1. Identification of the substance/mixture and of the company/undertaking

1.1. Product Identifier

Product Name: PeCOD® Check Standard
Chemical Name: Sorbitol Solution

Synonyms:
10ppm Check Standard 60ppm Check Standard
200ppm Check Standard 600ppm Check Standard
3000ppm Check Standard 6000ppm Check Standard

1.2. Relevant identified uses of the substance or mixture and uses advised against:

Product Use: Used as a check standard prior to analysis on the of MANTECH PeCOD® COD Analyzer. No uses advised against.

1.3. Details of the supplier of the safety data sheet

Manufacturer Information:
579453 Ontario Inc.
o/a MANTECH
5473 Highway 6 North
Guelph, ON, N1H 6J2

1.4. Emergency telephone number

Monday – Friday 8:00AM to 4:30PM (EST): +1-519-763-4245
24-hour: +1-519-835-5252

2. Hazards Identification

2.1. Hazard classification according to Regulation (EC) No 1272/2008

Not classified.

2.2. Label Elements

Symbol: No symbol
Signal Word: No signal word

Hazard Statements: Not applicable

Precautionary Statements: Not applicable

2.3. Other hazards

Skin: Prolonged or repeated exposure may result in slight irritation.

Ingestion: Ingestion of large amounts may result in stomach irritation.

HMIS Ratings:

<table>
<thead>
<tr>
<th>Component</th>
<th>Health</th>
<th>Fire</th>
<th>Physical Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sorbitol</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Silver Nitrate</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Water</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Hazard Scale:

0 = Minimal
1 = Slight
2 = Moderate
3 = Serious
4 = Severe
* = Chronic

3. Composition Information

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sorbitol</td>
<td>50-70-4</td>
<td>&lt;2%</td>
</tr>
<tr>
<td>Silver Nitrate</td>
<td>7761-88-8</td>
<td>&lt;0.01%</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>Balance</td>
</tr>
</tbody>
</table>

4. First Aid Measures

4.1. Description of first aid measures

Eye: Wash with running water for at least 15 minutes. Seek medical attention if irritation develops.

Skin: Wash area with soap and water. Seek medical attention if irritation develops.

Ingestion: If uncomfortable, seek medical attention.

Inhalation: Remove patient to fresh air. Seek medical attention for any breathing difficulties.

Advice to Doctor: Treat symptomatically.

4.2. Most important symptoms and effects, both acute and delayed

No further information available.

4.3. Indication of any immediate attention and special treatment needed

No further information available.
5. Fire-Fighting Measures

5.1. Extinguishing Media

General Fire Hazards:
Non-combustible solution.

Extinguishing Media:
Not combustible, however, if material is involved in a fire use dry chemical, foam, carbon dioxide, water fog.

5.2. Special hazards arising from the substance or mixture

Hazardous Combustion Properties:
None identified.

5.3. Advice for firefighters

Fire Fighting Equipment/Instructions:
Firefighters should wear self-contained breathing apparatus and suitable protective clothing

NFPA Ratings:

<table>
<thead>
<tr>
<th>Hazard Scale</th>
<th>Health</th>
<th>Fire</th>
<th>Physical Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 = Minimal</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1 = Slight</td>
<td></td>
<td></td>
<td>2 = Moderate</td>
</tr>
<tr>
<td>2 = Moderate</td>
<td></td>
<td>4</td>
<td>3 = Serious</td>
</tr>
<tr>
<td>3 = Serious</td>
<td></td>
<td>4</td>
<td>4 = Severe</td>
</tr>
</tbody>
</table>

6. Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuation Procedures:
None necessary.

6.2. Environmental Precautions

Special Procedures:
Follow all local, State, Federal, and Provincial regulations for disposal. Wash area down with excess water.

6.3. Methods and material for containment and cleaning up

Containment Procedures:
Contain the discharged material.
Clean-Up Procedures:
Wear appropriate personal protective equipment. Absorb spill with inert material such as lime, polypads, or other suitable absorbent material.

6.4. Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protective equipment.

7. Handling and Storage

7.1. Precautions for safe handling
Handling Procedures:
Avoid eye contact and repeated or prolonged skin contact. Exercise good industrial and personal hygiene procedures.

7.2. Conditions for safe storage, including any incompatibilities
Storage Procedures:
Keep container tightly closed, and store at room temperature.

7.3. Specific end use
See Section 1.2. for specific end uses.

8. Exposure Controls / Personal Protection

8.1. Control parameters
EU community exposure limit: N/A

National exposure limit: N/A

8.2. Exposure Controls
Exposure Guidelines: Exposures should be minimized in accordance with good industrial hygiene practices
Engineering Controls:
Not Necessary. Natural ventilation should be adequate under normal conditions. Keep containers closed when not in use.
Personal Protective Equipment (PPE)

**Eyes/face:** Wear safety glasses

**Skin:** Wear impervious (neoprene) gloves and cotton/polyester lab coat or overalls

**Respiratory:** Use in a ventilated area.

**General:** Wash hands after handling material and before eating or drinking.

### 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear, colourless</td>
</tr>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Odour</td>
<td>Odorless</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>pH</td>
<td>4-6</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Not Available</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>&gt;100°C (220°F)</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Vapour Pressure</td>
<td>Not Available</td>
</tr>
<tr>
<td>Vapour Density</td>
<td>Not Available</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Similar to Water</td>
</tr>
<tr>
<td>Lower Flammable Limit (LFL)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Upper Flammable Limit (UFL)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Solubility (H₂O)</td>
<td>Miscible with Water</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>Not Available</td>
</tr>
<tr>
<td>Auto Ignition Temperature</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>8.90 × 10⁻⁴ Pa. s</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not available</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Not applicable</td>
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<tr>
<td>pH</td>
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</tr>
</tbody>
</table>

### 10. Stability and Reactivity

10.1. **Reactivity**

Not applicable.

10.2. **Chemical stability**

Chemical Stability: This is a stable material.

Conditions to Avoid: Avoid contact with extreme heat and incompatible materials.

10.3. **Possibility of hazardous reactions**

No dangerous reactions known.

10.4. **Incompatible materials**

Strong oxidizers.
10.5. **Hazardous decomposition products**

Decomposition may yield Carbon Monoxide, Carbon Dioxide, and/or low molecular weight hydrocarbons when heated.

11. **Toxicological Information**

11.1. **Information on toxicological effects**

**Acute toxicity:** No LD50 or LC50 available for this product.

**Skin corrosion/irritation:** Does not cause skin irritation.

**Serious eye damage/irritation:** Does not cause eye damage/irritation.

**Respiratory or skin sensitization:** Over exposure may be irritating to contaminated tissues, but is reversible when removed from exposure.

**Germ cell mutagenicity:** No mutagenicity data available for this product.

**Carcinogenicity:** No carcinogenicity data available for this product.

**Reproductive toxicity:** No teratogenicity data available for this product. This product is not expected to cause reproductive or developmental effects.

**STOT-single exposure:** Not applicable.

**STOT-repeated exposure:** Not applicable.

**Aspiration hazard:** Not applicable.

12. **Ecological Information**

12.1. **Toxicity**

No data available.

12.2. **Persistence and biodegradability**

No data available.
12.3. **Bioaccumulative potential**
No data available.

12.4. **Mobility in soil**
No data available.

12.5. **Results of PBT and vPvB assessment**
No data available.

12.6. **Other adverse effects**
No data available

13. **Disposal Considerations**

13.1. **Waste treatment method**
Dispose of waste according to Local, State, Federal and Provincial Environmental Regulations.

14. **Transport Information**

14.1. **UN-Number**
None allocated.

14.2. **UN proper shipping name**
None allocated.

14.3. **Transport hazard class(es)**
**DOT, IATA, IMDG:** This product is not regulated as a hazardous material for transportation

14.4. **Packing group**
None allocated.

14.5. **Environmental hazards**
This substance is not associated with any environmental hazards.
14.6. Special precautions for users
No special precautions applicable.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable.

15. Regulatory Information

15.1. Safety, health, and environmental regulations/legislation specific for the substance or mixture

US Federal regulations
Not listed on the United States TSCA (Toxic Substances Control Act) inventory.

Canadian regulations
Not listed on the Canadian DSL (Domestic Substances List) inventory.
WHMIS Classification: Not classified by WHMIS.
Not listed on the Canadian Ingredient Disclosure List

EU Regulations
i. Directive 2012/18/EU: Substance is not listed.
ii. Named dangerous substances – ANNEX I: Substance is not listed.
iii. LIST OF SUBSTANCES SUBJECT TO AUTHORISATION (ANNEX XIV): Substance is not listed.

15.2. Chemical safety assessment
A chemical safety assessment had not been performed for this substance.

16. Other Information
Workers should be trained to handle hazardous chemicals. It is recommended that they are familiar with the contents of this safety data sheet (SDS). This SDS is not a risk assessment; recipients are advised to make their own risk assessment as required by other Health and Safety legislations. This substance is compliant with REACH.

Created: June 20, 2012

Revised: October 3, 2019
Reference: Not Available

DISCLAIMER
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