

MATERIAL SAFETY DATA SHEET

PRODUCT: PERSIST Brand Povidone-Iodine Prep
Topical Antimicrobial Finished Product
Date: 04/19/10 **Revision #:** 7



PRODUCT AND COMPANY INFORMATION – SECTION 1

Company Identification

Name: BD Medical
Address: 9450 South State Street
Sandy, UT 84070

Product Name

BD IV Start Pak w/Persist Catalog No.: Product Catalog No.
386170, 386172, 386175, 386179,
386180, 386190
BD Persist Stand alone 386401, 386402

FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE, OR ACCIDENT:

In the continental U.S., call: 801.565.2300 (24 hour)
For additional information, call: 888.237.2762
(M-F, 8:00 AM-4:30 PM EST)

COMPOSITION INFORMATION – SECTION 2

Product Code: NDC 5940711011

Chemical Name: 2-Pyrrolidinone 1-ethenyl-homopolymer compound with Iodine in Ethanol

Synonym: PVP-I with Ethyl Alcohol

<u>Chemical Name</u>	<u>Percent Wt.</u>	<u>CAS Number</u>	<u>RTECS Number</u>
PVP-I	10%	25655-418	TR1579600
Ethanol	> 70.0	64-17-5	KQ6300000

OSHA REGULATORY STATUS

	This material is classified as not hazardous under OSHA regulations.
	While this material is not classified as hazardous under OSHA regulations, this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of the product.
X	This material is classified as hazardous under OSHA regulations.

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HAZARDS IDENTIFICATION – SECTION 3

EMERGENCY OVERVIEW	<ul style="list-style-type: none">▪ Keep out of eyes, ears, and mouth.▪ Keep out of reach of children.▪ For external use only.▪ Caution! Flammable Liquid.
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POTENTIAL HEALTH EFFECTS

Eyes: May cause irritation and/or permanent damage.

Skin: May cause dermatitis, irritation, and defatting of skin.
Iodine may be absorbed through skin causing severe irritation.

Inhalation: ETHANOL: May cause headaches, drowsiness, fatigue, narcosis, loss of appetite, inability to concentrate, and irritation of the respiratory tract.
IODINE: May cause severe irritation or burns of the respiratory tract, pulmonary edema, or lung inflammation.

Ingestion: May cause stomach pains, nausea, vomiting, diarrhea, and depression of the central nervous system.

Chronic Effects: ETHANOL: Liver damage, anemia, reproductive and teratogenic problems.
IODINE: Damage to lungs, thyroid gland, and blood.

FIRST AID MEASURES – SECTION 4

**SEEK IMMEDIATE MEDICAL ATTENTION
FOR ALL CASES OF OVEREXPOSURE.**

FIRST AID MEASURES	
Eyes:	Flush immediately with copious amounts of running water for at least 15 minutes.
Skin:	Immediately remove any contaminated clothing. Flush the affected area with copious amounts of running water.
Inhalation:	Immediately remove victim to fresh air. Support breathing as needed, preferably mouth to mouth. If oxygen is needed, it should be administered by a trained professional.
Ingestion:	Give water or milk to dilute if victim is conscious and able to swallow. Never give anything by mouth if the victim is unconscious or having convulsions. Induce vomiting only as advised by physician or Poison Control Center.

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FIRE FIGHTING MEASURES – SECTION 5

NFPA Rating		
Health	Fire	Reactivity
1	3	0

Flammability Properties

Flash Point / Method: 55°F ASTM D-56 (Ethanol)

Flammability Limits: **LEL:** 3.3% (Ethanol) **UEL:** 19% (Ethanol)
(in air % by volume)

Autoignition Temperature: U/K

Hazardous Combustion Products: U/K

Extinguishing Media: Dry chemical, foam, or carbon dioxide. Water may be ineffective by spray should be used to keep fire exposed containers cool, to disperse vapors from leaks/spills that have not yet ignited, and to flush spills away from exposures and to dilute spills to nonflammable mixtures.

Firefighting Instructions: As in any fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

Unusual Fire and Explosion Hazards: Burning packaging materials may cause dense smoke and fumes.

ACCIDENTAL RELEASE MEASURES - SECTION 6

Treat large spills with sodium thiosulfate prior to flushing to a sanitary sewer if local and state regulations permit. Absorbent material used for clean-up should be disposed of as hazardous waste.

HANDLING & STORAGE – SECTION 7

Handling: For external use only. Keep out of eyes, ears, and mouth.

Storage: Store at room temperature (68°F to 77°F). Avoid excessive heat (104°F). Store away from oxidizers, ignition sources, and explosives. Consult local fire codes for additional storage information.

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EXPOSURE CONTROLS / PERSONAL PROTECTION – SECTION 8

Engineering Controls: General and/or local exhaust to maintain exposure below the TLV.

Personal Protective Equipment

Eye/Face Protection: Safety goggles/glasses recommended.
Skin Protection: Latex gloves recommended for normal use. Nitrile gloves and chemical-resistant impervious protective clothing are recommended for spill cleanup
Respiratory Protection: Not required under normal usage. Use approved SCBA in spill cleanup situations in accordance with 29 CFR 1910.134
General Hygiene Considerations: Keep out of eyes, ears, and mouth. For professional and hospital use only. Keep out of reach of children.

Exposure Guidelines

IODINE			
OSHA Ceiling:	0.1 ppm	ACGIH Ceiling:	0.1 ppm
ETHANOL			
OSHA PEL:	1000 ppm	ACGIH TLV:	1000ppm

PHYSICAL & CHEMICAL PROPERTIES – SECTION 9

CONSTITUENT:	Iodine	Ethanol	Product
Appearance, Physical State:	N/A	N/A	Dark, reddish brown liquid
Odor:	N/A	N/A	Pleasant, mild
Molecular Weight:	U/K	U/K	U/K
pH:	U/K	U/K	U/K
Boiling Point:	365°F	173°F	U/K
Melting Point:	N/A	N/A	N/A
Vapor Pressure (mm Hg):	0.3 mm @ 77°F	44 mm @ 68°F	U/K
Vapor Density (Air=1):	U/K	1.59	U/K
Solubility in Water:	Very slightly	Miscible	Completely soluble
% Volatile By Volume:	U/K	100%	U/K

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STABILITY & REACTIVITY – SECTION 10

Stability: Stable at normal temperatures and pressures.
Conditions to Avoid: Heat
Materials to Avoid: Strong oxidizers, potassium dioxide, bromine pentafluoride, acetyl chloride, platinum, sodium.
Hazardous Decomposition Products: Heat to decomposition may yield free iodine.
Hazardous Polymerization: Will not occur.

TOXICOLOGICAL INFORMATION – SECTION 11

Iodine Rat (Oral) LD50: 14 Gm/Kg
Ethanol Rat (Oral) LD50: 13.7 Gm/Kg

ECOLOGICAL INFORMATION – SECTION 12

No significant ecological information is available for this substance.

DISPOSAL CONSIDERATION – SECTION 13

This product contains listed hazardous waste and should be disposed of by a permitted hazardous waste disposal company. Follow all current Federal, state, and local regulations and guidelines.

TRANSPORT INFORMATION - SECTION 14

DOT CLASSIFICATION:

Small Quantity, Class 3
Refer to 49CFR 173.4 for additional information.

IATA CLASSIFICATION:

Dangerous Goods in Excepted Quantities, Class 3, UN 1170
Refer to IATA Section 2.7 for additional information.

IMDG CLASSIFICATION:

Ethyl Alcohol Solution, Class 3, UN 1170, PGII, Limited Quantity
Refer to IMDG Code Section 3 for additional information.

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REGULATORY INFORMATION – SECTION 15

US REGULATIONS

OSHA	Listed (Ethanol, Iodine) on Table Z-1 (Limits for Air Contaminants)
TSCA	Not Listed
CERCLA	Not Listed
SARA Title III	Not Listed

STATE REGULATIONS

MA Substance List	Listed (Ethanol, Iodine)
NJ Right-to-Know Hazardous Substance List	Listed (Ethanol, Iodine)
PA Hazardous Substance List	Listed (Ethanol, Iodine)

OTHER INFORMATION - SECTION 16

Definitions:

U/K = Unknown
N/A = Not Applicable

To the best of our knowledge, the information contained herein is accurate. However, neither Becton Dickinson nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. The possibility exists that the EU will not recognize this MSDS due to the fact that several components of the MSDS are reflective of ANSI Z-400.1-1998. Although ILO (International Labor Organization) has adopted ANSI Z-400.1-1998, ultimate disposition lies with the competent authority.

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VERSION HISTORY

Version	Description	ECO Number	Version Prepared By
7	Review and Update: Removed obsolete catalog numbers from section 1 386185, 386199, 383702, 383507, 383508, 383509 and 386510. Moved 386411, 386412 and 386413 to D12554 Persist Plus/CHG MSDS. Updated date and Revision in the Header.	ECO123316	Rachel LeBlanc Janet Boggess
6	<p>Routine Review, update to current format. To stay consistent with other MSDS's, include Version Number in the header..</p> <p>Changes made to Section 1: Update Company name to BD Medical Systems from BD Medical. Under Product Name Change Standalones to Stand alone.</p> <p>Changes made to Section 2: Under Chemical Name, change Iodine to PVP-I, Percent Wt. From 1.0 to 10%., CAS Number from 7553-56-2 to CAS # 25655-41-8 and the RTECS Number from NN1575000 to TR1579600.</p> <p>Changes made to section 3: in the Emergency Overview box add bullet for Caution! Flammable Liquid.</p> <p>Changes made to section 14: Change IMDG Classification: from the current "Dangerous Goods in Limited quantities of Class 3. Refer to IMDG Code Volume 2, pages 47 and 192 for additional information." To Ethyl Alcohol Solution, Class 3, UN1170 PGII Limited Quantity Refer to IMDG Code Section 3 for additional information.</p> <p>Update Version History table to the current format by removing the Document Version date which is no longer required since this information prints off from QDMS in the form of a watermark.</p>	ECO88586	Rachel Leblanc Janet Boggess
01-02	In the header of the documents. The word "Povidone" was spelled incorrectly (Providone) & was overlooked by those approving the prior revision on ECO 19696. This ECO is to correct the spelling. Reason for Change: Typographical Error.	19814	Nancy Watters