



## SAFETY DATA SHEET

Doc. ID: 8547168-75 Rev. AF  
Revised (year/month/day) 2015/04/01

### Section 1 Identification of the Substance/mixture and of the Company/undertaking

#### 1.1 Product Identifier

**Product Name** Ac-T™ 5diff Hgb Lyse  
**Part Number** 8547168  
**Series Name** Ac-T™ 5 diff

#### 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

##### EC REP Address

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

**e-mail address** SDSNT@beckman.com

#### 1.4 Emergency telephone number

**Telephone number (24H)** Chemtrec Emergency Tel No. U.S.A. 800-424-9300, International (001) 703-527-3887

##### Distributor and Emergency Phone No.

Refer to attached list, Document ID: [472050](#), for local distributor and emergency phone numbers.

### Section 2 Hazards Identification

#### 2.1 Classification of substance or mixture

**Product Description** Mixture  
For full text of R- phrases: see Section 16.  
Colorless; Clear; Liquid; Mild odor

##### Classification according to EC 1272/2008 (CLP/GHS)

Not classified as hazardous per EC 1272/2008 (CLP/GHS)

##### Classification according to EC Directives 1999/45/EC and 67/548/EEC

Xi;R36

##### Classification according to US-OSHA (HCS 29 CFR 1910.1200) and UN GHS

Skin Irritation Category 3  
Aquatic Hazard Acute, Category 3

## Section 2 Hazards Identification (Continued)

### 2.2 Label Elements

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

**Hazardous Ingredients**

Dodecyltrimethylammonium chloride

**Pictogram**

None

**Signal Word**

WARNING

**Hazard Statements**

H316 Causes mild skin irritation.

H402 Harmful to aquatic life.

**Precautionary Statements**

P273 Avoid release to the environment.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P501 Dispose of contents/container in accordance with local/national regulations

Product label will display most significant precautionary statements. 1% of product contains ingredients of unknown hazards to the aquatic environment.

### 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-67/548/EEC	EU 1272/2008 CLP/GHS	GHS	
Dodecyltrimethylammonium chloride CAS # 112-00-5 EINECS # 203-927-0 Index # Not available	1 - 5	Xn;R20/21/22	Aquatic Acute 1 Eye Irrit. 2 STOT SE 3 Skin Irrit. 2 H315; H319; H335; H400	Aquatic Acute 1 Eye Irrit. 2 STOT SE 3 Skin Irrit. 2 H315; H319; H335; H400	
Isopropyl Alcohol CAS # 67-63-0 EINECS # 200-661-7 Index # 603-117-00-0	< 3	F;R11 Xi;R36-67	Eye Irrit. 2 Flam. Liq. 2 STOT SE 3 H225; H319; H336	Eye Irrit. 2 Flam. Liq. 2 STOT SE 3 H225; H319; H336	3, 8

3 - Health hazard

8 - Present at concentration below the cut-off limits.

See section 8 for available Occupational exposure limits

See Section 15 for additional regulatory information

See Section 16 for hazard class, hazard statements and risk phrase description

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## Section 4 First Aid Measures

### 4.1 Description of first aid measures

<b>Inhalation</b>	If product is inhaled, move exposed individual to fresh air. If individual is not breathing, begin artificial respiration immediately and obtain medical attention.
<b>Eye Contact</b>	If product enters eyes, wash eyes gently under running water for 15 minutes or longer, making sure that the eyelids are held open. If pain or irritation occur, obtain medical attention.
<b>Skin Contact</b>	In case of skin contact, flush with copious amounts of water for at least 15 minutes. If pain or irritation occur, obtain medical attention.
<b>Ingestion</b>	If ingested, wash mouth out with water. If irritation or discomfort occurs, seek medical attention.

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

Causes mild skin 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.

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## Section 5 Fire Fighting Measures

**Flammable Properties** Nonflammable aqueous solution.

**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).

### 5.3 Advice for fire fighters

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

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

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## Section 6 Accidental Release Measures

### 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.

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## Section 6 Accidental Release Measures (Continued)

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- 6.2 Environmental Precautions** Contain spill to prevent migration.  
Do not allow the undiluted product to enter sewers/surface or ground water.  
Dispose of contents/container in accordance with local regulations
- 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 18 to 25°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**

Isopropyl Alcohol  
CAS # 67-63-0 400 ppm TWA; 980 mg/m3 TWA

**ACGIH**

Isopropyl Alcohol  
CAS # 67-63-0 400 ppm STEL; 200 ppm TWA

**DFG MAK**

Isopropyl Alcohol  
CAS # 67-63-0 400 ppm Peak; 1000 mg/m3 Peak; 200 ppm TWA MAK; 500 mg/m3 TWA MAK

**Ireland**

Isopropyl Alcohol  
CAS # 67-63-0 200 ppm TWA; 400 ppm STEL; Potential for cutaneous absorption

**IOELVs**

None established

**NIOSH**

Isopropyl Alcohol  
CAS # 67-63-0 2000 ppm IDLH (10% LEL); 500 ppm STEL; 1225 mg/m3 STEL; 400 ppm TWA;  
980 mg/m3 TWA

**Japan**

None established

## Section 8 Exposure Controls and Personal Protection (Continued)

### 8.2 Exposure controls

#### Engineering Controls

No special engineering controls are required. Use with good general ventilation.

#### Eye Protection

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.

#### Skin Protection

Impervious gloves, such as Nitrile or equivalent, should be worn to prevent skin contact. Refer U.S. OSHA 29 CFR 1910.138, European Standard EN374 or appropriate government standards.

#### Respiratory Protection

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>Specific Gravity (Water=1.0)</b>	≈ 1.03 @20°C
<b>Color</b>	Colorless	<b>Solubility</b>	
<b>Transparency</b>	Clear	<b>Water</b>	Miscible
<b>Odor</b>	Mild odor	<b>Organic</b>	Not determined
<b>pH</b>	9.5 - 10.5	<b>Partition coefficient: n-octanol/water</b>	Not determined
<b>Freezing Point</b>	Not determined	<b>Auto-ignition Temp.</b>	Not applicable
<b>Boiling Point</b>	Not determined	<b>Decomposition Temperature</b>	Not determined
<b>Flash Point</b>	Not applicable	<b>Percent Volatiles</b>	Not applicable
<b>Evaporation Rate</b>	Not determined	<b>Vapor Pressure</b>	Not determined
<b>Flammability (Solid, Gas)</b>	Not applicable	<b>Viscosity</b>	Not determined
<b>Flammability Limits</b>	Not applicable	<b>Explosive Properties</b>	Not applicable
<b>Vapor Density</b>	Not determined	<b>Oxidizing Properties</b>	Not applicable
<b>Odor Threshold</b>	Isopropyl Alcohol 43 ppm geometric mean air odor threshold = (detectable); 19 ppm geometric mean air odor threshold = (recognizable)		

### 9.2 Other Information

No further relevant information available.

## Section 10 Stability and Reactivity

### 10.1 Reactivity

No further relevant information available.

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## Section 10 Stability and Reactivity (Continued)

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- 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** Avoid exposure to heat and direct sunlight.  
To maintain product performance keep away from strong acids, strong bases, strong oxidizers.
- 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).

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## Section 11 Toxicological Information

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### 11.1 Information on toxicological effects

#### Toxicity Data for Hazardous Ingredients

Isopropyl Alcohol  
CAS # 67-63-0

Inhalation LC50 Rat 72.6 mg/L 4 h; Oral LD50 Rat 4396 mg/kg; Dermal LD50 Rat 12800 mg/kg; Dermal LD50 Rabbit 12870 mg/kg

**Primary Routes of Exposure** Eye contact, ingestion, inhalation, and skin contact.

**Skin Corrosion/Irritation** Causes mild skin irritation.

**Serious eye damage/eye irritation** No data available.

**Respiratory/skin sensitization** No data available.

**Carcinogenicity** No ingredients in this product are listed as carcinogens by ACGIH, IARC, NTP, OSHA or 1272/2008 EC regulation.

**Germ cell mutagenicity** No data available.

**Reproductive Toxicity** No data available.

**Specific target organ toxicity – single exposure**

No data available.

**Specific target organ toxicity – repeated exposure**

No data available.

**Aspiration hazard** No data available.

**Other Information** No further relevant information available.

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## Section 12 Ecological Information

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### 12.1 Ecotoxicity

#### Fresh Water Species

Isopropyl Alcohol  
CAS # 67-63-0

96 h LC50 Pimephales promelas: 9640 mg/L [flow-through]; 96 h LC50 Pimephales promelas: 11130 mg/L [static]; 96 h LC50 Lepomis macrochirus: >1400000 µg/L

#### Microtox

No information available.

#### Water Flea

Isopropyl Alcohol  
CAS # 67-63-0

48 h EC50 Daphnia magna: 13299 mg/L

#### Fresh Water Algae

Isopropyl Alcohol  
CAS # 67-63-0

96 h EC50 Desmodesmus subspicatus: >1000 mg/L; 72 h EC50 Desmodesmus subspicatus: >1000 mg/L

**12.2 Persistence and degradability** Not determined for the product.

**12.3 Bioaccumulation** Not determined for the product.

**12.4 Mobility in soil** Not determined for the product.

### 12.5 Results of PBT and vPvB assessment

Not determined for the product. PBT: Not applicable, vPvB: Not applicable.

### 12.6 Other Adverse Effects

Harmful to aquatic life.

This product is classified as environmentally hazardous. Do not allow undiluted product to enter sewer/surface or ground water. Dispose of contents/container to in accordance with local/national regulations

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## 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.

### 13.2 Additional information

Suggested European waste catalogue 18 01 07 - chemicals other than those mentioned in 18 01 06. Dispose in accordance with national, state and local waste regulations.

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## Section 14 Transport Information

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

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## 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

Isopropyl Alcohol is subject to reporting requirements of Section 313, Title III of SARA. 1.0 % de minimis concentration (only)

## Section 15 Regulatory Information (Continued)

**CERCLA RG's, 40 CFR 302.4** Potassium Cyanide is listed.

**California Proposition 65** Potassium Cyanide has been identified by the State of California to cause cancer and reproductive harm. The State of California has adopted a regulation which requires a warning be given to individual who may be exposed to chemicals identified by the State to cause cancer or reproductive harm.  
**WARNING:** This product contains a chemical known to the State of California to cause cancer and reproductive harm.

**Massachusetts MSL** Isopropyl Alcohol is listed.  
Potassium Cyanide is listed.

### **New Jersey Dept. of Health RTK List**

Isopropyl Alcohol is listed.  
Potassium Cyanide is listed.

**Pennsylvania RTK** Isopropyl Alcohol is listed.  
Potassium Cyanide is listed.

### **EU Regulations**

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

**Water Hazard Class (Germany) WGK 2**, water endangering

**REACH 1907/2006 EC - Annex XIV - list of substances subject to authorization.**

No ingredients listed.

**According to EC Directives (1999/45/EC and 67/548 EEC)**

Irritant

Xi



### **Risk and Safety Phrases**

R36 Irritating to eyes.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

### **Canada**

This product is exempt from WHMIS label and SDS requirements.

**PIN** Not applicable

### **Ingredients on Ingredient Disclosure List**

Isopropyl Alcohol

### **Ingredients with unknown toxicological properties**

Product is exempt

**15.2 Chemical Safety Assessment** A Chemical Safety Assessment has not been carried out.

*Some hazardous ingredients listed in Section 15 are below OSHAs and WHMIS' 1.0% w/w (0.1% for carcinogens) or EU's ingredient specific concentrations required for reporting in Section 3.*



## Section 16 Other Information

<b>Beckman Coulter Safety Rating</b>	<b>Flammability: 0</b> <b>Health: 1</b> <b>Reactivity with Water: 0</b> <b>Contact: 1</b>	Code 0=None 1=Slight 2=Caution 3=Severe
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**Revision Changes** Updated to GHS.

### Hazard Class, hazard statements and risk phrase description from section 3

F - Highly flammable  
 Xi - Irritant  
 Xn - Harmful  
 R11 Highly flammable.  
 R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.  
 R36 Irritating to eyes.  
 R67 Vapours may cause drowsiness and dizziness.  
 Aquatic Acute 1 - Aquatic Hazard Acute, Category 1  
 Eye Irrit. 2 - Eye Irritation Category 2  
 Flam. Liq. 2 - Flammable Liquids, Category 2  
 Skin Irrit. 2 - Skin Irritation Category 2  
 STOT SE 3 - Specific Target Organ Toxicity Single Exposure Category 3  
 STOT SE 3 - Specific Target Organ Toxicity Single Exposure Category 3  
 H225 - Highly flammable liquid and vapour.  
 H315 - Causes skin irritation.  
 H319 - Causes serious eye irritation.  
 H335 - May cause respiratory irritation.  
 H336 - May cause drowsiness or dizziness.  
 H400 - Very toxic to aquatic life.

### Abbreviations and Acronyms

ACGIH - American Conference of Governmental Industrial Hygienists  
 ADR - European Agreement Concerning The International Carriage Of Dangerous Goods By Road  
 CERCLA - The Comprehensive Environmental Response, Compensation, and Liability Act  
 CLP - Classification, Labeling and Packaging  
 DFGMAK - Republic Germany's maximum exposure limit  
 GHS - Globally Harmonized System  
 HCS - Hazard Communication Standard  
 IARC - Internal Agency for Research on Cancer  
 IATA - International Air Transport Association  
 ICAO - International Civil Aviation Organization  
 IMDG - International Maritime Dangerous Goods  
 IOELVs - European Unions' Indicative Occupational Exposure Limit Values  
 NIOSH - National Institute for Occupational Safety and Health  
 NTP - National Toxicology Program  
 OSHA - Occupational Safety and Health Administration  
 PBT - Persistent bioaccumulative and toxic substances

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## Section 16 Other Information (Continued)

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SARA - Superfund Amendments and Reauthorization Act  
TDG - Canadian Transportation Of Dangerous Goods Regulations.  
UN GHS - United Nations Globally Harmonized System  
US DOT - United States Department of Transportation  
WHMIS - Workplace Hazardous Material Information System  
vPvB - Very persistent and very bioaccumulative substances  
EC50 - Effective Concentration, 50%  
LC50 - Lethal Concentration, 50%  
LD50 - Lethal Dose, 50%

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For further information, please contact your local Beckman Coulter, Inc. representative.

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