

## Safety Data Sheet

**ALDEFLUOR<sup>™</sup> DEAB REAGENT, 1.5 MM****EFFECTIVE DATE: 2015-05-05**

### 1 Product and Company Identification

- 1.1 Product Name:** ALDEFLUOR<sup>™</sup> Diethylaminobenzaldehyde (DEAB) Reagent, 1.5 mM in 95% ethanol
- 1.2 Catalog Number:** 01705
- 1.3 Product Use:** Laboratory Chemical
- 1.4 Manufacturer/Supplier:** STEMCELL Technologies  
Suite 500-1618 Station Street  
Vancouver, British Columbia V6A 1B6 Canada
- 1.5 In Case of Emergency Call:** 1-800-667-0322

### 2 Hazards Identification

#### 2.1 Classification of the substance or mixture

Flammable liquids (Category 2)

Eye irritation (Category 2B)

#### 2.2 Label elements

##### Pictogram

**Signal word** Danger

##### Hazard statement(s)

H225 Highly flammable liquid and vapour.

H320 Causes eye irritation.

##### Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P264 Wash hands thoroughly after handling.

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

P303+361+353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

P337+313 If eye irritation persists: Get medical advice/ attention.

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P370+378

In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

**2.3 Other hazards**

No data available

### 3 Composition / Information on Ingredients

#### 3.1 Substances

Hazardous Components (Chemical Name)	CAS #	Concentration	EC #
ethyl alcohol	64-17-5	95%	200-578-6
4-diethylaminobenzaldehyde	120-21-8	0.03%	204-377-4

### 4 First Aid Measures

#### 4.1 Description of first aid measures

##### 4.1.1 If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

##### 4.1.2 In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

##### 4.1.3 In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

##### 4.1.4 If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

The most important known symptoms and effects are described in section 2.2 and/or in section 11.

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

No data available

### 5 Fire Fighting Measures

#### 5.1 Extinguishing Media

##### 5.1.1 Suitable Extinguishing Media

Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.

##### 5.1.2 Unsuitable Extinguishing Media

No data available

#### 5.2 Special hazards arising from the substance or mixture

##### 5.2.1 Flammable Properties and Hazards

Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.

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No data available

**5.2.3 Autoignition Pt**

No data available

**5.2.4 Explosive Limits**

LEL: No data available

UEL: No data available

**5.2.5 Hazardous Combustion Products**

Carbon oxides

**5.3 Fire Fighting Instructions**

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

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**6 Accidental Release Measures****6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

**6.2 Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**6.3 Methods and materials for containment and cleaning up**

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

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**7 Handling and Storage****7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Take measures to prevent the build-up of electrostatic charge.

For precautions see section 2.2.

**7.2 Conditions for safe storage**

Keep container tightly closed in a dry and well-ventilated place.

Containers which are opened must be carefully resealed and kept upright to prevent leakage.

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### 8 Exposure Controls/Personal Protection

#### 8.1 Exposure limits

##### Components with workplace control parameters

Component	CAS #	Value	Control parameters	Basis
ethyl alcohol	64-17-5	TWA	1000 ppm 1800 mg/m <sup>3</sup>	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TWAEV	1000 ppm 1800 mg/m <sup>3</sup>	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		STEL	1000 ppm	Canada. British Columbia OEL
		TWA	1000 ppm	USA. ACGIH Threshold Limit Values (TLV)
	Remarks	Upper Respiratory Tract irritation Confirmed animal carcinogen with unknown relevance to humans		
		TWA	1000 ppm 1900 mg/m <sup>3</sup>	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		The value in mg/m <sup>3</sup> is approximate.		
		TWA	1000 ppm 1900 mg/m <sup>3</sup>	USA. NIOSH Recommended Exposure Limits
		TWA	1000 ppm 1920 mg/m <sup>3</sup>	UK. EH40 WEL – Workplace Exposure Limits
		Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used		

#### 8.2 Engineering controls

Use mechanical exhaust or laboratory fumehood to avoid exposure.

#### 8.3 Personal protective equipment

##### 8.3.1 Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

##### 8.3.2 Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

##### 8.3.3 Respiratory protection

Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

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**ALDEFLUOR<sup>TM</sup> DEAB REAGENT, 1.5 MM****EFFECTIVE DATE: 2015-05-05****8.3.4 General hygiene considerations**

General industrial hygiene practice.

**8.3.5 Environmental exposure controls**

Do not let product enter drains.

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**9 Physical and Chemical Properties****9.1 Information on basic physical and chemical properties**

Appearance	Liquid
Odour	No data available
Odour threshold	No data available
pH	No data available
Melting point/freezing point	No data available
Boiling point/boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Solubility	No data available
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available

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**10 Stability and Reactivity**

<b>10.1 Reactivity</b>	No data available
<b>10.2 Chemical stability</b>	Stable under recommended storage conditions.
<b>10.3 Possibility of hazardous reactions</b>	Vapours may form explosive mixture with air.
<b>10.4 Conditions to avoid</b>	Heat, flames and sparks. Extremes of temperature and direct sunlight.
<b>10.5 Incompatible materials</b>	No data available
<b>10.6 Hazardous decomposition products</b>	Hazardous decomposition products formed under fire conditions - Carbon oxides

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**11 Toxicological Information****11.1 Acute toxicity**

Oral:	No data available
Inhalation:	No data available

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Dermal: No data available

Other: No data available

**11.2 Skin corrosion/irritation**

No data available

**11.3 Serious eye damage/eye irritation**

Eyes: no data available

**11.4 Respiratory and/or skin sensitization**

No data available

**11.5 Germ cell mutagenicity**

No data available

**11.6 Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**11.7 Reproductive toxicity**

No data available

**11.8 Specific target organ toxicity - single exposure**

No data available

**11.9 Specific target organ toxicity - repeated exposure**

No data available

**11.10 Aspiration hazard**

No data available

**11.11 Potential health effects**

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.

Ingestion: May be harmful if swallowed.

Skin: May be harmful if absorbed through skin. Causes skin irritation.

Eyes: Causes eye irritation.

**11.12 Signs and symptoms of exposure**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Stomach - Irregularities - Based on Human Evidence (Ethanol)

**11.13 RTECS #** No data available

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**12 Ecological Information****12.1 Toxicity** No data available**12.2 Persistence and degradability** No data available**12.3 Bioaccumulative potential** No data available**12.4 Mobility in soil** No data available**12.5 Other adverse effects** No data available

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### 13 Disposal Considerations

#### 13.1 Waste disposal method

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

#### 13.2 Contaminated packaging

Dispose of as unused product.

### 14 Transport Information

<b>14.1 UN number</b>	DOT	1170
	ADR/RID	1170
	IMDG	1170
	IATA	1170
<b>14.2 UN proper shipping name</b>	DOT	Ethanol solutions
	ADR/RID	ETHANOL SOLUTION
	IMDG	ETHANOL SOLUTION
	IATA	Ethanol solution
<b>14.3 Transport hazard class(es)</b>	DOT	3
	ADR/RID	3
	IMDG	3
	IATA	3
<b>14.4 Packing group</b>	DOT	II
	ADR/RID	II
	IMDG	II
	IATA	II
<b>14.5 Environmental hazards</b>	DOT	Marine pollutant: No
	ADR/RID	No
	IMDG	Marine pollutant: No
	IATA	No
<b>14.6 Special precautions</b>	No data available	

### 15 Regulatory Information

#### 15.1 USA

##### SARA 302 Components:

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

##### SARA 313 Components:

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

##### SARA 311/312:

Fire Hazard, Acute Health Hazard, Chronic Health Hazard



**Safety Data Sheet****ALDEFLUOR<sup>TM</sup> DEAB REAGENT, 1.5 MM****EFFECTIVE DATE: 2015-05-05****Massachusetts Right To Know Components**

Component	CAS #	Revision Date
ethyl alcohol	64-17-5	2007-03-01

**Pennsylvania Right To Know Components**

Component	CAS #	Revision Date
ethyl alcohol	64-17-5	2007-03-01
Water	7732-18-5	
4-diethylaminobenzaldehyde	120-21-8	

**New Jersey Right To Know Components**

Component	CAS #	Revision Date
ethyl alcohol	64-17-5	2007-03-01
Water	7732-18-5	
4-diethylaminobenzaldehyde	120-21-8	

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**15.2 EU**

This SDS was prepared in accordance with Regulation (EC) No.1272/2008 and European Directive 67/548/EEC as amended.

**15.3 Canada**

WHMIS Classification: B2 Flammable liquid

This SDS was prepared in accordance with Hazardous Products Regulations (HPR) and WHMIS 2015.

**16 Other Information**

**16.1 Prepared by:** Quality Control, STEMCELL Technologies Inc.

**16.2 Revision:** N/A

**16.3 Notice:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. STEMCELL Technologies Inc. shall not be held liable for any damage resulting from handling or from contact with the product. The information contained in this Safety Data Sheet (SDS) is current as of the Effective Date shown in this document and may be subject to amendment by STEMCELL Technologies Inc.

**16.4 Disclaimer:** **THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES.**