SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Anticoagulant Citrate Dextrose Solution USP (ACD) Solution A

PRODUCT USE: ACD-A Solution is used as an anticoagulant for the automated separation and processing of blood components, one application of which includes collection of blood products for reinfusion.

SUPPLIER:
Company: Jorgensen Laboratories, Inc.
Address: 1450 N. Van Buren Avenue, Loveland, CO 80538, USA
Telephone: +1 (800) 525-5614
Email: info@jorvet.com

SECTION 2 – HAZARDS IDENTIFICATION

Mixture is not hazardous as defined by the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

EMERGENCY OVERVIEW

CHEMICAL CLASSIFICATION
None.

PRECAUTIONARY STATEMENTS
None needed.

STORAGE
Store in a cool, well-ventilated place.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

- < 1% Citric Acid Monohydrate, CAS No. – 5949-29-1
- 2.20% Trisodium Citrate Dihydrate, CAS No. – 6132-04-3
- 2.45% Dextrose Monohydrate
- Water, CAS No. – 14431-43-7
SECTION 4 – FIRST AID MEASURES

First aid is not generally required. If in doubt, contact a Poison Control Center or a doctor.

EYE
Rinse with water. First aid is generally not required. If in doubt, contact a Poison Control Center or a doctor.

SKIN
If skin contact of several minutes occurs, rinse with running water. First aid is generally not required. If in doubt, contact a Poison Control Center or a doctor.

INHALED
Inhalation is not a route of exposure.

SECTION 5 – FIRE FIGHTING MEASURES

Not Flammable

No Fire/Explosion Hazard

SECTION 6 – ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS
None.

EMERGENCY PROCEDURES

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANUP
If local regulations permit, mop up with plenty of water and run to waste, diluting greatly with running water. Otherwise, contain with sand and transfer to salvage container. Arrange removal by disposal company.

SECTION 7 – HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING
Keep bags securely sealed prior to use.
Use standard safe hygienic work practices.

CONDITIONS FOR SAFE STORAGE
Avoid physical damage to bags.
Avoid freezing conditions.
Store at up to 25°C.

STORAGE INCOMPATIBILITY
None.
SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

CONTROL PARAMETERS

NOTE: The information in the table below is relevant for each chemical in a concentration of 100%.

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Reference</th>
<th>PEL</th>
<th>STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citric Acid Monohydrate</td>
<td>US OSHA</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
<tr>
<td>Trisodium Citrate Dihydrate</td>
<td>US OSHA</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
<tr>
<td>Dextrose Monohydrate</td>
<td>US OSHA</td>
<td>Not Established</td>
<td>Not Established</td>
</tr>
</tbody>
</table>

ENGINEERING CONTROLS
None needed.

PERSONAL PROTECTIVE EQUIPMENT

Eye/Face — None needed.
Hands — None needed.
Respirator — None needed.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL PROPERTIES

Appearance — Colorless liquid.
Odor — None.
Odor threshold — Does not apply.
pH — 4.5-5.5
Melting Point/Range — Does not apply.
Boiling Point/Range — ~ 100°C (212°F) (Water).
Flash Point — None.
Evaporation Rate — Dilute aqueous solution.
Flammability — Not flammable.
Upper Explosive Limit — None.
Lower Explosive Limit — None.
Vapor Pressure (mmHg) — The highest known value is 2.3 kPa (at 20°C) (Water).
Vapor Density — Does not apply.
Relative Vapor Density — Does not apply.
Solubility — Does not apply.
Partition Coefficient: n-octanol/water — None.
Auto-ignition Temperature — None.
Decomposition Temperature — None.
Viscosity — Liquid.
Explosive properties — None.
Oxidizing properties — None.
Freezing Point — ~0°C (32°F) (Water).
SECTION 10 – STABILITY AND REACTIVITY

CONDITIONS CONTRIBUTING TO INSTABILITY
Reactivity — None.
Chemical Stability — Considered very stable.
Possibility of Hazardous Reactions — None.
Conditions to Avoid — None.
Incompatibility — None.
Hazardous Decomposition Products — None.

SECTION 11 – TOXICOLOGICAL INFORMATION

Mixture is not known to be toxic.

SECTION 12 – ECOLOGICAL INFORMATION

Product is not considered to have an impact if released to the environment.

SECTION 13 – DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with local regulatory requirements for non-hazardous material.

SECTION 14 – TRANSPORTATION INFORMATION

Does not meet the definition of hazardous material as defined by the United States Department of Transportation (U.S. DOT).

Does not meet the definition of dangerous goods as defined by the United Nations.

Does not meet the definition of dangerous goods as defined by the International Air Transport Association (IATA).

Not known as a marine pollutant.

Not environmentally hazardous according to the United Nations Model Regulations.

Special Precautions for User – None.
SECTION 15 – REGULATORY INFORMATION

Not known to be regulated by any other authority.

Not known to have any prohibitions or restrictions in any country.

Not subject to The Montreal Protocol on Substances that Deplete the Ozone Layer, the Stockholm Convention on Persistent Organic Pollutants, or the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade.

SECTION 16 – OTHER INFORMATION

US OSHA — United States Occupational Safety and Health Administration

PEL — Permissible Exposure Limit
STEL — Short Term Exposure Limit

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