SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** TN1867A - Potassium Iodide Solution  
**Catalog Number:** TN1867A

Hach Company  
P.O. Box 389  
Loveland, CO USA 80539  
(970) 669-3050

Emergency Telephone Numbers:  
(Medical and Transportation)  
(303) 623-5716  
24 Hour Service  
(515)232-2533  
8am - 4pm CST

**MSDS Number:** M00977  
**Chemical Name:** Not applicable  
**CAS Number:** Not Applicable  
**Additional CAS No. (for hydrated forms):** Not applicable  
**Chemical Formula:** Not applicable  
**Chemical Family:** Not applicable  
**Intended Use:** Laboratory Reagent

2. HAZARDS IDENTIFICATION

Not applicable

**GHS Classification:**  
**Hazard categories:** Skin Corrosion/Irritation: Skin Irrit. 2  
**GHS Label Elements:**  
**WARNING**

**Hazard Statements:** Causes skin irritation. Causes serious eye irritation.

**Precautionary statements:** Handle environmental release according to local, state, federal, provincial requirements. Wear protective gloves / protective clothing / eye protection / face protection. If IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

**HIMS:**  
**Health:** 1  
**Flammability:** 0  
**Reactivity:** 0  
**Protective Equipment:** X - See protective equipment. Section 8.

**NFPA:**  
**Health:** 1  
**Flammability:** 0  
**Reactivity:** 0  
**Symbol:** Not applicable

**WHMIS Hazard Classification:** Not applicable  
**WHMIS Symbols:** Not applicable

3. COMPOSITION / INFORMATION ON INGREDIENTS
Hazardous Components according to GHS:

**Potassium Iodide**

- **CAS Number:** 7681-11-0
- **Chemical Formula:** KI
- **GHS Classification:** Acute Tox 5-Orl, H303; Skin Irr. 2, H315; Eye Irr. 2A, H319
- **Percent Range (Trade Secret):** 5.0 - 15.0
- **Percent Range Units:** weight/weight
- **PEL:** 15 mg/m³ as total dust; 5 mg/m³ as respirable dust
- **TLV:** 10 mg/m³ as inhalable dust; 3 mg/m³ as respirable dust

**WHMIS Symbols:** Other Toxic Effects

**Sodium Hydroxide**

- **CAS Number:** 1310-73-2
- **Chemical Formula:** NaOH
- **GHS Classification:** Met. Corr. 1, H290; Skin Corr. 1A, H314; Aquatic Acute 3, H402
- **Percent Range (Trade Secret):** < 0.5
- **Percent Range Units:** weight/weight
- **PEL:** 2 mg/m³
- **TLV:** Not established

**WHMIS Symbols:** Acute Poison Corrosive

**Hazardous Components according to GHS:** No

**Demineralized Water**

- **CAS Number:** 7732-18-5
- **Chemical Formula:** H₂O
- **GHS Classification:** Not a dangerous substance according to GHS.
- **Percent Range (Trade Secret):** 85.0 - 95.0
- **Percent Range Units:** volume/volume
- **PEL:** Not established
- **TLV:** Not established

**WHMIS Symbols:** Not applicable

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4. FIRST AID MEASURES

**General Information:** In the event of exposure, show this Material Safety Data Sheet and label (where possible) to a doctor.

**Advice to doctor:** Treat symptomatically.

**Eye Contact:** Immediately flush eyes with water for 15 minutes. Call physician.

**Skin Contact (First Aid):** Wash skin with soap and plenty of water. Call physician if irritation develops.

**Inhalation:** None required.

**Ingestion (First Aid):** Give large quantities of water. Call physician immediately.

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5. FIRE FIGHTING MEASURES

**Flammable Properties:** Material will not burn.

**Fire Fighting Instruction:** As in any fire, wear self-contained breathing apparatus pressure-demand and full protective gear.

**Extinguishing Media:** Use media appropriate to surrounding fire conditions

**Extinguishing Media NOT To Be Used:** Not applicable

**Fire / Explosion Hazards:** This product will not burn or explode.

**Hazardous Combustion Products:** This material will not burn.

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6. ACCIDENTAL RELEASE MEASURES

**Spill Response Notice:**
Only persons properly qualified to respond to an emergency involving hazardous substances may respond to a spill according to federal regulations (OSHA 29 CFR 1910.120(a)(v)) and per your company's emergency response plan and guidelines/procedures. See Section 13, Special Instructions for disposal assistance. Outside of the US, only persons properly qualified according to state or local regulations should respond to a spill involving chemicals.

**Containment Technique:** Absorb spilled liquid with non-reactive sorbent material. Stop spilled material from being released to the environment.

**Clean-up Technique:** Cover spilled material with a dry acid, such as citric or boric. Scoop up slurry into a large beaker. Dilute with a large excess of water. Adjust to a pH between 6 and 9. Use sulfuric or citric acid to lower pH. Use soda ash or sodium bicarbonate to increase pH. Flush reacted material to the drain with a large excess of water. Decontaminate the area of the spill with a soap solution.

**Evacuation Procedure:** Evacuate as needed to perform spill clean-up. If conditions warrant, increase the size of the evacuation.

**DOT Emergency Response Guide Number:** Not applicable

### 7. HANDLING AND STORAGE

**Handling:** Avoid contact with eyes. Wash thoroughly after handling. Maintain general industrial hygiene practices when using this product.

**Storage:** Protect from light. Keep container tightly closed when not in use.

**Flammability Class:** Not applicable

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Controls:** Maintain general industrial hygiene practices when using this product.

**Personal Protective Equipment:**

- **Eye Protection:** safety glasses with top and side shields
- **Skin Protection:** disposable latex gloves. In the EU, the selected gloves must satisfy the specifications of EU Directive 89/686/EEC and standard EN 374 derived from it.
- **Inhalation Protection:** adequate ventilation

**Precautionary Measures:** Avoid contact with eyes. Wash thoroughly after handling. Protect from light

**TLV:** Not established

**PEL:** Not established

For Occupational Exposure Limits (OEL) for ingredients, see section 3 - Composition/Information on Ingredients:

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Clear, colorless liquid

**Physical State:** Liquid

**Molecular Weight:** Not applicable

**Odor:** None

**Odor Threshold:** Odorless

**pH:** 10

**Metal Corrosivity:**

- **Corrosivity Classification:** Not classified as corrosive to metals according to GHS criteria.
- **Steel:** Not determined
- **Aluminum:** Not determined

**Specific Gravity/ Relative Density (water = 1; air =1):** 1.07

**Viscosity:** Not applicable

**Solubility:**

- **Water:** Miscible
- **Acid:** Miscible
- **Other:** Not determined

**Partition Coefficient (n-octanol / water):** Not applicable

**Coefficient of Water / Oil:** Not applicable

**Melting Point:** Not determined

**Decomposition Temperature:** Not applicable

**Boiling Point:** −100 °C (−212 °F)

**Vapor Pressure:** Not determined

**Vapor Density (air = 1):** Not determined

**Evaporation Rate (water = 1):** Not determined

**Volatile Organic Compounds Content:** Not applicable
Flammable Properties: Material will not burn.  
Flash Point: Not applicable
Method: Not applicable
Flammability Limits:  
Lower Explosion Limits: Not applicable
Upper Explosion Limits: Not applicable
Autoignition Temperature: Not applicable
Explosive Properties: 
Not classified according to GHS criteria.
Oxidizing Properties: 
Not classified according to GHS criteria.
Reactivity Properties: 
Not classified as self-reactive, pyrophoric, self-heating or emitting flammable gases in contact with water according to GHS criteria.
Gas under Pressure: 
Not classified according to GHS criteria.

10. STABILITY AND REACTIVITY

Chemical Stability: Stable when stored under proper conditions.
Mechanical Impact: None reported
Static Discharge: None reported.
Reactivity / Incompatibility: None reported
Hazardous Decomposition: Heating to decomposition releases toxic and/or corrosive fumes of iodine compounds
Conditions to Avoid: Exposure to direct sunlight. Evaporation

11. TOXICOLOGICAL INFORMATION

Toxicokinetics, Metabolism and Distribution: No information available for mixture.
Toxicologically Synergistic Products: None reported
Acute Toxicity: Based on classification principles, the classification criteria are not met.
Specific Target Organ Toxicity - Single Exposure (STOT-SE): Based on classification principles, the classification criteria are not met.
Specific Target Organ Toxicity - Repeat Exposure (STOT-RE): Based on classification principles, the classification criteria are not met.
Skin Corrosion/Irritation: Based on classification principles, the classification criteria are not met.
Eye Damage: Irritating to eyes. Assessment based on pH
Sensitization: Based on classification principles, the classification criteria are not met.
CMR Effects/Properties (carcinogenic, mutagenic or toxic to reproduction): Data insufficient for classification
This product does NOT contain any IARC listed chemicals.
This product does NOT contain any NTP listed chemicals.
This product does NOT contain any OSHA listed carcinogens.
Symptoms/Effects:
Ingestion: None reported
Inhalation: No data reported.
Skin Absorption: None Reported
Chronic Effects: Iodines overdose, 'iodism', may cause skin rash, runny nose, headaches, fever and bronchitis.
Medical Conditions Aggravated: None reported

12. ECOLOGICAL INFORMATION

Product Ecological Information: --
No ecological data available for this product. Mobility in soil: No data available
Ingredient Ecological Information: --
No ecological data available for the ingredients of this product.

13. DISPOSAL CONSIDERATIONS

EPA Waste ID Number: Not applicable
Special Instructions (Disposal): Open cold water tap completely, slowly pour the reacted material to the drain. Allow cold water to run for 5 minutes to completely flush the system.  
Empty Containers: Rinse three times with an appropriate solvent. Dispose of empty container as normal trash.  
NOTICE (Disposal): These disposal guidelines are based on federal regulations and may be superseded by more stringent state or local requirements. Please consult your local environmental regulators for more information. In Europe: Chemical and analysis solutions must be disposed of in compliance with the respective national regulations. Product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system.

14. TRANSPORT INFORMATION

D.O.T.:  
D.O.T. Proper Shipping Name: Not Currently Regulated  
--  
Hazard Class: NA  
Subsidiary Risk: NA  
ID Number: NA  
Packing Group: NA

T.D.G.:  
Proper Shipping Name: Not Currently Regulated  
--  
Hazard Class: NA  
Subsidiary Risk: NA  
UN Number/PIN: NA  
Packing Group: NA

I.C.A.O.:  
I.C.A.O. Proper Shipping Name: Not Currently Regulated  
--  
Hazard Class: NA  
Subsidiary Risk: NA  
ID Number: NA  
Packing Group: NA

I.M.O.:  
Proper Shipping Name: Not Currently Regulated  
--  
Hazard Class: NA  
Subsidiary Risk: NA  
ID Number: NA  
Packing Group: NA

Additional Information: There is a possibility that this product could be contained in a reagent set or kit composed of various compatible hazardous goods. If the item is NOT in a set or kit, the classification given above applies. If the item IS part of a set or kit, the classification would change to the following: UN3316 Chemical Kit, Class 9, PG II or III. If the item is not regulated, the Chemical Kit classification does not apply.

15. REGULATORY INFORMATION

U.S. Federal Regulations:  
O.S. H.A.: This product meets the criteria for a hazardous substance as defined in the Hazard Communication Standard. (29 CFR 1910.1200)

E.P.A.:  
S.A.R.A. Title III Section 311/312 Categorization (40 CFR 370): Immediate (Acute) Health Hazard  
S.A.R.A. Title III Section 313 (40 CFR 372): This product does NOT contain any chemical subject to the reporting requirements of Section 313 of Title III of SARA.  
--  
302 (EHS) TPQ (40 CFR 355): Not applicable  
304 CERCLA RQ (40 CFR 302.4): Not applicable  
304 EHS RQ (40 CFR 355): Not applicable  
Clean Water Act (40 CFR 116.4): Not applicable  
RCRA: Contains no RCRA regulated substances.

State Regulations:  
California Prop. 65: No Prop. 65 listed chemicals are present in this product.  
Identification of Prop. 65 Ingredient(s): None
California Perchlorate Rule CCR Title 22 Chap 33: Not applicable
Trade Secret Registry: Not applicable

National Inventories:
U.S. Inventory Status: All ingredients in this product are listed on the TSCA 8(b) Inventory (40 CFR 710).
CAS Number: Not Applicable
Canadian Inventory Status: All ingredients of this product are DSL Listed.
EEC Inventory Status: All ingredients used to make this product are listed on EINECS / ELINCS.
Australian Inventory (AICS) Status: All ingredients are listed.
New Zealand Inventory (NZIoC) Status: All components either listed or exempt.
Korean Inventory (KECI) Status: All components of this product are either listed, listed as the anhydrous compound or exempt.
Japan (ENCs) Inventory Status: All components either listed or exempt.
China (PRC) Inventory (MEP) Status: All components either listed or exempt.

16. OTHER INFORMATION

Complete Text of H phrases referred to in Section 3: H319 Causes serious eye irritation.
Revision Summary: Substantial revision to comply with EU Reg 1272/2008, Reg 1907/2006 and UN GHS (ST/SQ/AC.10/36/Add.3).
Date of MSDS Preparation:
Day: 03
Month: February
Year: 2015
MSDS Prepared: MSDS prepared by Product Compliance Department extension 3350
CCOHS Evaluation Note: This product has been classified and labeled in accordance with the requirements of GHS (ST/SQ/AC.10/36/Add.3). It is offered under the interim policy that was established by Health Canada permitting use of GHS-formatted safety data sheets in Canada prior to revision of CPR to GHS. It is offered under exemption from WHMIS labeling as specified in the Controlled Products Regulation (CPR) Section 17.

Legend:
NA - Not Applicable
ND - Not Determined
NV - Not Available
w/w - weight/weight
w/v - weight/volume
v/v - volume/volume

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

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