

Safety Data Sheet

Alcoholic PVP Iodine, Trichrome Kit

Revision Date: 01/08/19

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier	Trade name: Alcoholic PVP Iodine Product code(s): 6901-08, 900A
1.2 Relevant identified uses	Laboratory Reagent
Supplier:	Astral Diagnostics Inc. 800-441-0366 Technical Service Monday-Friday: 8:00 -5:00 PM
Synonym:	None.
Material uses:	Laboratory Reagent.
Validation date:	12/11/2013
In case of emergency:	800-424-9300 CHEMTREC (USA) 24 Hours/Day: 7 Days/Week

2. HAZARDS IDENTIFICATION

Emergency Overview:

GHS Label Elements: Pictogram



Signal Word: **Danger!**

Hazard statement(s):

H225: Highly flammable liquid vapor

H315: Causes skin irritation

H319: Causes serious eye irritation

Precautionary statement(s):

P210: Keep away from heat/sparks/open flames. No smoking

P233: Keep container tightly closed

P242: Use only non-spark tools

P264: Wash skin thoroughly after handling

NFPA Rating

Health hazard: 2

Fire: 3

Reactivity Hazard: 0

HMIS Classification

Health hazard: 2

Flammability: 3

Physical hazards: 0

Potential Health Effects : Inhalation – May cause respiratory tract irritation.

Skin - May cause skin irritation.
Eyes – May cause eye irritation.
Ingestion – Potentially toxic if swallowed in large quantities.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Name	CAS number	% by volume
Ethanol	64-17-5	~99
Isopropanol	67-63-0	<3
PVP Iodine	25655-41-8	<1
Water	7732-18-5	Balance

4. FIRST AID MEASURES

First-aid measures general: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation: *Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.*

First-aid measures after skin contact: Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a poison center or doctor/physician.

First-aid measures after eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.

First-aid measures after ingestion: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media: Do not use a heavy water stream

5.2 Special hazards arising from the substance or mixture

No additional information available

5.3 Advice for firefighters

Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment. Do not enter fire area without proper protective equipment, including respiratory protection.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment: Gloves. Safety glasses. Combined gas/dust mask with filter type B/P3.
Emergency procedures: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment: Equip cleanup crew with proper protection.
Emergency procedures: Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Precautions for safe handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not breathe mist, vapors, spray. Obtain special instructions before use. Use personal protective equipment as required. Do not handle until all safety precautions have been read and understood.

Hygiene measures: Wash exposed skin thoroughly after handling. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures: Comply with applicable regulations.

Storage conditions: Keep container closed when not in use. Protect from sunlight. Store in a well-ventilated place.

Incompatible products: Strong oxidizers. Strong reducing agents. Strong bases.

Incompatible materials: Sources of ignition. Direct sunlight

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Consult local authorities for acceptable exposure limits.

Component	Source	Type	Value	Note
Isopropanol	ACGIH	TWA	200 ppm	
	ACGIH	STEL	400 ppm	
	NIOSH	TWA	980 mg/m ³ , 400 ppm	
	OSHA	TWA	980 mg/m ³ , 400 ppm	
	IDLH	US	2000 ppm	
Ethanol	OSHA	TWA	1900 mg/m ³	
	OSHA	ppm	1000 ppm	

Personal protective equipment: Safety glasses. Gloves. Protective clothing. High gas/vapor concentration: gas mask with filter type B.

Hand protection: Wear protective gloves.

Eye protection: Chemical goggles or face shield.

Skin and body protection: Wear suitable protective clothing.

Respiratory protection: Wear appropriate mask. Gas mask with filter type B.

Other information: Do not eat, drink or smoke during use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid.

Flash Point: Not determined

pH: NA

Melting/freezing point: -37°C

Vapor pressure: NA

Color: Brown

Odor: alcohol like

Boiling/condensation point: ~82°C

Relative density: ~0.9

Vapor density: NA

Odor threshold: NA
VOC: Not Determined

Evaporation rate: >1
Solubility: Soluble in the following materials: water

10. STABILITY AND REACTIVITY

10.1. Reactivity

Nonreactive under normal conditions

10.2. Chemical stability

No decomposition if used and stored according to specifications

10.3. Possibility of hazardous reactions

Not established

10.4. Conditions to avoid

Exposure to light. Incompatible materials

10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizers

10.6. Hazardous decomposition products

Hydrogen iodide. Iodine gas. May include oxides of iodine

11. TOXICOLOGICAL INFORMATION

Iodine

LD50 oral rat 14 g/kg

Isopropanol

LD50 dermal rabbit 12870 mg/kg

LC50 inhalation rat 73 mg/l/4hr

ATE oral 5045 mg/kg body weight

Ethanol

LD50 oral rat 10740 mg/kg bodyweight

LD50 dermal rabbit >16000 mg/kg

Skin corrosion/irritation: Not classified

Serious eye damage/irritation: No irritating effect

Respiratory or skin sensitization: Not classified

Germ cell mutagenicity: Not classified

Carcinogenicity: Not Classified

12. ECOLOGICAL INFORMATION

Toxicity	Isopropanol		
		LC50 fish2	9640 mg/l
		EC50 Daphnia2	13299 mg/l
		Algae 1	>1000 mg/l
	Ethanol		
		LC50 fish1	14200 mg/l
		EC50 Daphnia1	9300 mg/l
		LC50 fish2	13000 mg/l/96h
	Iodine		
		Fish LC50	2190 mg/l/96h
		Crustacea LC50	220-313 mg/l/25h
Persistence and degradability	Isopropanol		
		BOD	1.19 gO2/g
		COD	2.23 gO2/g
		ThOD	2.4 gO2/g

	Ethanol		
		BOD	0.8-0.967 gO2/g
		COD	1.70 gO2/g
		ThOD	2.10 gO2/g
Bioaccumulative potential	Isopropanol		
		Log Pow	0.05
	Ethanol	Log Pow	-0.31
Mobility in soil	Isopropanol	Surface tension	0.021 N/m
	Ethanol	Surface tension	0.022 N/m

13. DISPOSAL CONSIDERATIONS

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

DOT (US)

UN number: 1170

Class: 3

Packing Group: II

Proper Shipping name: Ethanol Solution

Reportable Quantity: 5000lb

IMDG/IATA

UN number: 1170

Class: 3 (6.1)

Packing Group: II

Proper Shipping name: Ethanol

15. REGULATORY INFORMATION

15.1 US Federal regulations

Ethanol

SARA Section 311/312 Hazardous Classes: Fire hazard, Acute health hazard, chronic health hazard

15.2 International regulations

Isopropanol

WHMIS Classification: Class B Division 2-Flammable Liquid, Class D Division 2 Subdivision A- Very toxic material causing other toxic effects

Ethanol

WHMIS Classification: Class B Division 2-Flammable Liquid, Class D Division 2 Subdivision A- Very toxic material causing other toxic effects, Class D Division 2 subdivision B- Toxic material causing other toxic effects

15.3 California Proposition 65

This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

16. OTHER INFORMATION

National Fire Protection Association (U.S.A.)



Notice to reader

This Safety Data Sheet has been prepared in accordance with the Globally Harmonized System for the Classification and Labeling of Chemicals (GHS). To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries makes any warranty of merchantability or any other warranty, expressed or implied, which respect to such information, and we assume no liability resulting from its use. In no event shall Astral Diagnostics, Inc be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages resulting from use of or reliance upon this information.