SAFETY DATA SHEET
VAN GIESON’S SOLUTION DNA

Section 1 - Chemical Product and Company Identification

**SDS Name:** Van Gieson’s Solution DNA  
**Catalog Numbers:** SO-1142DNA  
**Company Identification:** ROWLEY BIOCHEMICAL  
10 ELECTRONICS AVENUE  
DANVERS, MA 01923  
**For information, call:** 978-739-4883  
**Emergency Number:** 800-424-9300  
**For CHEMTREC assistance, call:** 800-424-9300

Section 2 - Hazards Identification

**GHS Classifications**  
**HEALTH HAZARDS**
- H301-Acute Oral Toxicity: 3  
- H312-Acute Dermal Toxicity: 4  
- H315-Skin Corrosion/Skin Irritation: 2  
- H318-Eye Damage/Irritation: 1  
- H341-Germ Cell Mutagenicity: 2  
- H373-Specific Target Organ Toxicity: 2  
**PHYSICAL HAZARDS**
- H290-Corrosive to Metals: 1  
**ENVIRONMENTAL HAZARDS**
- Aquatic acute environmental Hazards: Not classified  
- Chronic environmental Hazards: Not classified

**Pictograms or Hazard symbols and Hazard statement.**

- **Warning:** Causes skin irritation. Harmful in contact with skin.  
- **Danger:** Toxic if swallowed.
Chronic:
Mutagenic for bacteria and/or yeast. Causes damage to the following organs: mucous membranes. May cause damage to the following organs: blood, kidneys, liver. Prolonged or repeated skin contact may cause allergic or sensitization dermatitis. Prolonged or repeated eye contact may cause conjunctivitis. Prolonged or repeated skin and eye contact may also cause yellow staining of skin and eyes, and "yellow vision".

Precautionary Statement

H301
P270 Do not eat, drink, or smoke when using this product.
P301 + P310 If swallowed, immediately call a physician.
P330 Rinse mouth.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

H312+H315+H318
P264-Wash thoroughly after handling.
P280-Wear protective gloves.
P302+P352-IF ON SKIN: Wash with plenty of soap and water.
P332+P313-If skin irritation occurs: Get medical advice/attention.
P362-Take off contaminated clothing and wash before reuse

H341
P202 Do not handle until all safety precautions have been read and understood.
P201 Obtain special instructions before use
P280 Wear protective gloves, clothing, and eye and face protection
P308 + P311 If exposed or concerned, call a physician.
P405 Store locked up.

H320+H373
P305+P351+P338-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313-If eye irritation persists: Get medical advice/attention.

H290
P234-Keep only in original container.
P390-Absorb spillage to prevent material damage.
P406-Store in corrosive resistant/container with a resistant inner liner.

DANGER! **Toxic** if swallowed. Causes serious eye damage. **Mutagenic!** Suspected of causing genetic defects. May cause damage to organs through prolonged exposure. **Irritant!** Avoid contact with skin, eyes and clothing. May be **corrosive** to metals. Dry Picric Acid is an extremely hazardous material, which can detonate under certain conditions. This material should only be used by those familiar with the properties and safe handling of Picric Acid and its solutions. Read SDS before using.
Section 3 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>3244-88-0</td>
<td>Acid Fuchsin</td>
<td>0.1 w/v</td>
</tr>
<tr>
<td>88-89-1</td>
<td>Picric Acid</td>
<td>1.6 v/v</td>
</tr>
<tr>
<td>7732-18-5</td>
<td>Water</td>
<td>Balance</td>
</tr>
</tbody>
</table>

Section 4 - First Aid Measures

**Eye Exposure:** In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

**Dermal Exposure:** In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. If concerned, seek immediate medical advice.

**Oral Exposure:** If Swallowing seek immediate medical advice.

**Inhalation Exposure:** If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

Section 5 - Fire Fighting Measures

Firefighters should wear proper protective clothing and self contained breathing apparatus with full piece operated in positive pressure mode to prevent contact with skin and eyes.

**Extinguishing Media:** Use water spray, dry chemical powder, or appropriate foam.

**Flash Point:** CAS#: 88-89-1: Closed cup: 150°C (302°F).

**Auto-ignition Temperature:** CAS#: 88-89-1: 300°C (572°F)

**NFPA Rating:** (estimated) Health: 1; Flammability: 0; Instability: 0

Section 6 - Accidental Release Measures

**Procedure(s) of Personal Precaution(s):**
Wear protective gear.

**Methods for Cleaning up:** Absorb with sand, earth or vermiculite. Carefully sweep up and containerize for proper disposal.

Section 7 - Handling and Storage

Use care when handling. Wash thoroughly after handling. Store capped at room temperature. Keep away from incompatible materials.
Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

**Personal Protective Equipment**

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

Section 9 - Physical and Chemical Properties

**Physical State:** Liquid

**Appearance:** Orange-Red

**Odor:** Odorless

**pH:** N/A

**Vapor Pressure:** 2.3 kPa @ 20deg. C

**Vapor Density:** 0.62 (Air=1)

**Evaporation Rate:** N/A

**Viscosity:** N/A

**Boiling Point:** 100 deg. C

**Solubility:** N/A

Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under ordinary conditions of use and storage. Heat and sunlight can contribute to instability.

**Conditions to Avoid:** High temperatures, mechanical shock, ignition sources. An explosive mixture results when the aqueous solution crystallizes. Do not let dry picric acid (crystals) form in container or on the cap threads of container. Dry picric acid is explosive.

**Incompatibilities with Other Materials:** Highly reactive with metals, alkalis. Reactive with oxidizing agents, reducing agents. The product may undergo hazardous decomposition, condensation or polymerization, it may react violently with water to emit toxic gases or it may become self reactive under conditions of shock or increase in temperature or pressure.

**Hazardous Decomposition Products:** Will not occur.

**Hazardous Polymerization:** Will not occur.

Section 11 - Toxicological Information

**RTECS#:** TJ7875000

**LD50/LC50:**

CAS# 88-89-1: Acute oral toxicity (LD50): 200 mg/kg [Rat].
Carcinogenicity:
CAS# 88-89-1, 3244-88-0: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: Acute Potential Health Effects: Picric acid causes skin irritation and it may be absorbed through the skin. It has been shown to cause symptoms, when absorbed through the skin, similar to those when ingested. Will cause eye irritation and may result in corneal injury leading to blindness. Harmful if swallowed! May cause gastrointestinal tract irritation with abdominal pain, nausea, vomiting, and diarrhea. May affect behavior/central nervous system (vertigo, headache, stupor, tremor, convulsions), cardiovascular system, metabolism, kidneys/urinary system (anuria, oliguria, renal lesions, hemorrhagic nephritis), liver (acute hepatitis, jaundice). Chronic Potential Health Effects Picric acid: Prolonged or repeated skin contact may cause allergic or sensitization dermatitis. May cause conjunctivitis in the eyes, and may also cause yellow staining of the skin and eyes, and “yellow vision”.

Section 12 - Ecological Information

CAS# 88-89-1, 3244-88-0

Ecotoxicity: No information available.
Environmental: No information available.
Physical: No information available.
Other: No information available.

Section 13 - Disposal Considerations

Appropriate method of disposal of substance or preparation:

Handled as hazardous waste and sent to an RCRA approved incinerator or disposed in an RCRA approved wasted facility.

Section 14 – Transport Information

DOT
Non-Regulated

Section 15 - Regulatory Information

Canada Regulatory Information
WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

European/International Regulations
European Labeling in Accordance with EC Directives

Risk Phrases:
R21/22/48 Harmful in contact with skin, danger of serious damage to health by prolonged exposure in contact with skin and if swallowed.
R25 Toxic if swallowed.
R41 Risk of serious damage to eyes.
R43 May cause sensitization by skin contact.
R46 May cause heritable genetic damage.
Safety Phrases:
S20/21 When using do not eat, drink or smoke
S2 Keep out of the reach of children.
S7 Keep container tightly closed.
S9 Keep container in a well-ventilated place
S16 Keep away from sources of ignition.
S24/25 Avoid contact with skin and eyes.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S46 If swallowed, seek medical advice immediately and show this container or label.

Section 16 - Additional Information

MSDS Creation Date: 10/15/12
Revision #1. CF 10/8/13
The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Rowley Biochemical, 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, howsoever arising, even if Rowley Biochemical, Inc. has been advised of the possibility of such damages.