

**ACD-A**

Version 1

**Globally Harmonized System of Classification and Labeling of Chemicals (GHS)  
Safety Data Sheet (SDS)****SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

|                     |                                                                                                                                                                                            |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>PRODUCT NAME</b> | Anticoagulant Citrate Dextrose Solution USP (ACD) Solution A                                                                                                                               |
| <b>PRODUCT USE</b>  | 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. |
| <b>SUPPLIER</b>     |                                                                                                                                                                                            |
| Company:            | Terumo BCT                                                                                                                                                                                 |
| Address:            | 10811 West Collins Ave.<br>Lakewood, CO 80215<br>USA                                                                                                                                       |
| Telephone:          | +1 (303) 231-4357                                                                                                                                                                          |
| Email:              | <a href="mailto:EHS@terumobct.com">EHS@terumobct.com</a>                                                                                                                                   |

**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        | CAS No. – 14431-43-7 |
| Water                             |                      |

## 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%.

| Chemical                    | Reference | PEL             | STEL            |
|-----------------------------|-----------|-----------------|-----------------|
| Citric Acid Monohydrate     | US OSHA   | Not Established | Not Established |
| Trisodium Citrate Dihydrate | US OSHA   | Not Established | Not Established |
| Dextrose Monohydrate        | US OSHA   | Not Established | Not Established |

### 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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