

ACKNOWLEDGEMENT

Material Safety Data Sheet

Greiner Labortechnik GmbH in accordance with 29 CFR 1910.1200 (OSHA)
Bordhüller Straße 32, 4339 Kremsmünster, Austria
Tel.: (04441) 7533 6791-0 Fax: (04441) 7531 6318

Date: 06/01/94



Product name:

VACUETTE® Coagulation Tubes

Substance specifications:

Components	Content	CAS No.
citric acid	4.2 g/l	5919-29-1
tri-sodium citrate	32 g/l	6132-01-3

Product Order Numbers:

454321, 454322, 454325, 454327, 454331, 454332, 154381, 454385, 454386,

454387

Physical / chemical properties

Features	Citric Acid	Tri sodium Citrate
Appearance	white crystals	white powder
Odor	none	none

Classification of hazardous and harmful properties

Not available.

Exposure and First Aid Treatment Information

Eyes:

Immediately wash eyes with running water for at least 15 min. Assure adequate flushing of eyes by separating the eyelids with fingers. Immediately wash skin with soap and running water. Consult a physician if required.

Skin:

Move to a place where the air is fresh. If not breathing, give artificial respiration. In case of hard breathing, give oxygen. Wash mouth out with water. Consult a physician.

Inhalation:

Material may be irritating to the mucous membranes and upper respiratory tract. Prolonged repeated exposure may cause allergic reactions in certain sensitive individuals.

Fire Protection Information

Procedure:

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Extinguishing agent:

Use foam, carbon dioxide, and powder extinguishing agents. Water spray.

Unusual Hazards:

Material is capable of creating dust explosion.

Caution: Viscous

Caution: Corrosive

Caustic MSDS

Accidental Release Information

Wear proper protection such as NIOSH approved respirator, chemical safety goggles, rubber boots and chemical resistant gloves to avoid contact with skin and eyes. Sweep up spill and place in closed container for disposal. Avoid raising dust. Ventilate area and wash spill site after material pick up is complete.

Handling and Storage Information

Use suitable container and keep tightly closed when not in use. Store in cool dry place.

Hazardous Property Information

Flash point:	nd/a
Ignition point:	nd/a
Combustibility:	nd/a
Reactivity:	
Hazardous Decomposition Products:	toxic fumes of carbon monoxide, carbon dioxide
Incompatibility:	Avoid bases, reducing agents, oxidizing agents

Toxicological Information

May be harmful by inhalation, ingestion, or skin absorption.
May cause eye irritation.
May cause skin irritation.
Material may be irritating to the mucous membranes and upper respiratory tract. Prolonged repeated exposure may cause allergic reactions in certain sensitive individuals.

Environmental Pollution Information

No data is available.

Disposal Information

Disposal should be done in accordance with all federal, state and local environmental regulations.

Regulatory Information

NIOSH 1983: HZD X36/38, NIS 11, TNF 713, NOS 15, TNE 17300, IFE 9926
NOHS 1974: HZD 63905, NIS 16/5, TNF 38675, NOS 97, TNE 200416
NOES 1983: HZD E0277; NIS 1; TNF 403; NOS 5; TNF 4070; TFE 2015
NOES 1983: HZD 63905; NIS 96; TNF 13473; NOS 105; TNE 301801; TFE 163142
EPA TSCA: Section 8(B) Chemical Inventory



Transportation Information

Make sure there is no leakage from the vessel. Carry out the loading in such a way that the packages will not fall down, drop or get damaged, taking measures to prevent collapse during transportation. Transport product at 0 - 40 °C, avoiding direct sunlight.

Other Information

Contact Information

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AUSTRIA
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Contact Information in U.S.

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260 Gateway Drive, Suite 17A
Bel Air, MD 21014
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Fax: (410) 836-8517
Email: GreinerMed@aol.com

To the best of our knowledge, the information contained herein is accurate. However, neither C.A. Greiner & Sohne GmbH nor any of its subsidiaries 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 end 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.

MATERIAL SAFETY DATA SHEET
Product Group: Dipotassium EDTA

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MATERIAL SAFETY DATA SHEET
Product Group: Dipotassium EDTA

Page 2 of 4

O 36838
O 366933
O 36839A,B

O 368394

BD

BD

MSDS Number: VS60311-07
Issue Date: September 5, 2000
Supersedes: March 27, 2000
EHC No.: 101850O 368398
O 368399 D.C.
O 3687107
O 3685113

BD

COMPANY IDENTIFICATION: SECTION 1

Company Identification:
Becton Dickinson VACUTAINER® Systems
A Division of Becton Dickinson and Company
1 Becton Drive
Franklin Lakes, NJ 07417-1885

FOR CHEMICAL EMERGENCY SPILL LEAK, FIRE, EXPOSURE, OR ACCIDENT:
In the continental U.S., call Chemtrec: 1-800-424-9300
For additional non-emergency information, call: 1-800-631-0174

Product Name: VACUTAINER® Brand Tube with Dipotassium EDTA

Reorder Number: 360001, 360002, 360003, 360004, 365955, 365973, 365974, 366650, 366652, 367548, 367649, 367656, 367840, 367841, 367842, 367843, 367844, 367845, 367846, 367855, 367856, 367859, 367861, 367862, 367863, 367865, 368021, 368171, 367906, 367907, 367908, 367909

Synonym(s): N/A **Chemical Formula:** N/A **Chemical Family:** Chelating agent.

COMPOSITION/INFORMATION ON INGREDIENTS - SECTION 2

Chemical Name	CAS Number	Exposure Limits	Weight (mg)
Dipotassium EDTA	25102-12-9	NA	13.9 mg

HEALTH EFFECTS SUMMARY - SECTION 3

The following information summarizes human experience and results of scientific investigations reviewed by health professionals for hazard evaluation of and development of Precautionary Measures and Occupational Control Procedures recommended in this document.

Primary Route of Entry: None identified.

Medical Conditions Which Might be Aggravated: None identified.

Acute Exposure Effects:

1. Skin: May cause irritation.
 2. Eyes: May cause irritation.
 3. Inhalation: None identified.
 4. Ingestion: None identified.
- Repeated Exposure Effects:**
1. Skin: None identified.
 2. Inhalation: None identified.
 3. Ingestion: None identified.

Becton Dickinson and Company

EMERGENCY AND FIRST AID PROCEDURES - SECTION 4

SKIN: Immediately flush skin with plenty of soap and water for at least 15 minutes.

EYES: Immediately flush with plenty of water for at least 15 minutes.

INHALATION: Move the exposed person to fresh air.

INGESTION: Immediately give large amounts of water. Get medical attention.

FIRE PROTECTION INFORMATION - SECTION 5

FLASH POINT: N/A **Method:** N/A

AUTOIGNITION TEMPERATURE: N/A **Method:** N/A

COMBUSTIBILITY: N/A **Method:** N/A

EXTINGUISHING MEDIA: Use extinguishing media appropriate for surrounding fire.

SPECIAL FIRE FIGHTING PROCEDURES: Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece operated in positive pressure mode.

ACCIDENTAL RELEASE MEASURES - SECTION 6

Avoid overexposure. Wear suitable protective clothing. Carefully sweep up and remove. Flush area with water.

HANDLING AND STORAGE PROCEDURES - SECTION 7

Keep container tightly closed. Suitable for any general chemical storage area.

OCCUPATIONAL CONTROL PROCEDURES - SECTION 8

EYE PROTECTION: Use safety goggles.

RESPIRATORY PROTECTION: None required where adequate ventilation conditions exist. If airborne concentration is high, use an appropriate dust mask.

VENTILATION: Use adequate general or local exhaust ventilation to keep fume or dust levels as low as possible.

AIRBORNE EXPOSURE LIMITS: None identified.

OTHER PROTECTIVE EQUIPMENT: Eye bath, safety shower, aprons.

PHYSICAL PROPERTIES - SECTION 9

Appearance:	White crystalline powder.	Odor:	Odorless
Vapor Pressure (@ 20°C mm Hg):	N/A	Viscosity @ 40°C (centistokes):	N/A
Specific Gravity @ 25/25°C:	N/A	Solubility in Water (wt/wt):	Complete (100%)
Solubility in Other Solvents:	N/A		

Note: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

Received In
L-SH Quality Management
Department

JUL 13 2004



Indispensable to
human health

REACTIVITY DATA - SECTION 10

Reactivity: Stable.

Hazardous Decomposition Products: Oxides of nitrogen, carbon monoxide, carbon dioxide.

Hazardous Polymerization: Will not occur.

TOXICOLOGY INFORMATION - SECTION 11

Acute Eye Effects: May cause irritation.

Inhalation Toxicity: May cause irritation.

Exposure Limits: Not established.

Reproductive Toxicity: Not established.

Synergistic Products: Not established.

Carcinogenicity: Contains more than 0.1% by weight of a material listed as a potential carcinogen by:

NTP No

ARC No

OSHA No

Other Chronic Effects: None identified.

Signs and Symptoms of Overexposure: None identified.

Medical Conditions Generally Aggravated by Overexposure: None identified.

ECOLOGICAL INFORMATION - SECTION 12

No data is available on the adverse effects of this material on the environment. Neither COD nor BOD data are available.

DISPOSAL CONSIDERATIONS - SECTION 13

Disposal should be done in accordance with local, state and federal regulations.

TRANSPORTATION INFORMATION - SECTION 14

D.O.T.

Proper Shipping Name: Chemicals, N.O.S. (Non-regulated)

Hazard Class/ID, No./Packing Group: N/A.

Label: N/A.

I.M.O.

Proper Shipping Name: Chemicals, N.O.S. (Non-regulated)

Hazard Class/ID, No./Packing Group: N/A.

Label: N/A.

I.C.A.O/IATA

Proper Shipping Name: Chemicals, N.O.S. (Non-regulated)

Hazard Class/ID, No./Packing Group: N/A.

Label: N/A.

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REGULATORY INFORMATION - SECTION 15

ISCA Inventory: Yes

Reportable Quantity (RQ) Under US EPA CERCLA Regulations: None

SARA Hazard Notification Hazard Categories Under Criteria of SARA Title III Rules

(40 CFR Part 370): None

Section 313 Toxic Chemicals: None

Hazardous Chemicals Under OSHA Hazard Communication Standard: None

(40 CFR Part 370): None

OTHER INFORMATION - SECTION 16

Label Information:

Caution
May cause irritation. During use avoid contact with eyes, skin, clothing. Wash thoroughly after handling.
When not in use keep in tightly closed container.

Hazard Ratings:

NFPA

HHS

Fire - 1
Health - 1
Flammability - 1
Reactivity - 0
Specific Hazard - 0

Information Contact:
Becton Dickinson VACUTAINER® Systems
A Division of Becton Dickinson and Company
1 Becton Drive
Franklin Lakes, NJ 07417-1885

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