MATERIAL SAFETY DATA SHEET

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SECTION I:

CHEMICAL NAME AND SYNONYMS: Povidone Iodine Solution USP, PVP-I

TRADE NAME: Betadine® Solution (10% Povidone Iodine)

CHEMICAL FAMILY: Polymer, complex of Polyvinylpyrrolidone w/ Iodine

FORMULA: (C₆H₉NO)n x I

CAS REGISTRY #: 25655-41-8

SECTION II: HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>NAME</th>
<th>CAS NO.'S</th>
<th>OSHA PEL/ACGIH TLV - TWA</th>
<th>TOXICOLOGICAL DATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>POVIDONE IODINE, USP</td>
<td>25655-41-8</td>
<td>15 mg/m³ – PEL 10 mg/m³ - TLV</td>
<td>ORAL – MOUSE LD50 &gt; 8100 mg/kg</td>
</tr>
<tr>
<td>INACTIVE INGREDIENTS</td>
<td>NL</td>
<td>NE</td>
<td>GENERALLY RECOGNIZED AS SAFE.</td>
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</tbody>
</table>

SECTION III: PHYSICAL DATA

SPECIFIC GRAVITY: 1.03 (WATER = 1)

pH: 5 - 6

APPEARANCE & ODOR: Reddish-Brown, clear liquid, faint odor.

SECTION IV: FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (method used): NA

FLAMMABLE LIMITS: NA

LEL: NA

EXTINGUISHING MEDIA: Use water, CO₂, dry chem or any suitable fire fighting agents for other primary cause of fire.

SPECIAL FIRE FIGHTING PROCEDURES: None regarding this product.

UNUSUAL FIRE AND EXPLOSION HAZARDS: NA

SECTION V: HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE (TLV): NE for Product – see Section II for ingredient TLV’s.

EFFECTS OF OVEREXPOSURE: This product is generally recognized as safe when used as a topical antimicrobial agent. Prolonged exposure to wet soln. may cause local irritation to the skin. Elevated concentrations of iodine in the serum may occur if excessive amounts of iodine are adsorbed through broken skin, burns or deep wounds. Iodine may also be absorbed through the lungs and gastrointestinal tract. High concentrations of iodide in serum may produce alterations in thyroid function, renal disturbances, acidosis & electrolyte disturbances.

CONDITIONS AGGRAVATED BY EXPOSURE: NIF.

EMERGENCY AND FIRST AID MEASURES:

FOR EYES: Flush with copious amounts of water for 15 minutes. Seek medical attention.

FOR SKIN: Wash affected area thoroughly with water. Seek medical attention.

FOR INGESTION: INDUCE VOMITING IMMEDIATELY - drink copious amounts of water – seek prompt medical aid.

NA = NOT APPLICABLE

NE = NOT ESTABLISHED

NL = NOT LISTED

NIF = NO INFORMATION FOUND
attention. Never give anything by mouth to an unconscious person.

**FOR INHALATION:** Inhalation is not likely to occur, however, in the event of exposure to vapors remove the victim from the affected area, restore breathing - if required and seek medical attention.

### SECTION VI: REACTIVITY DATA

**STABILITY:** Stable at normal temperature and pressure.

**STORAGE:** Store and handle in accordance with good housekeeping practices. Store in tight container in a cool and dry location.

**INCOMPATIBILITIES:** Reducing agents, strong alkalies.

**HAZARDOUS DECOMPOSITION:** None.

**POLYMERIZATION:** Not known to occur.

**CONDITIONS TO AVOID:** Avoid contact with incompatible materials.

### SECTION VII: ENVIRONMENTAL DATA

**SPILL/RELEASE MEASURES:** Wipe up spills with absorbent material. Sodium Thiosulfate is useful in decolorizing stains.

**WASTE DISPOSAL:** Dispose of in accordance with state, federal and local regulations.

**HAZARDOUS SUBSTANCE UNDER SUPERFUND:** NL

**HAZARDOUS WASTE, 40CFR 261:** NL

**HAZARDOUS WASTE NUMBER:** NE

**CONTAINER DISPOSAL:** No special handling required. Consult local regulations regarding empty container disposal.

### SECTION VIII: SPECIAL PROTECTION INFORMATION

**RESPIRATORY PROTECTION:** Ordinarily not required.

**VENTILATION:** Ordinarily not required.

**SKIN PROTECTION:** Any impervious glovewear or apparel suitable to limit contact exposure.

**EYE PROTECTION:** Chemical splash goggles, face shield or any other suitable protective eyewear to limit exposure.

### SECTION IX: SPECIAL PRECAUTIONS

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:** No special precautions are deemed necessary.

**OTHER PRECAUTIONS:** NA

**NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RATINGS:**

<table>
<thead>
<tr>
<th>Health</th>
<th>Fire</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
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