

ID 10

**Material Safety Data Sheet**

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910 1200. Standard must be consulted for specific requirements.

**U.S. Department of Labor**

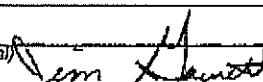
Occupational Safety and Health Administration  
(Non-Mandatory Form)  
Form Approved  
OMB No. 1218-0072

**IDENTITY (as Used on Label and List)**

**Iodine, PVP**

Note: Blank spaces are not permitted. If any item is not applicable or no information is available, the space must be marked to indicate that.

**Section I**

Manufacturer's name <b>Western Chemical</b>	Emergency Telephone Number <b>1-800-424-9300 Chemtrec</b>
Address (Number, Street, City, State and ZIP Code) <b>1269 Latimore Road Ferndale, WA 98248</b>	Telephone Number for Information <b>1-360-384-5898</b>
	Date Prepared <b>6/17/05</b>
	Signature of Preparer (optional) 

**Section II—Hazardous Ingredients/Identity Information**

Hazardous Components (Specific Chemical Identity, Common Name(s))	CAS	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
PolyVinylpyrrolidone complex	25655-41-8	Not established	Not established		10.0%

**Section III—Physical/Chemical Characteristics**

Boiling Point	130°C	Specific Gravity (H <sub>2</sub> O = 1)	Approx 1.10 @ 60F
Vapor Pressure (mm Hg)	N/A	Melting Point	N/A
Vapor Density (AIR = 1)	N/A	Evaporation Rate (Butyl Acetate = 1)	Slower
Solubility in Water	100%		
Appearance and Odor	Brown-Black Liquid Slightly Iodine odor		

**Section IV—Fire and Explosion Hazard Data**

Flash Point (Method Used)	> 100 degrees C	Flammable Limits	LEL UNK	UEL UNK
Extinguishing Media	Use Water Fog, Foam, or Dry Chemical Extinguishing Media.			
Special Fire Fighting Procedures	Fire fighters should use positive-pressure self-contained breathing apparatus. (SCBA)			
Unusual Fire and Explosion Hazards	Adequate ventilation and cleanliness must be maintained.			

(Reproduce locally)

OSHA 174 Sept 1985

**Section V—Reactivity Data**

Stability	Unstable		Conditions to Avoid
	Stable	X	N/A
Incompatibility (Materials to Avoid)			
Hazardous Decomposition or Byproducts			
Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	X	N/A

The burden of safe use of our materials must rest entirely with the user. We cannot assume responsibility for the completeness or accuracy of any information supplied by us concerning the hazards and recommended use of the chemicals.

<b>Section VI—Health Hazard Data</b>			
Route(s) of Entry	Inhalation? Yes	Skin? Yes	Ingestion? Yes
Health Hazards (Acute and Chronic) Acute overexposure may occur if excessive amounts are absorbed through broken skin, burns, or deep wounds. This product is generally accepted as safe for use as an antimicrobial agent. Symptoms of over exposure may result in excessive amounts of sodium in the blood, and cases of acidosis have been reported as well as increased serum iodine levels.			
Chronic Overexposure Effects Overexposure to PVP-I may cause hyperthyroidism			
Carcinogenicity No	NTP? No	IARC Monographs? No	OSHA Regulated? No
Signs and Symptoms of Exposure Pain or irritation to eyes, mucous membranes, skin or lungs.			
Medical Conditions			
Generally Aggravated by Exposure Unknown			
Emergency and First Aid Procedures			
<u>Inhalation:</u> Remove immediately to fresh air. If not breathing, give artificial respiration, preferably mouth to mouth. If breathing is difficult, give oxygen. Call a physician.			
<u>Skin Contact:</u> Rinse contaminated area of skin with 5 % sodium thiosulfate. If this is not available, wash with soap and water. If irritation occurs consult physician. Thoroughly clean contaminated clothing and shoes before reuse.			
<u>Ingestion:</u> If conscious, drink large quantities of milk and any common (vegetable) oil. DO NOT INDUCE VOMITING. Take immediately to hospital or physician. If unconscious or in convulsions take immediately to hospital or physician. DO NOT ATTEMPT TO GIVE ANYTHING BY MOUTH TO AN UNCONCIOUS PERSON.			
<u>Eye Contact:</u> Flush with water for at least 15 minutes, lifting lower and upper eyelids. Obtain medical attention immediately after water flushing.			
<b>Section VII—Precautions for Safe Handling and Use</b>			
Steps to Be Taken in Case Material is Released or Spilled Contain the spill. Do not allow to flow into water supplies. Absorb any leaked or spilled material or neutralize with sodium thiosulfate.			
Waste Disposal Method Dispose of according to local, state, and federal regulations.			
Precautions to Be Taken in Handling and Storing Follow label instructions.			
Other Precautions Harmful if swallowed . Keep out of reach of children.			
<b>Section VIII—Control Measures</b>			
Respiratory Protection (Specify Type) Full or half face respirator with organic vapor protection cartridges.			
Ventilation	Local Exhaust	Use local exhaust	Special None
	Mechanical (General)	None	Other None
Protective Gloves	Nalgene or similar		Eye Protection Complete Eye protection Goggles
Other Protective Clothing or Equipment Apron, coveralls, and boots as necessary to prevent contact.			
Work/Hygienic Practices Wash off any product immediately. Protect environment.			

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### SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE	UK
EFFECTS OF OVEREXPOSURE	Possible skin and eye irritation
EMERGENCY AND FIRST AID PROCEDURES	Skin - wash with soap & water. Eyes - flush with plenty of water. Consult physician. Internal - give large amounts of milk or water. Call physician immediately.

### SECTION VI - REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	
INCOMPATIBILITY (Materials to avoid)			
HAZARDOUS DECOMPOSITION PRODUCTS			
Iodine Vapors			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

### SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED	
Flush with water	
WASTE DISPOSAL METHOD	
Flush neutralized waste down drain or pick up with absorbent.	

### SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)		
N/A		
VENTILATION	LOCAL EXHAUST	SPECIAL
	MECHANICAL (General)	
If available, if not open doors or windows		N/A
PROTECTIVE GLOVES	rubber	EYE PROTECTION
OTHER PROTECTIVE EQUIPMENT	as needed	protective goggles

### SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING	
Store away from heat. Mix only as directed. Do not reuse empty container.	
OTHER PRECAUTIONS	
Harmful if swallowed. Keep out of reach of children.	



## FAX

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Date: August 25, 2005

Fax: 360 384-0270

From: **Jim Garnett**  
**QC Officer**  
[Jimg@wchemical.com](mailto:Jimg@wchemical.com)

To: Cathy W.  
Aquatic Eco-Systems, INC.

Pages: 3 including cover

Phone:

Subject: PVP-I MSDS

Fax: 1-407-886-6787

Comments: Here is the proper MSDS. Call me back if you need anything else or have questions.

**Jim Garnett**

1269 Lattimore Road Ferndale, WA 98248