



## SAFETY DATA SHEET

Doc. ID: B88526-75 Rev. AA  
Issued (year/month/day) 2016/03/21

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

#### 1.1 Product Identifier

**Product Name** 7-AAD Viability Dye

**Part Number** B88526

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

**Product Use** For Research Use Only. See product literature for details.

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

##### Manufacturer

Distributed by Beckman Coulter, Inc. for  
IMMUNOTECH (A Beckman Coulter  
Company)  
130, av.de Lattre de Tassigny - BP 177  
13276 Marseille Cedex 09 - France Tèl.  
(33) 91 17 27 00

**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  
Violet; Clear; Liquid; Odorless

##### 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

Not classified as dangerous per EC Directives (1999/45/EC and 67/548 EEC)

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

Skin Irritation Category 3

## Section 2 Hazards Identification (Continued)

<b>2.2 Label Elements</b>	<p><b>According to EC 1272/2008 (CLP/GHS), US-OSHA and UN GHS</b></p> <p><b>Hazardous Ingredients</b> Dimethyl Sulfoxide</p> <p><b>Pictogram</b> None</p> <p><b>Signal Word</b> WARNING</p> <p><b>Hazard Statements</b> H316 Causes mild skin irritation.</p> <p><b>Precautionary Statements</b> P332+P313 If skin irritation occurs: Get medical advice/attention.</p>
<b>2.3 Other hazards</b>	<p>Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable.</p>

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	
Dimethyl Sulfoxide CAS # 67-68-5 EINECS # 200-664-3 Index # Not available	1 -2	Xi;R36/37/38	Eye Irrit. 2 STOT SE 3 Skin Irrit. 2 H315; H319; H335	Eye Irrit. 2 Flam. Liq. 4 STOT SE 3 Skin Irrit. 2 H227; H315; H319; H335	

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

## 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. Remove contaminated clothing and shoes. If pain or irritation occur, obtain medical attention.

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## Section 4 First Aid Measures (Continued)

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- Ingestion** 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 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 specific medical attention or treatment required.

## Section 5 Fire Fighting Measures

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- 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.

## 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.  
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 2 to 8°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

**DFG MAK**

Dimethyl Sulfoxide  
CAS # 67-68-5

skin notation; 100 ppm Peak; 320 mg/m<sup>3</sup> Peak; 50 ppm TWA MAK; 160 mg/m<sup>3</sup> TWA MAK

**Ireland** None established

**IOELVs** None established

**NIOSH** None established

**Japan** None established

**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 @20°C
<b>Color</b>	Violet	<b>Solubility</b>	
<b>Transparency</b>	Clear	<b>Water</b>	Miscible
<b>Odor</b>	Odorless	<b>Organic</b>	Not determined
<b>pH</b>	7	<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>Flammability Limits</b>	Not determined		
<b>Vapor Density</b>	Not determined		
<b>Odor Threshold</b>	Not applicable		

**9.2 Other Information** 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**  
Avoid contact with incompatible materials.  
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).

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## Section 11 Toxicological Information

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### 11.1 Information on toxicological effects

#### Toxicity Data for Hazardous Ingredients

Not applicable

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

**Skin Corrosion/Irritation** Causes 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

Dimethyl Sulfoxide  
CAS # 67-68-5

96 h LC50 Pimephales promelas: 34000 mg/L; 96 h LC50 Oncorhynchus mykiss: 33 - 37 g/L [static]; 96 h LC50 Lepomis macrochirus: >40 g/L [static]; 96 h LC50 Cyprinus carpio: 41.7 g/L

**Microtox** No information available.

**Water Flea** No information available.

**Fresh Water Algae** No information available.

**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.

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## Section 12 Ecological Information (Continued)

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### 12.5 Results of PBT and vPvB assessment

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

### 12.6 Other Adverse Effects

No further relevant information available.

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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.

#### 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.

### 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, IATA, IMDG, US DOT, European ADR and RID 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** No ingredients listed.

**CERCLA RG's, 40 CFR 302.4** No ingredients listed.

**California Proposition 65** No ingredients listed.

**Massachusetts MSL** No ingredients listed.

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

Dimethyl Sulfoxide is listed.

**Pennsylvania RTK** No ingredients listed.

#### EU Regulations

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

#### **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)**

Not classified as dangerous per EC Directives (1999/45/EC and 67/548 EEC)

## Section 15 Regulatory Information (Continued)

### Canada

**WHMIS Classification:** D2B - Poisonous and Infectious Material: Division 2 - Other Toxic Effects: Toxic (Skin Irritation)

D2B - Poisonous and Infectious Material: Division 2 - Other Toxic Effects: Toxic (Eye Irritation)

**PIN** Not applicable

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

Dimethyl Sulfoxide

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

None

**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: 2</b> <b>Reactivity with Water: 0</b> <b>Contact: 2</b>	Code 0=None 1=Slight 2=Caution 3=Severe
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**Revision Changes** New document

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

Xi - Irritant  
 R36/37/38 Irritating to eyes, respiratory system and skin.  
 Eye Irrit. 2 - Eye Irritation Category 2  
 Flam. Liq. 4 - Flammable Liquids, Category 4  
 Skin Irrit. 2 - Skin Irritation Category 2  
 STOT SE 3 - Specific Target Organ Toxicity Single Exposure Category 3  
 H227 - Combustible Liquid  
 H315 - Causes skin irritation.  
 H319 - Causes serious eye irritation.  
 H335 - May cause respiratory irritation.

### **Abbreviations and Acronyms**

ACGIH - American Conference of Governmental Industrial Hygienists  
 ADR and RID - European Agreement Concerning The International Carriage Of Dangerous Goods By Road and Rail  
 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 - International Agency for Research on Cancer  
 IATA - International Air Transport Association  
 ICAO - International Civil Aviation Organization



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## Section 16 Other Information (Continued)

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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  
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  
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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