1 Product and Company Identification

<table>
<thead>
<tr>
<th>Product identifier</th>
<th>100% T Reference Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS #</td>
<td>Mixture</td>
</tr>
<tr>
<td>Product use</td>
<td>Analytical Calibration</td>
</tr>
<tr>
<td>Recommended restrictions</td>
<td>None known</td>
</tr>
<tr>
<td>Manufacturer information</td>
<td>Trojan Technologies</td>
</tr>
<tr>
<td></td>
<td>3020 Gore Road</td>
</tr>
<tr>
<td></td>
<td>London, ON N5V 4T7 CA</td>
</tr>
<tr>
<td></td>
<td>Phone: 519-457-3400</td>
</tr>
<tr>
<td></td>
<td>Phone: 888-220-6118</td>
</tr>
<tr>
<td>Australian supplier</td>
<td>Alastair MacNab</td>
</tr>
<tr>
<td></td>
<td>Trojan Technologies Group ULC</td>
</tr>
<tr>
<td></td>
<td>96 Ricketts Road</td>
</tr>
<tr>
<td></td>
<td>MOUNT WAVERLY VIC 3149</td>
</tr>
<tr>
<td>CANUTEC</td>
<td>Phone: 613-996-6666</td>
</tr>
<tr>
<td>Australian emergency #</td>
<td>Phone: 011 03 97283953</td>
</tr>
<tr>
<td></td>
<td>Mobile: 011 0488 080069</td>
</tr>
</tbody>
</table>

2 Hazards Identification

- Physical hazards: Not classified
- Health hazards: Not classified
- Environmental hazards: Not classified

WHMIS 2015 defined hazards

Label elements

- Hazard symbol: None
- Signal word: None
- Hazard statement: The mixture does not meet the criteria for classification.
- Precaution statement:
  - Prevention: Observe good industrial hygiene practices.
  - Response: Wash hands after handling.
  - Storage: Store away from incompatible materials.
  - Disposal: Dispose of waste and residues in accordance with local authority requirements.

WHMIS 2015: Health Hazard(s) not otherwise classified (HHNOC): None known

WHMIS 2015: Physical Hazard(s) not otherwise classified (PHNOC): None known

Hazard(s) not otherwise classified (HNOC): None known

Supplemental information: None

3 Composition/Information on Ingredients

Mixture Composition comments: This product is considered non-hazardous by WHMIS/OSHA criteria.
4 First Aid Measures

**Inhalation**
If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.

**Skin Contact**
Flush with cool water. Wash with soap and water. Obtain medical attention if irritation persists.

**Eye Contact**
Hold eye open and rinse gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.

**Ingestion**
Rinse mouth. Do not induce vomiting. If vomiting occurs, have victim lean forward to reduce risk of aspiration. Never give anything by mouth if victim is unconscious, or convulsing.

**Indication of immediate medical attention and special treatment needed**
Direct contact with eyes may cause temporary irritation.

**General Information**
If feeling unwell, seek medical advice (show the label and SDS where possible). Ensure medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Avoid contact with eyes and skin. Keep out of reach of children.

5 Fire Fighting Measures

**Suitable extinguishing media**

**Unsuitable extinguishing media**
Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical**
During fire, gases hazardous to health may be formed.

**Special protective equipment and precautions for firefighters**
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Fire-fighting equipment/instructions**
Move containers from fire area if you can do so without risk.

**Specific methods**
Use standard firefighting procedures and consider the hazards of other involved materials.

**General fire hazards**
No unusual fire or explosion hazards noted.

**Hazardous combustion Products**
May include and are not limited to: Oxides of carbon.

6 Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures**
Keep unnecessary personnel away. For personal protection, refer Section 8.

**Methods and materials for containment and cleanup**
Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

**Environmental precautions**
Never return spills to original containers for re-use. For waste disposal, refer Section 13.
7  Handling and Storage

Precautions for safe handling
Wash thoroughly after handling. Use good industrial hygiene practices in handling this material. When using do not eat or drink.

Conditions for safe storage, including any incompatibilities
Store in original tightly closed container. Store away from incompatible materials (refer Section 10). Keep out of reach of children.

8  Exposure Controls/Personal Protection

Occupational exposure limits
No exposure limits noted for ingredient(s).

Biological limit values
No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls
Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment, Eye/face protection
Eye/face protection
Wear safety glasses with side shields (or goggles).

Skin protection: Hand protection
Impervious gloves. Confirm with reputable supplier first.

Other Skin protection
Wear suitable protective clothing. As required by employer code.

Respiratory protection
Not normally required

Thermal hazards
Not applicable

General hygiene considerations
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. When using do not eat or drink.

9  Physical and Chemical Properties

Appearance
Liquid

Odor
Odorless

Odor Threshold
Not available

pH
~7

Melting Point / Freezing Point
0°C (32°F)

Initial Boiling Point
100°C (212°F)

Specific gravity
1.00

Flash Point
Not applicable

Evaporation Rate
Not available

Flammability (solid, gas)
Not applicable

Vapor Pressure
Not available

Vapor Density
Not available

Relative Density
Not available

Auto-ignition Temperature
Not available

Decomposition Temperature
Not available

Other information:

Explosive properties
Not explosive

Oxidizing properties
Not oxidizing
### 10 Stability and Reactivity

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reactivity</td>
<td>None known</td>
</tr>
<tr>
<td>Possibility of hazardous reactions</td>
<td>No dangerous reaction known under conditions of normal use.</td>
</tr>
<tr>
<td>Chemical stability</td>
<td>Material is stable under normal conditions.</td>
</tr>
<tr>
<td>Conditions to avoid</td>
<td>Do not mix with other chemicals.</td>
</tr>
<tr>
<td>Incompatible materials</td>
<td>Not corrosive to SAE 1020 Steel or non-clad Aluminum based on test data (UN Manual of Tests and Criteria, Part III, Section 37.1 -Corrosion to metals).</td>
</tr>
<tr>
<td>Hazardous decomposition products</td>
<td>May include and are not limited to : Oxides of carbon.</td>
</tr>
</tbody>
</table>

### 11 Toxicological Information

**Routes of exposure**
- Eye, Skin contact, Inhalation, Ingestion.

**Information on likely routes of exposure**

<table>
<thead>
<tr>
<th>Route</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingestion</td>
<td>Expected to be a low ingestion hazard. May cause stomach distress, nausea or vomiting.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Health injuries are not known or expected under normal use.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>Not corrosive or irritating to skin based on test data.</td>
</tr>
<tr>
<td></td>
<td>No adverse effects due to skin contact are expected.</td>
</tr>
<tr>
<td>Eye contact</td>
<td>Not corrosive or irritating to eyes based on test data.</td>
</tr>
<tr>
<td></td>
<td>Direct contact with eyes may cause temporary irritation.</td>
</tr>
</tbody>
</table>

**Information on toxicological effects**

- **Acute toxicity**: Not available
- **Skin corrosion/irritation**: Prolonged skin contact may cause temporary irritation.
- **Exposure minutes**: Not available
- **Erythema value**: Not available
- **Oedema value**: Not available
- **Serious eye damage/eye irritation**: Direct contact with eyes may cause temporary irritation.
- **Corneal opacity value**: Not available
- **Iris lesion value**: Not available
- **Conjunctival reddening value**: Not available
- **Recover days**: Not available

**Respiratory or skin sensitization**

- **Respiratory sensitization**: Not a respiratory sensitizers.
- **Skin sensitization**: This product is not expected to cause skin sensitization.

**Mutagenicity**

- No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity**

- **US - California Proposition 65 - CRT: Listed date/Carcinogenic substance**: Formaldehyde (CAS 50-00-0)
- **US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**: Not listed

**Reproductive toxicity**

- This product is not expected to cause reproductive or developmental effects.

**Teratogenicity**

- Not available
### Specific target organ toxicity (single exposure)
Not classified

### Specific target organ toxicity (repeated exposure)
Not classified

### Aspiration hazard
Not an aspiration hazard.

### 12 Ecological Information

<table>
<thead>
<tr>
<th>Category</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecotoxicity</td>
<td>Not available</td>
</tr>
<tr>
<td>Persistence and degradability</td>
<td>Not available</td>
</tr>
<tr>
<td>Bioaccumulative potential</td>
<td>Not available</td>
</tr>
<tr>
<td>Mobility in soil</td>
<td>Not available</td>
</tr>
<tr>
<td>Mobility in general</td>
<td>Not available</td>
</tr>
<tr>
<td>Other adverse effects</td>
<td>Not available</td>
</tr>
<tr>
<td>Aquatic toxicity</td>
<td>Toxic to aquatic life</td>
</tr>
</tbody>
</table>

### 13 Disposal Information

<table>
<thead>
<tr>
<th>Category</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disposal instructions</td>
<td>Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose in accordance with all applicable regulations.</td>
</tr>
<tr>
<td>Local disposal regulations</td>
<td>Dispose in accordance with all applicable regulations.</td>
</tr>
<tr>
<td>Hazardous waste code</td>
<td>The waste code should be assigned in discussion between the user, the producer and the waste disposal company.</td>
</tr>
<tr>
<td>Waste from residues / unused products</td>
<td>Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).</td>
</tr>
<tr>
<td>Contaminated packaging</td>
<td>Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.</td>
</tr>
</tbody>
</table>

### 14 Transport Information

<table>
<thead>
<tr>
<th>Category</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport of Dangerous Goods (TDG) Proof of Classification</td>
<td>In accordance with Part 2.2.1 (SOR/2014-152) of the Transportation of Dangerous Goods. Regulations, we certify that the classification of this product is correct as of the SDS date of issue.</td>
</tr>
<tr>
<td>U.S. Department of Transportation (DOT)</td>
<td>Not regulated as dangerous goods.</td>
</tr>
<tr>
<td>Transportation of Dangerous Goods (TDG - Canada)</td>
<td>Not regulated as dangerous goods.</td>
</tr>
</tbody>
</table>
### 15. Regulatory Information

**Canadian federal regulations**

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

**Canada DSL Challenge Substances: Listed substance**

Formaldehyde (CAS 50-00-0) | Listed

**Export Control List (CEPA 1999, Schedule 3)**

Not listed

**Greenhouse Gases**

Not listed

**Precursor Control Regulations**

Not regulated

**WHMIS Classifications**

Not applicable

**US federal regulations**

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Formaldehyde (CAS 50-00-0) | Listed


Not listed

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**

<table>
<thead>
<tr>
<th>Hazard category</th>
<th>- No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Delayed Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Fire Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Pressure Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Reactivity Hazard</td>
<td>No</td>
</tr>
</tbody>
</table>

**SARA 302 Extremely hazardous substance**

No

**SARA 311/312 Hazardous chemical**

No

**SARA 313 (TRI reporting)**

No

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated

**Inventory status**

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA)</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A “Yes” indicates that all components of this product comply with the inventory requirements administered by the governing country(s).
16. Other Information

Disclaimer
The information in the sheet was written based on the best knowledge and experience currently available. Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

NFPA Code
(Health: 1) (Flammability: 0) (Reactivity: 0)

<table>
<thead>
<tr>
<th>Issue Date</th>
<th>02-March-2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version #</td>
<td>01</td>
</tr>
<tr>
<td>Effective Date</td>
<td>02-March-2018</td>
</tr>
<tr>
<td>Prepared by</td>
<td>Manufacturer Personnel</td>
</tr>
</tbody>
</table>

Other Information
For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.

LEGEND

<table>
<thead>
<tr>
<th>Term</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severe</td>
<td>4</td>
</tr>
<tr>
<td>Serious</td>
<td>3</td>
</tr>
<tr>
<td>Moderate</td>
<td>2</td>
</tr>
<tr>
<td>Slight</td>
<td>1</td>
</tr>
<tr>
<td>Minimal</td>
<td>0</td>
</tr>
</tbody>
</table>