exposure to ignition sources, for example use non-sparking tools and explosion-proof equipment. Potentially toxic/irritating fumes/vapors may be evolved from heated or agitated material. Use only with adequate ventilation. Use proper bonding and/or ground procedures. However, bonding and grounds may not eliminate the hazard from static accumulation. Peroxides may form upon prolonged storage. Exposure to light, heat or air significantly increases peroxide formation. If evaporated to a residue, the mixture of peroxides residue and material vapor may explode when exposed to heat or shock. Prevent small spills and leakage to avoid slip hazard.

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Loading/Unloading Temperature:

Transport Temperature:

Transport Pressure:

Static Accumulator: This material is not a static accumulator.

Storage: Ample fire water supply should be available. A fixed sprinkler/deluge system is recommended. Keep container closed. Handle containers with care. Open slowly in order to control possible pressure release. Store in a cool, well-ventilated area. Outside or detached storage preferred. Storage containers should be grounded and bonded. Fixed storage containers, transfer containers and associated equipment should be grounded and bonded to prevent accumulation of static charge.

Storage Temperature

Storage Pressure:

Suitable Containers/Packaging: Drums; Tank Cars; Tank Trucks; Tankers; Barges

Suitable Materials and Coatings: Carbon Steel; Stainless Steel; Polyester; Teflon; Polyethylene; Polypropylene; Copper Bronze; Epoxy Phenolic; Zinc; Vinyls

Unsuitable Materials and Coatings: Aluminum; Cast Iron; Polystyrene; Ethylene-propylene-diene monomer (EPDM); Monel; Butyl Rubber; Natural Rubber

8. Exposure controls/personal protection

Exposure Limit Values

Exposure limits/standards (Note: Exposure limits are not additive)

Substance Name	Form	Limit Standard	Note	Source
Isopropyl alcohol		TWA 980 mg/m ³ 400 ppm	N/A	OSHA Z1
		STEL 400 ppm	N/A	ACGIH
		TWA 200 ppm	N/A	ACGIH

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

Biological limits

Substance	Specimen	Sampling Time	Determinant	Source
Isopropyl alcohol	Urine	End of shift at end of work wk	40 mg/l Acetone	ACGIH BELs (BEIs)

Engineering Controls: The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider: Adequate ventilation should be provided so that exposure limits are not exceeded. Use explosion-proof ventilation equipment.

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: Half-face filter respirator.

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/vapor warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

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

Eye Protection: Chemical goggles 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. Practice good housekeeping.

Environmental Controls: Comply with applicable environmental regulations limiting discharge to air, water and soil. Protect the environment by applying appropriate control measures to prevent or limit emissions.

9. Physical and chemical properties

Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the supplier for additional information.

General information

Physical State:	Liquid
Form:	Clear
Color:	Colorless
Odor:	Alcohol
Odor Threshold:	N/D

Important Health, Safety, and Environmental Information

Relative Density (at 20°C):	0.786 [with respect to water] [calculated]
Density (at 20°C):	785 kg/m ³ (6.55 lbs/gal, 0.79 kg/dm ³) [ISO 12185]
Flammability (Solid, Gas):	N/D
Flash Point [Method]:	12°C (54°F) [ASTM D-56]
Flammable Limits (Approx. Volume % in air):	LEL: 2.0 UEL: 13
Auto ignition Temperature:	>350°C (662°F) [Technical literature]
Boiling Point / Range:	82°C (180°F) - 83°C (181°F) [ASTM D1078]
Decomposition Temperature:	N/D
Vapor Density (Air = 1):	> 1 at 101 kPa [Calculated]
Vapor Density (Air = 1):	> 1 at 101 kPa [Calculated]
Vapor Pressure:	4.3 kPa (32.25 mm Hg) at 20°C [Calculated] [In-house method]
Evaporation Rate (n-butyl acetate = 1):	3.9 [In-house method]
pH:	N/D
Log Pow (n-Octanol/Water Partition Coefficient):	0.05 [Technical literature]

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Solubility in Water:	Complete
Viscosity:	[N/D at 40°C] 2.66 cSt (2.66 mm ² /sec) at 25°C [ASTM D7042]
Oxidizing Properties:	See Hazards Identification Section.
OTHER INFORMATION	
Freezing Point:	N/D
Melting Point:	-89°C (-128°F) [Technical literature]
Molecular Weight:	60 G/MOLE [Calculated]
Hygroscopic:	Yes
Coefficient of Thermal Expansion:	0.00117 V/VDEGC [In-house method]

10. Stability and reactivity

Materials and conditions to avoid:

REACTIVITY: See sub-sections below.

STABILITY: Under normal storage conditions peroxides may accumulate and explode when subjected to heat or shock. Distillation or evaporation increases peroxide formation and increases the explosion hazard.

CONDITIONS TO AVOID: Avoid heat, sparks, open flames and other ignition sources.

MATERIALS TO AVOID: Aldehydes, Amines, Strong oxidizers, Caustics, Chlorinated Compounds, Alkanolamines

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

POSSIBILITY OF HAZARDOUS REACTIONS: Hazardous polymerization will not occur.

11. Toxicology information

INFORMATION ON TOXICOLOGICAL EFFECTS

HAZARD CLASS

CONCLUSION/REMARKS

INHALATION

Acute Toxicity: (Rat) 6 hour(s) LC50>

Minimally Toxic. Based on test data for the material.

25000 mg/m³ (Vapor)

Test(s) equivalent or similar to OECD Guideline 403

Irritation: No end point data for material.

Elevated temperatures or mechanical action may form vapors, mist or fumes which may be irritating to the eyes, nose, throat, or

INGESTION

Acute Toxicity (Rat): LD50 5840 mg/kg

Minimally Toxic. Based on test data for the material. Test(s) equivalent or similar to OECD Guideline 401

SKIN

Acute Toxicity (Rabbit): LD50 13900 mg/kg

Minimally Toxic. Based on test data for the material. Test(s) equivalent or similar to OECD Guideline 402

Skin Corrosion/Irritation: Data available.

May dry the skin leading to discomfort and dermatitis. Based on test data for the material. Test(s) equivalent or similar to OECD

EYE

Serious Eye Damage/Irritation:

Irritating and will injure eye tissue. Based on test data for the material. Test(s) equivalent or similar to OECD Guideline 405

Data available.

SENSITIZATION

Respiratory Sensitization: No end point data

Not expected to be a respiratory sensitizer.

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Respiratory Sensitization: No end point data	Not expected to be a respiratory sensitizer.
Skin Sensitization: Data available.	Not expected to be a skin sensitizer. Based on test data for the material. Test(s) equivalent or similar to OECD Guideline 406
Aspiration. Data available.	May be harmful if swallowed and enters airways. Based on physico-chemical properties of the material.
Germ Cell Mutagenicity: Data available.	No expected to be a germ cell mutagen. Based on test data for the material. Test(s) equivalent or similar to OECD Guideline 471
Carcinogenicity: Data available.	Not expected to cause cancer. Based on test data for the material. Test(s) equivalent or similar to OECD Guideline 451
Reproductive Toxicity: Data available.	Not expected to be a reproductive toxicant. Based on test data for the material. Test(s) equivalent or similar to OECD Guideline 414
Lactation: No end point data for material.	Not expected to cause harm to breast-fed children.
Specific Target Organ Toxicity (STOT)	
Single Exposure: No end Point data for materi	May cause drowsiness or dizziness.
Repeated Exposure: Data available.	Not expected to cause organ damage from prolonged or repeated exposure. Based on test data for the material. Test(s) equivalent or similar to OECD Guideline 413

OTHER INFORMATION: For the product itself:

Vapor concentrations above recommended exposure levels are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anesthetic and may have other central nervous system effects. Prolonged and/or repeated skin contact with low viscosity materials may defat the skin resulting in possible irritation and dermatitis. Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may

The following ingredients are cited on the lists below: None.

1 = NTP CARC

3 = IARC 1

5 = IARC 2B

2 = NTP SUS

4 = IARC 2A

6 = OSHA CARC

12. Ecological Information

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

EXOTOXICITY

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

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: Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion

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Regulatory Disposal Information: RCRA Information: Disposal of unused product may be subject to RCRA regulations (40 CFR 261). Disposal of the used product may also be regulated due to ignitability, corrosively, **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.**

14. Transport information

DOT 49 CFR 172.101

Not regulated per 49 CFR 173.4 Small Quantity Exemption

LAND (DOT)

Proper Shipping Name:	ISOPROPANOL
Hazard Class & Division:	3
ID Number:	1219
Packing Group:	II
ERG Number:	129
Label(s):	3
Transport Document Name:	UN1219, ISOPROPANOL, 3, PG II

AIR (IATA)

Proper Shipping Name:	ISOPROPYL ALCOHOL
Hazard Class & Division:	3
ID Number:	1219
Packing Group:	II
Label(s) / Mark(s):	3
Transport Document Name:	UN1219, ISOPROPYL ALCOHOL, 3 PG II

15. Regulatory information

OSHA HAZARD COMMUNICATION STANDARD: This material is considered hazardous in accordance with OSHA HazCom 2012, 29 CRF 1910.1200.

16. Other information

Puritan Medical Products Company LLC provides the information in this document in good faith and believes the information to be accurate. The chemical, physical and toxicological properties of this product have not been thoroughly investigated. It is the responsibility of the buyer to research and understand safe methods of handling, storing, and disposal of this product. Puritan Medical makes no warranty with respect to such information and assumes no liability for any loss or injury, which may result from the use of this information. It is the buyers responsibility to comply with local, state and federal regulations concerning use and disposal of this product.