Anticoagulant Citrate Phosphate Double Dextrose Solution (CP2D)
Safety Data Sheet
Revision date: 29/10/2015  Date of issue: 29/10/2015  Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
Product form : Mixture
Product Name : Anticoagulant Citrate Phosphate Double Dextrose Solution (CP2D)

1.2. Relevant identified uses of the substance or mixture and uses advised against
1.2.1. Relevant identified uses
Use of the substance/mixture : Blood coagulation prevention.
1.2.2. Uses advised against
No additional information available

1.3. Details of the supplier of the safety data sheet
Haemonetics Corporation
400 Wood Road
Braintree, MA 02184

1.4. Emergency telephone number
Emergency number : Contact the Environmental, Health & Safety Department – (781) 848-7100

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Classification according to Regulation (EC) No. 1272/2008 [CLP]
Not classified

Adverse physicochemical, human health and environmental effects
No additional information available

2.2. Label elements
Labelling according to Regulation (EC) No. 1272/2008 [CLP]
No labelling applicable

2.3. Other hazards
Other hazards not contributing to the classification:
Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

SECTION 3: Composition/information on ingredients

3.1. Substance
Not applicable

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water for injection</td>
<td>(CAS No) 7732-18-5 (EC no) 231-791-2</td>
<td>92,18</td>
<td>Not classified</td>
</tr>
<tr>
<td>.alpha.-D-Glucopyranose, monohydrate</td>
<td>(CAS No) 14431-43-7 (EC no) 604-408-5</td>
<td>4,64</td>
<td>Not classified</td>
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<tr>
<td>Trisodium citrate</td>
<td>(CAS No) 68-04-2 (EC no) 200-675-3</td>
<td>2,63</td>
<td>Not classified</td>
</tr>
<tr>
<td>Citric acid</td>
<td>(CAS No) 77-92-9 (EC no) 201-069-1</td>
<td>0,327</td>
<td>Eye Irrit. 2, H319</td>
</tr>
<tr>
<td>Phosphoric acid, monosodium salt,</td>
<td>(CAS No) 10049-21-5 (EC no) 600-102-0</td>
<td>0,222</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of 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).
Anticoagulant Citrate Phosphate Double Dextrose Solution (CP2D)

First-aid measures after inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

First-aid measures after skin contact: Remove contaminated clothing. Drench affected area with Water for injection for at least 15 minutes. Obtain medical attention if irritation develops or persists.

First-aid measures after eye contact: Rinse cautiously with Water for injection for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

First-aid measures after ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most important symptoms and effects, both acute and delayed
Symptoms/injuries: Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/injuries after inhalation: Prolonged exposure may cause irritation.
Symptoms/injuries after skin contact: Prolonged exposure may cause skin irritation.
Symptoms/injuries after eye contact: May cause slight irritation to eyes.
Symptoms/injuries after ingestion: Ingestion may cause adverse effects.

4.3. Indication of any immediate medical attention and special treatment needed
If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: Firefighting measures
5.1. Extinguishing media
Suitable extinguishing media: Water for injection spray, dry chemical, foam, carbon dioxide.
Unsuitable extinguishing media: Do not use a heavy Water for injection stream. Use of heavy stream of Water for injection may spread fire.

5.2. Special hazards arising from the substance or mixture
Fire hazard: Not considered flammable but may burn at high temperatures.
Explosion hazard: Product is not explosive.
Reactivity: Hazardous reactions are not expected to occur under normal conditions.

5.3. Advice for firefighters
Precautionary measures fire: Exercise caution when fighting any chemical fire.
Firefighting instructions: Use Water for injection spray or fog for cooling exposed containers.
Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures
6.1. Personal precautions, protective equipment and emergency procedures
General measures: Avoid prolonged contact with eyes, skin and clothing. Avoid breathing (vapor, mist, spray).

6.1.1. For non-emergency personnel
Protective equipment: Use appropriate personal protection equipment (PPE).
Emergency procedures: Evacuate unnecessary personnel.

6.1.2. For emergency responders
Protective equipment: Equip cleanup crew with proper protection.
Emergency procedures: Ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

6.2. Environmental precautions
Prevent entry to sewers and public Water for injections.

6.3. Methods and material for containment and cleaning up
For containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Methods for cleaning up: Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to other sections
See Heading 8. Exposure controls and personal protection. See Section 13, Disposal Considerations.
Anticoagulant Citrate Phosphate Double Dextrose Solution (CP2D)
Safety Data Sheet

SECTION 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 for injection before eating, drinking or smoking and when leaving work. Avoid prolonged contact with eyes, skin and clothing. Avoid breathing vapors, mist, spray.

Hygiene measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for safe storage, including any incompatibilities
Technical measures: Comply with applicable regulations.
Storage conditions: Keep container closed when not in use. Store in a dry, cool place. Recommended storage temperature: 25°C (77°F). Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible materials: Strong acids, strong bases, strong oxidizers. Water for injection reactive substances.

7.3. Specific end use(s)
Blood coagulation prevention.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
No additional information available

8.2. Exposure controls
Appropriate engineering controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.


Materials for protective clothing: Chemically resistant materials and fabrics.
Hand protection: Wear protective gloves.
Eye protection: Chemical safety goggles.
Skin and body protection: Wear suitable protective clothing.
Respiratory protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other information: When using, do not eat, drink or smoke.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties
Physical state: Liquid
Colour: Clear
Odour: None
Odour threshold: No data available
pH: No data available
Evaporation rate: No data available
Melting point: No data available
Freezing point: No data available
Boiling point: No data available
Flash point: No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Flammability (solid, gas): No data available
Vapour pressure: No data available
Relative vapour density at 20 °C: No data available
Solubility: Water for injection: Soluble
Anticoagulant Citrate Phosphate Double Dextrose Solution (CP2D)
Safety Data Sheet

Partition coefficient: n-octanol/Water for injection : No data available
Viscosity : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : No data available

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
Hazardous reactions are not expected to occur under normal conditions.

10.2. Chemical stability
Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions
Hazardous polymerization will not occur.

10.4. Conditions to avoid
Direct sunlight, extremely high or low temperatures, and incompatible materials.

10.5. Incompatible materials
Strong acids, strong bases, strong oxidizers. Water for injection reactive substances.

10.6. Hazardous decomposition products
Upon thermal decomposition: Carbon oxides (CO, CO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

<table>
<thead>
<tr>
<th>Trisodium citrate (68-04-2)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>5.4 g/kg</td>
</tr>
<tr>
<td>LD50 dermal rat</td>
<td>&gt; 2000 mg/kg</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Citric acid (77-92-9)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>5400 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rat</td>
<td>&gt; 2000 mg/kg</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : Not classified
Specific target organ toxicity (repeated exposure) : Not classified
Aspiration hazard : Not classified
Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity
Ecology - general : Not classified.

<table>
<thead>
<tr>
<th>Trisodium citrate (68-04-2)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish 1</td>
<td>18000 (18000 - 32000) mg/l (Exposure time: 96 h - Species: Poecilia reticulata)</td>
</tr>
<tr>
<td>EC50 Daphnia 1</td>
<td>5600 (5600 - 10000) mg/l (Exposure time: 48 h - Species: Daphnia magna)</td>
</tr>
<tr>
<td>EC50 other aquatic organisms 1</td>
<td>18000 (18000 - 32000) mg/l (Exposure time: 96 h - Species: Chlorella vulgaris)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Citric acid (77-92-9)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish 1</td>
<td>1516 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])</td>
</tr>
</tbody>
</table>

29/10/2015
EN (English)
4/6
Anticoagulant Citrate Phosphate Double Dextrose Solution (CP2D)
Safety Data Sheet

12.2. Persistence and degradability

<table>
<thead>
<tr>
<th>Anticoagulant Citrate Phosphate Double Dextrose Solution (CP2D)</th>
<th>Persistence and degradability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citric acid (77-92-9)</td>
<td>Not established.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Citric acid (77-92-9)</th>
<th>Persistence and degradability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Readily biodegradable in Water for injection.</td>
</tr>
</tbody>
</table>

12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>Anticoagulant Citrate Phosphate Double Dextrose Solution (CP2D)</th>
<th>Bioaccumulative potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citric acid (77-92-9)</td>
<td>Not established.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Log Pow</th>
<th>-1.72 (at 20 °C)</th>
</tr>
</thead>
</table>

12.4. Mobility in soil
No additional information available

12.5. Results of PBT and vPvB assessment
No additional information available

12.6. Other adverse effects

Other information: Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations: Dispose of contents/container in accordance with local, regional, national, and international regulations.

Additional information: Container may remain hazardous when empty. Continue to observe all precautions.

Ecology - waste materials: Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number
Not regulated for transport

14.2. UN proper shipping name
Not applicable

14.3. Transport hazard class(es)
Not applicable

14.4. Packing group
Not applicable

14.5. Environmental hazards

Other information: No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport
No additional information available

14.6.2. Transport by sea
No additional information available

14.6.3. Air transport
No additional information available

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

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
15.1.1. EU-Regulations
Contains no REACH substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances

15.1.2. National regulations
No additional information available
15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

<table>
<thead>
<tr>
<th>Revision date</th>
<th>29/10/2015</th>
</tr>
</thead>
</table>

Full text of H- and EUH-statements:

<table>
<thead>
<tr>
<th>Eye Irrit. 2</th>
<th>Serious eye damage/eye irritation, Category 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</td>
</tr>
</tbody>
</table>

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.