
 greiner bio-one Page 1 / 4	<b>SAFETY DATA SHEET</b> acc. to ISO 11014, 29 CFR 1910.1200	 greiner bio-one A AN SOP 04.03.02-071 Rev.00 Valid from: 09/22/2014
	<b>VACUETTE® ACD-A</b>	

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

- **Product Name:** VACUETTE® ACD-A
- **Manufacturer/Supplier:**

### AUSTRIA

Greiner Bio-One GmbH  
 Bad Haller Strasse 32  
 4550 Kremsmünster  
 Austria  
 Tel: (++43) 7583 6791-0  
 Fax: (++43) 7583 114  
 Email: office@at.gbo.com

### USA

Greiner Bio-One North America Inc.  
 4238 Capital Drive  
 Monroe, NC 28110  
 USA  
 Tel: (++1) 888-286-3883  
 FAX: (++1) 800-726-0052  
 Email: info@us.gbo.com

### BRASIL



Greiner Bio-One Brasil  
 Produtos Médicos Hospitalares Ltda.  
 Av. Affonso Pansan no. 1.967  
 13473-620 Vila Bertini  
 Americana, São Paulo - Brasil  
 Tel: +55 (19) 3468-9600  
 Fax: +55 (19) 3468-9601  
 Email: info@br.gbo.com

## SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

- **Description:** VACUETTE PET Tube (Polyethyleneterephthalate) with
- **Chemical name:** Citric Acid Monohydrate  
 Citric Acid Trisodium Dihydrate  
 Glucose
- **CAS No.** Citric Acid Monohydrate 5949-29-1  
 Citric Acid Trisodium Dihydrate 6132-04-03  
 Glucose 50-99-7
- **Quantity of substances:** < 10 %
- **Exposure limits:** N/A

## SECTION 3: HAZARDS IDENTIFICATION

- **Hazard description:**  
 EU: This product contains no hazardous constituents, or the concentration of all chemical constituents are below the regulatory threshold limits described by European Directive 91/155/EEC, and 93/112/EC.  
 US: May cause eye and skin irritation. Inhalation of large amounts of dust may be irritating to the respiratory tract. May cause nausea and vomiting if ingested in large quantities. May also cause hypernoia and convulsing.  
 Primary route of entry: skin, eyes, inhalation and ingestion
- **Acute exposure effect:**  
 Eyes: May cause eye irritation.  
 Skin: May cause skin irritation.  
 Inhalation: Inhalation of large amounts of dust may be irritating to the upper respiratory tract.  
 Ingestion: May cause nausea and vomiting if ingested in large quantities. May also cause hypernoia and convulsing.
- **Repeated exposure effects:**  
 Eyes: None identified.  
 Skin: None identified.  
 Inhalation: None identified.
- **Medical Conditions which might be aggravated:** None identified

 <b>greiner bio-one</b> Page 2 / 4	<b>SAFETY DATA SHEET</b> acc. to ISO 11014, 29 CFR 1910.1200	 <b>greiner bio-one</b> A AN SOP 04.03.02-071 Rev.00 Valid from: 09/22/2014
	<b>VACUETTE® ACD-A</b>	

#### SECTION 4: FIRST AID MEASURES

- **Skin:** Wash affected area thoroughly with soap and water. Seek medical attention if irritation develops.
- **Eyes:** Rinse opened eye for 15 minutes under running water. Seek medical attention if irritation develops.
- **Inhalation:** Remove victim to fresh air. Seek immediate medical attention if breathing is difficult.
- **Ingestion:** Give 2 to 4 glasses of water to dilute. Seek immediate medical attention.
- **Information for doctor:** Show this label

#### SECTION 5: FIRE-FIGHTING MEASURES

- **Suitable extinguishing media:** Water spray, carbon dioxide, dry chemical powder or appropriate foam.
- **Protective equipment:** Firefighters should wear proper protective clothing to prevent contact with skin and eyes and self-contained NIOSH approved breathing apparatus operated in positive pressure mode. Keep containers cool by spraying with water.

#### SECTION 6: ACCIDENTAL RELEASE MEASURES



- **Personal precautions:** Avoid overexposure. Wear protective equipment, including NIOSH approved respirator.
- **Environmental precautions:** N/A
- **Methods for cleaning up:** Do not dry-sweep. Wet down to minimize airborne dust. Place in an appropriate disposal container. Flush area with water.

#### SECTION 7: HANDLING AND STORAGE

- **Handling:**  
**Advice for safe handling:** Do not breathe dust. Avoid dust generation or accumulation. Use adequate ventilation and dust collection.  
**Information about protection against explosions and fires:** N/A
- **Storage:**  
**Requirements to be met by storerooms and receptacles:** Use suitable containers. Keep tightly closed when not in use. Store in a cool, dry, well-ventilated area.  
**Information about storage in one common storage facility:** Store away from incompatible materials, such as strong bases and strong oxidizing agents.

#### SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

- **Additional information about design of technical systems:** Use sufficient local or general exhaust.
- **Personal protective equipment:**  
**General protective and hygienic measures:** Wash thoroughly after handling. Remove contaminated and wash before reuse. Avoid contact with eyes, skin and clothing. Avoid ingestion and inhalation. Use with adequate ventilation. Provide eye bath and safety shower.  
**Breathing equipment:** NIOSH-approved respirator  
**Hand protection:** Wear appropriate protective gloves to prevent skin exposure.  
**Eye protection:** Use chemical safety goggles  
**Body protection:** Wear appropriate protective clothing to prevent skin exposure.

 <b>greiner bio-one</b> Page 3 / 4	<b>SAFETY DATA SHEET</b> acc. to ISO 11014, 29 CFR 1910.1200	 <b>greiner bio-one</b> A AN SOP 04.03.02-071 Rev.00 Valid from: 09/22/2014
	<b>VACUETTE® ACD-A</b>	

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

	<b>Citric Acid Monohydrate:</b>	<b>Citric Acid Trisodium Dihydrate:</b>	<b>Glucose</b>
• <b>General information</b>			
• <b>Form:</b>	Solid	Solid	Solid
• <b>Color:</b>	White	White	Colorless
• <b>Odor:</b>	Odorless	Odorless	Odorless
• <b>PH-value:</b>	1,85 (5%, 25°C)	7,5 – 9,0	6-7 (10 %, 20 °C)
• <b>Change in condition</b>			
Melting point/Melting range:	135 – 152 °C	300 °C	Approx. 146 °C
Boiling point/Boiling range:	N/A	N/A	N/A
• <b>Flash point:</b>	345 °C	N/A	Approx. 500 °C
• <b>Flammability (solid, gaseous):</b>	N/A	N/A	N/A
• <b>Danger of explosion:</b>	Product does not present an explosion hazard		
• <b>Vapor pressure:</b>	<0,1 (hPa, 20 °C)	N/A	N/A
• <b>Density:</b>	1,54 g/cm <sup>3</sup>	N/A	N/A
• <b>Solubility in/Miscibility w/H<sub>2</sub>O:</b>	Soluble	Soluble	Soluble
• <b>Organic solvents:</b>	N/A	N/A	N/A
• <b>Solids content:</b>	N/A	N/A	N/A

## SECTION 10: STABILITY AND REACTIVITY



- **Thermal decomposition / conditions to avoid:** None identified
- **Materials to avoid:** Strong bases and strong oxidizing agents.
- **Dangerous reactions:** Stable, none known
- **Hazardous decomposition products:** Oxides of carbon. Acid smoke and fumes will be emitted when heated.

## SECTION 11: TOXICOLOGICAL INFORMATION

- **Acute toxicity** (LD 50 oral rat > 200 mg/kg)
  - Eye:** May cause irritation
  - Skin:** May cause irritation
  - Inhalation:** Inhalation of large amounts of dust may be irritating to the upper respiratory tract.
  - Ingestion:** May cause nausea and vomiting if ingested in large quantities. May also cause hypernoia and convulsing.
- **Primary irritant effect:**
  - On the skin:** Not established
  - On the eye:** Not established
- **Sensitization:** Not established
- **Additional toxicological information:** None identified

## SECTION 12: ECOLOGICAL INFORMATION

- **Ecotoxilogical effects:** No data is available on the adverse effects of this material on the environment.
- **Other information:** N/A
- **General notes:** N/A

 greiner bio-one Page 4 / 4	<b>SAFETY DATA SHEET</b> acc. to ISO 11014, 29 CFR 1910.1200	 greiner bio-one A AN SOP 04.03.02-071 Rev.00 Valid from: 09/22/2014
	<b>VACUETTE® ACD-A</b>	

### SECTION 13: DISPOSAL CONSIDERATION

- Product:**  
**Recommendation**  
 Disposal should be done in accordance with all federal, state and local environmental regulations. Disposal must be made according to the regulations found in 40 CFR 261. This product is not a hazardous waste according to local regulations.
- Packaging:**  
**Recommendation**  
 Disposal should be done in accordance with all federal, state and local environmental regulations. This product is not a hazardous waste according to local regulations.  
**Recommended cleansing agent:** Water if necessary with cleansing agents

### SECTION 14: TRANSPORT INFORMATION

- DOT regulations:** Not regulated
- Land transport ADR/RID:** Not regulated
- Maritime transport IMDG:** Not regulated
- Air transport ICAO-TI and IATA-DGR:** Not regulated

### SECTION 15: REGULATORY INFORMATION

- Hazard Communication Standard (HCS) 29 CFR 1910.1200(g), revised in 2012**
- EC directives:** 91/155/EEC, 93/112/EC, 88/379/EEC
- National regulations: Chemical (Hazard Information and Packaging) Regulations: ChemG (Austria)**
- Water hazard class:** N/A
- Note:** Please note that there may be additional legal provisions to be observed. We recommend that you keep yourself informed about all applicable international, national and local regulations.

### SECTION 16: OTHER INFORMATION

To the best of our knowledge, the information contained herein is accurate. However, neither Greiner Bio-One nor any of its subcontractors or suppliers assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.