

## Section 1 Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

**Product name** Citranox\*  
**Part number** 81912  
**Series name** ACCESS

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Product use** For In Vitro Diagnostic Use. See product literature for details.

### 1.3 Details of the supplier of the safety data sheet

#### Manufacturer

Beckman Coulter, Inc.  
250 S. Kraemer Blvd  
Brea, CA 92821, U.S.A.  
Tel: 800-854-3633

#### Supplier

**CANADA**  
Beckman Coulter Canada LP  
7075 Financial Drive  
Mississauga, ON L5N 6V8  
Canada  
1-800-463-7828

**UNITED KINGDOM**  
Beckman Coulter (UK) Ltd.  
Oakley Court  
Kingsmead Business Park, London  
Road  
High Wycombe  
United Kingdom HP11 1JU  
01494 441181

**AUSTRALIA**  
Beckman Coulter Australia Pty Ltd  
23-27 Chaplin Drive  
Lane Cove NSW 2066  
Australia  
ABN 81 002 011 672  
24 Hour emergency contact phone  
number:  
1800 060 881

**SWITZERLAND**  
Beckman Coulter Eurocenter SA  
22, rue Juste-Olivier, Case Postale  
1044,  
CH-1260 Nyon 1, Switzerland.  
Telephone: +41 (0)22 365 36 11  
Monday through Friday, 9:00 am to  
7:00pm)

**NEW ZEALAND**  
Beckman Coulter NZ  
Unit J, 33 Walmsley Road, Otahuhu,  
Auckland 1062, New Zealand  
Hours available: 08:30 - 17:00

**ICELAND / ÍSLAND**  
Beckman Coulter AB  
Ekbacksvägen 28  
168 69 Bromma  
Sweden  
Phone No.: +46 80564 85 900  
Hours available: 08.00-16.30

**MALTA**  
DX Distributor:  
Cherubino Ltd

## Section 1 Identification of the substance/mixture and of the company/undertaking (Continued)

	DELFI Building, Sliema Road, Gzira, GZR 1637 Telephone: +356 21343270 Hours available: 08:30 – 17:00
<b>e-mail address</b>	SDSNT@beckman.com
<b>1.4 Emergency telephone number</b>	
<b>Telephone number (24H)</b>	Chemtrec Emergency Tel No. U.S.A. 800-424-9300, International (001) 703-527-3887
<b>Distributor and emergency phone no.</b>	Refer to attached list, Document ID: <a href="#">472050</a> , for local distributor and emergency phone numbers. UNITED STATES - Emergency Phone (24h): Chemtrec (800) 424-9300, International (001) 703-527-3887  CANADA - Poison Centre: 1-844-764-7669; Centre antipoison du Québec: 1-800-463-5060  UNITED KINGDOM - For UK and Scotland: Emergency Call 999  IRELAND - National Poisons Information Centre Phone No.: Members of Public: +353 (01) 809 2166 (8:00 am to 10:00 pm 7 days a week); Healthcare Professionals: +353 (01) 809 2566 (24 hour service)  AUSTRALIA - 24 Hour emergency contact phone number: 1800 060 881  NEW ZEALAND - 24 Hour emergency number: 0800 446 109

## Section 2 Hazards identification

### 2.1 Classification of the substance or mixture

<b>Product description</b>	Mixture Pale yellow; Liquid; Mild odor
<b>Classification according to EC 1272/2008 (CLP/GHS)</b>	Skin Irritation Category 2, H315 Eye Irritation Category 2, H319
<b>Classification according to US-OSHA (HCS 29 CFR 1910.1200) and UN GHS</b>	Skin Irritation Category 2 Eye Irritation Category 2

## Section 2 Hazards identification (Continued)

### 2.2 Label elements

According to EC 1272/2008 (CLP/GHS), US-OSHA and UN GHS  
**Hazardous ingredients**

Citric Acid  
Glycollic acid

**Pictogram**



**Signal word**

WARNING

**Hazard statements**

H315 Causes skin irritation.  
H319 Causes serious eye irritation.

**Precautionary statements**

**Prevention**

P280 Wear protective gloves, protective clothing and eye/face protection.

**Response**

P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P332+P313 If skin irritation occurs: Get medical advice/attention.  
P337+P313 If eye irritation persists: Get medical advice/attention.  
P362+P364 Take off contaminated clothing and wash it before use.

**Storage**

None

**Disposal**

None

Product label will display most significant precautionary statements.

### 2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

See Section 11 Toxicological Information for more detailed health information.

## Section 3 Composition and information on ingredients

### 3.2 Mixtures

Hazardous ingredients:		Hazard classification of pure ingredients		
Chemical name	% by wt.	EU 1272/2008 CLP/GHS	GHS	Note
Citric Acid CAS # 77-92-9 EINECS # 201-069-1 Index # Not available	10 - 25	Eye Irrit. 2, H319 STOT SE 3, H335	Eye Irrit. 2, H319 STOT SE 3, H335	REST

# SAFETY DATA SHEET

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## Section 3 Composition and information on ingredients (Continued)

<p>Glycollic acid CAS # 79-14-1 EINECS # 201-180-5 Index # Not available</p>	<p>2.5 - 10</p>	<p>Acute Tox. Oral 4, H302 Eye Dam. 1, H318 Skin Corr. 1, H314  Acute Toxicity Estimates (ATE) ATE Oral = 500 mg/kg</p>	<p>Acute Tox. Oral 4, H302 Eye Dam. 1, H318 Skin Corr. 1, H314</p>	
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REST - Subject to Restriction as per Annex XVII of REACH Regulation (EC) No 1907/2006

See section 8 for available Occupational exposure limits  
See Section 15 for additional regulatory information  
See Section 16 for description of hazard class and hazard statements

## Section 4 First aid measures

### 4.1 Description of first aid measures

- Inhalation** If product is inhaled, move exposed individual to fresh air. If individual is not breathing, begin artificial respiration by trained personnel and obtain medical attention immediately.
- Eye contact** If product enters eyes, rinse eyes gently with water for 15 minutes or longer, making sure that the eyelid is held open. If pain or irritation occurs, obtain medical advice/attention.
- Skin contact** In case of skin contact, rinse with plenty of water. Remove contaminated clothing and shoes. If pain or irritation occurs, obtain medical advice/attention.
- Ingestion** If product is ingested, rinse mouth with water. If irritation or discomfort occurs, obtain medical attention immediately.

### 4.2 Most important symptoms and effects, both acute and delayed

May cause skin and eyes irritation.  
See Section 11 Toxicological Information for more detailed health information.

### 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available. Refer to Section 4.1.

## Section 5 Firefighting measures

- 5.1 Extinguishing media** In case of fire use carbon dioxide (CO<sub>2</sub>), dry chemical, water spray or foam. For large fires use extinguishing media suitable for surrounding fire.

### 5.2 Special hazards arising from the substance or mixture Special fire and explosion hazards

No special hazards determined.

#### Hazardous combustion products

No combustion products posing significant hazards are expected from this product (an aqueous solution).

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## Section 5 Firefighting measures (Continued)

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### 5.3 Advice for firefighters

**Protective equipment** Self-contained breathing apparatus is recommended for firefighters in all chemical fire situations.

**Additional information** No further relevant information available.

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## Section 6 Accidental release measures

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### 6.1 Personal precautions, protective equipment and emergency procedures

**Personal precautions** Observe general safety guidelines for protection; avoid eye and skin contact. Wear protective gloves, protective clothing and eye/face protection.

**6.2 Environmental precautions** Contain spill to prevent migration.  
Do not allow the undiluted product to enter sewers/surface or ground water.

### 6.3 Methods and material for containment and cleaning up

**Spill and leak procedures** Absorb spilled material with an appropriate inert, non-flammable absorbent and dispose according to local regulations.

**6.4 Reference to other sections** Refer sections 8 and 13.

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## Section 7 Handling and storage

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**7.1 Precautions for safe handling** Use good laboratory procedures; avoid eye and skin contact.

### 7.2 Conditions for safe storage, including any incompatibilities

Store at 15 to 30°C, as directed on the product label.  
To maintain product quality, store according to the instructions in the product labeling.  
Store away from strong acids, strong bases, strong oxidizers and incompatible materials (section 10).

**7.3 Specific end uses** No further relevant information available.

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## Section 8 Exposure controls and personal protection

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### 8.1 Control parameters

#### Exposure limits

**US OSHA** None established

**ACGIH** None established

**ACGIH Biological Exposure Indices (BEI)**  
None established

#### DFG MAK

Citric Acid  
CAS # 77-92-9 4 mg/m<sup>3</sup> Peak (respirable fraction); 2 mg/m<sup>3</sup> TWA MAK (inhalable fraction)

**Ireland** None established

**IOELVs**  
None established

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Document ID: 81912-75 Version AL  
Revision Date (year/month/day) 2024/11/01  
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## Section 8 Exposure controls and personal protection (Continued)

<b>NIOSH</b>	None established
<b>China</b>	None established
<b>Croatia</b>	None established
<b>Japan</b>	None established
<b>Sweden (AFS 2015:7 and amendments)</b>	None established
<b>Turkey</b>	None established
<b>8.2 Exposure controls</b>	
<b>Engineering controls</b>	No special engineering controls are required. Use with good general ventilation.
<b>Eye protection</b>	Safety glasses or chemical goggles should be worn to prevent eye contact. Refer U.S. OSHA 29 CFR 1910.133, European Standard EN166 or appropriate government standards.
<b>Skin protection</b>	Wear impervious gloves such as Nitrile or equivalent and protective clothing. Refer to U.S. OSHA 29 CFR 1910.138, European Standard EN 374, EN 14605:2005+A1:2009 or appropriate government standards.
<b>Respiratory protection</b>	Under normal conditions, the use of this product should not require respiratory protection. If overexposure should occur and ventilation is not adequate to maintain airborne concentrations at acceptable levels, the use of respiratory protection should be evaluated by a qualified professional.

## Section 9 Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<b>Physical state</b>	Liquid	<b>Density and/or relative density</b>	1.120 @20°C
<b>Color</b>	Pale yellow	<b>Solubility</b>	
<b>Odor</b>	Mild odor	<b>Water</b>	Miscible
<b>pH</b>	2.5	<b>Organic</b>	Not determined
<b>Freezing point</b>	Not determined	<b>Partition coefficient n-octanol/water (log value)</b>	Not determined
<b>Boiling point or initial boiling point and boiling range</b>	103°C (217.4°F)	<b>Auto-ignition temp.</b>	Not applicable
<b>Flash point</b>	Not applicable	<b>Decomposition temperature</b>	Not determined
<b>Flammability</b>	Not applicable	<b>Vapor pressure</b>	Not determined
		<b>Kinematic viscosity</b>	Not determined

## Section 9 Physical and chemical properties (Continued)

**Lower and upper explosion limit** Not applicable

**Relative vapor density** Not determined

**Particle characteristics** Not applicable

### 9.2 Other information

#### Information with regard to physical hazard classes

No further relevant information available.

#### Other safety characteristics

No further relevant information available.

## Section 10 Stability and reactivity

**10.1 Reactivity** No further relevant information available.

**10.2 Chemical stability** The product is stable in accordance with recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No further relevant information available.

### 10.4 Conditions to avoid

To maintain product performance keep away from strong acids, strong bases, strong oxidizers.

Avoid exposure to heat and direct sunlight.

### 10.5 Incompatible materials

No further relevant information available.

### 10.6 Hazardous decomposition products

No decomposition products posing significant hazards would be expected from this product (an aqueous solution).

## Section 11 Toxicological information

### 11.1 Information on hazard classes

#### Toxicity data for hazardous ingredients

Glycollic acid  
CAS # 79-14-1

Inhalation LC50 Rat >5.2 mg/L 4 h (females)(aerosol)(CHEMVIEW); Inhalation LC50 Rat 3.6 mg/L 4 h (males)(aerosol)(CHEMVIEW); Oral LD50 Rat 1950 mg/kg (NLM\_CIP)

Citric Acid  
CAS # 77-92-9

Dermal LD50 Rat >2000 mg/kg (no deaths occurred)(EU\_CLH); Oral LD50 Rat 3 g/kg (NLM\_CIP)

#### Primary routes of exposure

Eye contact, ingestion, inhalation, and skin contact.

#### Acute toxicity

Not classified based on available data.

#### Skin corrosion/irritation

May cause skin irritation.

#### Serious eye damage/irritation

May cause eye irritation.

#### Respiratory or skin sensitisation

Not classified based on available data.

#### Germ cell mutagenicity

Not classified based on available data.

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## Section 11 Toxicological information (Continued)

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<b>Carcinogenicity</b>	No ingredients in this product are listed as carcinogens by ACGIH, IARC, NTP, OSHA or 1272/2008 EC regulation.
<b>Reproductive toxicity</b>	Not classified based on available data.
<b>Specific target organ toxicity (STOT) – single exposure</b>	Not classified based on available data.
<b>Specific target organ toxicity (STOT) – repeated exposure</b>	Not classified based on available data.
<b>Aspiration hazard</b>	Not classified based on available data.
<b>11.2 Information on other hazards</b>	
<b>Endocrine disrupting properties</b>	This product does not have substance(s) of endocrine disrupting properties for health according to REACH Article 57(f).
<b>Other information</b>	No further relevant information available.

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## Section 12 Ecological information

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<b>12.1 Toxicity</b>	
<b>Fresh water species</b>	
Glycollic acid CAS # 79-14-1	LC50 96 h Brachydanio rerio: >5000 mg/L [static] (IUCLID)
Citric Acid CAS # 77-92-9	LC50 96 h Lepomis macrochirus: 1516 mg/L (OECD_SIDS)
<b>Microtox/organisms</b>	No information available.
<b>Water flea</b>	No information available.
<b>Fresh water algae</b>	No information available.
<b>12.2 Persistence and degradability</b>	Not determined for the product.
<b>12.3 Bioaccumulative potential</b>	Not determined for the product.
<b>12.4 Mobility in soil</b>	Not determined for the product.
<b>12.5 Results of PBT and vPvB assessment</b>	Not determined for the product. PBT: Not applicable, vPvB: Not applicable.

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## Section 12 Ecological information (Continued)

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### 12.6 Endocrine disrupting properties

This product does not have substance(s) of endocrine disrupting properties for environment according to REACH Article 57(f).

### 12.7 Other adverse effects

No further relevant information available.

## Section 13 Disposal considerations

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### 13.1 Waste treatment methods

#### Product waste disposal

Chemical residues and remains should be routinely handled as special waste. This must be disposed of in compliance with anti-pollution and other laws of the country concerned. To ensure compliance we recommend that you contact the relevant (local) authorities and/or an approved waste-disposal company for information.

#### Package disposal

Dispose of waste product, unused product and contaminated packaging in compliance with federal, state and local regulations. If unsure of the applicable requirements, contact the authorities for information.

#### Additional information

Suggested European waste catalogue 18 01 06\* - chemicals consisting of or containing dangerous substances. Dispose in accordance with national, state and local waste regulations.

## Section 14 Transport information

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Transportation of this product is not regulated under ICAO, IATA DGR, IMDG, US DOT, European ADR and RID or Canadian TDG.

**14.1 UN/ID number:** Not regulated for transportation

**14.2 UN proper shipping name:** Not regulated for transportation

**14.3 Transport hazard class(es):** Not regulated for transportation

**14.4 Packing group:** Not regulated for transportation

**14.5 Environmental hazards:** Not regulated for transportation

**14.6 Special precautions for user:** None

**14.7 Maritime transport in bulk according to IMO instruments:** Not applicable

## Section 15 Regulatory information

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### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### US Federal and State Regulations

##### **SARA 313 (Section 313, Title III reporting requirements)**

No ingredients listed.

##### **CERCLA (The Comprehensive Environmental Response, Compensation, and Liability Act) 40 CFR 302.4**

No ingredients listed.

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## Section 15 Regulatory information (Continued)

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### California Proposition 65

#### Chemical which is known to the State of California to cause cancer

No ingredients listed.

#### Chemical which is known to the State of California to cause development toxicity

No ingredients listed.

#### Chemical which is known to the State of California to cause male reproductive toxicity

No ingredients listed.

#### Chemical which is known to the State of California to cause female reproductive toxicity

No ingredients listed.

### Massachusetts Right To Know (RTK) List

No ingredients listed.

### New Jersey Dept. of Health Right To Know (RTK) List

No ingredients listed.

### Pennsylvania Right To Know (RTK) List

No ingredients listed.

### EU Regulations

This SDS complies with EC Regulations 1907/2006 (REACH) and amendments.

### **Water Hazard Class (Germany)**

WGK 1, low water endangering

### **Regulation (EU) 2019/1148 on the marketing and use of explosives precursors - Substances Subject to Suspicious Transactions Reporting**

No ingredients listed.

### **Regulation (EU) 2019/1148 on the marketing and use of explosives precursors - Restricted Explosives Precursors**

No ingredients listed.

### **REACH 1907/2006 EC - Candidate List of Substances of Very High Concern (SVHC)**

No ingredients listed.

### **REACH 1907/2006 EC - Annex XVII – Restrictions on Certain Dangerous Substances**

CAS # 77-92-9

Citric Acid

Entry No.: 75

### **REACH 1907/2006 EC - Annex XIV - list of substances subject to authorisation**

No ingredients listed.

Refer to Section 3

## Section 15 Regulatory information (Continued)

### UK Regulations

#### **UK REACH Regulation (as Amended) - List of substances subject to authorisation**

Refer to Section 3

### Canada

This product is exempt from WHMIS label and SDS requirements.

### China

#### **Catalog of Hazardous Chemicals - Hazardous Chemicals**

No ingredients listed.

#### **Inventory - China - Inventory of Existing Chemical Substances (IECSC)**

All ingredients are listed or exempted.

### Turkey

#### **Turkey-REACH - KKDIK Regulation - Annex 17 – Restrictions**

No ingredients listed.

### International

#### **UN/FAO/Rotterdam Convention - Chemicals Subject to Prior Informed Consent (PIC)**

No ingredients listed.

### **15.2 Chemical safety assessment**

A Chemical Safety Assessment has not been carried out.

*Some hazardous ingredients listed in Section 15 are below the cutoff limits of 0.1% for carcinogen, mutagen and reproductive toxin and 1% for other health hazards required for reporting in Section 3.*

## Section 16 Other information

<b>Beckman Coulter safety rating</b>	<b>Flammability: 0</b> <b>Health: 2</b> <b>Reactivity with water: 0</b> <b>Physical contact: 2</b>	Code 0=None 1=Slight 2=Caution 3=Severe
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**Revision changes** Updated sections 3, 8

#### **Document version and issue/revision date**

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## Section 16 Other information (Continued)

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**Hazard Classification Procedure** This mixture was classified using the calculation method for human health and environmental hazards. Physical hazards were determined based on the specification.

**Description of hazard class and hazard statements from Section 3**

Acute Tox. Oral 4 - Acute Toxicity Oral, Category 4  
Eye Dam. 1 - Eye Damage Category 1  
Eye Irrit. 2 - Eye Irritation Category 2  
Skin Corr. 1 - Skin Corrosion Category 1  
STOT SE 3 - Specific Target Organ Toxicity Single Exposure Category 3  
H302 - Harmful if swallowed.  
H314 - Causes severe skin burns and eye damage.  
H318 - Causes serious eye damage.  
H319 - Causes serious eye irritation.  
H335 - May cause respiratory irritation.

**Abbreviations and acronyms**

ACGIH - American Conference of Governmental Industrial Hygienists (ACGIH)  
ADR and RID - European Agreement Concerning the International Carriage of Dangerous Goods by Road and Rail  
CLP - Classification, Labeling and Packaging  
DFGMAK - Republic Germany's maximum exposure limit  
EC50 - Concentration of a substance in an environmental medium expected to produce a certain effect in 50% of test organisms  
GHS - Globally Harmonized System of Classification and Labelling of Chemicals (GHS)  
HCS - Hazard Communication Standard  
IARC - International Agency for Research on Cancer  
IATA DGR - International Air Transport Association Dangerous Goods Regulation  
ICAO - International Civil Aviation Organization  
IDLH - Immediately Dangerous to Life or Health  
IMDG - International Maritime Dangerous Goods  
IMO - International Maritime Organization  
IOELVs - European Unions' Indicative Occupational Exposure Limit Values  
LC50 - Concentration of a substance in water causing death (50% of the tested population) to aquatic life  
LD50 - Lethal Dose 50%  
NIOSH - National Institute for Occupational Safety and Health  
NTP - National Toxicology Program  
OSHA - Occupational Safety and Health Administration  
PBT - Persistent Bioaccumulative and Toxic substances  
PEL - Permissible Exposure Limit  
SARA - Superfund Amendments and Reauthorization Act  
STEL – Short Term Exposure Limit  
STLV - Short Term Limit Value

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## Section 16 Other information (Continued)

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STV - Short Term Value  
TDG - Canadian Transportation of Dangerous Goods Regulations  
TLV - Threshold Limit Value  
TWA – Time Weighted Average  
UN GHS - United Nations Globally Harmonized System  
US DOT - United States Department of Transportation  
US OSHA - United States Occupational Safety and Health Administration  
vPvB - very Persistent and very Bioaccumulative substances  
WHMIS - Workplace Hazardous Material Information System

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