Kit #61 Plant Cell Study



Version: SDS 240.02.00 Revision Date: March 27, 2015

# 1. IDENTIFICATION

1.1 Product Identifiers

**Monocot Cross Section** Product Name: 70% Isopropyl alcohol Alternative names:

**Product Number:** 61-2EA

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

Identified uses: For laboratory and educational use only

1.3 Details of the supplier of the safety data sheet

LAB-AIDS®, Inc, 17 Colt Ct., Ronkonkoma, NY 11779, USA Company:

Telephone: +1 800 381 8003. +1 631 820 8268 Fax:

1.4 Emergency telephone number

CHEMTREC 1 800 424-9300 Emergency number:

#### 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

**GHS** classification

Flam. Liq. (Category 2), H225 Eye irritant (Category 2A), H319

2.2 Label elements, including precautionary statements

Danger
H225 - Highly flammable liquid and vapor, H319 - Causes serious eye irritation. Signal word: Hazards statements:

P210 - Keep away from heat, hot surfaces, open flames, sparks, P280 - Wear protective gloves, eye protection Precautionary statements:

Pictogram:



2.3 Hazards not otherwise classified: none

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substance: Not applicable

3.2 Mixture

Chemical Name	Product identifier	%	GHS-US classification	
Water Isopropanol	CAS# 7732-18-5 CAS# 67-63-0	30% 70%	Not classified Flam. Liq. 2, H225; Eye Irrit. 2A; STOT SE 3, H336	

#### 3.3 Chemicals where a trade secret is claimed: None

#### 4. FIRST AID MEASURE

#### 4.1 Description of the first aid measure:

INGESTION: Never give anything by mouth to unconscious person. Rinse mouth and get conscious person drink a glass of milk or water. Do NOT induce vomiting unless directed to do so by medical personnel. Get immediate medical attention.

INHALATION: Remove to fresh air. Get medical attention if necessary.

EYE CONTACT: Wash immediately with plenty of water, and continue washing for at least 15min., occasionally lifting upper and lower eyelids. Seek medical attention if necessary.

SKIN CONTACT: Flush thoroughly with mild soap and water. Remove contaminated clothing. Get medical attention if irritation develop.

4.2 Most important symptoms and effects, both acute and delayed: Exposure to high concentrations may cause coughing and central nervous system depression. Dizziness. Headache.

## 5. FIREFIGHTING MEASURES

#### 5.1 Extinguishing media

Suitable extinguishing media: Use TriClass, dry chemical extinguisher.

- 5.2 Special hazard arising from the substance or mixture: Vapor spreads at floor level.
- 5.3 Advice for firefighters: Use self-contained breathing apparatus and protective clothing.

### **6. ACCIDENTAL RELEASE MEASURES**

- 6.1 Personal precautions: Wear laboratory grade gloves, eye protection and a lab coat.
- 6.2 Emergency procedures: Restrict unprotected personnel from the area.
- 6.3 Methods and material used for containment and cleanup procedure: For small spill use paper towel.

#### 7. HANDLING AND STORAGE

- 7.1 Precaution for safe handling: Read label on container before using. Do not wear contact lenses when working with chemicals. For laboratory use only. Not for drug, food or household use. Use only under adult supervision. Use hood or with adequate ventilation. Avoid breathing vapor. Wash hands thoruse. oughly after handling.
- 7.2 Storage: Keep container tightly closed in cool, well ventilated area. Keep away from open flames, sparks and heat.
- 7.3 incompatibility: Refer to section 10.

8.1 Control parameters: ACGIH: STEL: 980g/m3; USA OSHA: TWA: 490g/m3

8.2 Exposure controls: Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits.

Respiratory protection: Non should be needed if normal laboratory handling at room temperature. Use self-contained breathing apparatus in high vapor concentrations.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid. Appearance: Transparent.

Odor: Alcohol pH: Not available

Vapor Pressure (mm Hg): 32.4 at 20 °C/68°F (Isopropyl alcohol)

Vapor Density: the Not available **Evaporation Rate: Not available** 

Viscosity: N/A

Flash point: 12°C/53.6°F (isopropyl alcohol) Autoignition: 399 °C/750.2°F (Isopropyl alcohol) Boiling point: 82°C/180°F (isopropyl alcohol) Melting point: -89.5°C/-129.1°F (isopropyl alcohol)

Freezing point: Not available Decomposition temp: Not available Solubility: Miscible in water and alcohol Specific gravity (H2O = 1): 0.786 g/cm3 Percent volatile (%): Not available Molecular formula: Mixture Molecular weight: Mixture

## 10. STABILITY AND REACTIVITY

Chemical Stability: Stable

Conditions to Avoid: High temperatures, sparks open flames and incompatible materials. Incompatibilities: Alkali metals, metals, organic materials, strong oxidizing agents, amines. Hazardous decomposition: not available.

Hazardous polymerization: Will not occur.

### 11. TOXICOLOGICAL INFORMATION

Acute effects: Eyes: Material is irritating to eyes. Skin: May cause mild skin irritation. Inhalation: Inhalation of large quantities might produce nausea, dizziness and headache. Ingestion: Ingestion may affect reversible liver effects and Central System Depression similar to inhalation.

Toxicological data: ORAL LDsolsopropyl alcohol: 5045mg/kg [Rat]. 3600mg/kg [Mouse]. 6410 mg/kg [Rabbit]

DERMAL LDsolsopropyl alcohol: 12800 mg/kg 4h [Rabbit]

Carcinogenicity:

California prop 65: Not classified

## 12. ECOLOGICAL INFORMATION

Data not available.

### 13. DISPOSAL CONSIDERATION

Disposal of in accordance with all local, state, and federal regulations.

## 14. TRANSPORT INFORMATION

UN number: 1219

Shipping name: Isopropanol solution

Hazard Class: 3 Packing group: PG II Exceptions: Lty Qty ≤1L

## 15. REGULATORY INFORMATION

TSCA-listed, EINECS-listed (200-661-7) isopropyl alcohol. R11- Highly flammable, R36- Irritating to eyes, R67-Vapors may cause drowsiness and dizziness.

# 16. OTHER INFORMATION

The Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. LAB-AIDS® makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation and verification. The data should not be confused with local, state, federal regulations, or insurance mandates, and CONSTITUTE NO WARRANTY. Any use of these data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond LAB-AIDS, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

Version: SDS 240.02.00 Revision Date: March 27, 2015



Pictogram:

Version: SDS\_240.03.00 Revision Date: March 27, 2015

#### 1. IDENTIFICATION

1.1 Product Identifiers

**Dicot Cross Section** Product Name: 70% Isopropyl alcohol Alternative names:

Product Number: 61-3EA

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

Identified uses: For laboratory and educational use only

1.3 Details of the supplier of the safety data sheet
Company: LAB-AIDS®, Inc, 17 Colt Ct., Ronkonkoma, NY 11779, USA
Telephone: +1 800 381 8003.

+1 631 820 8268 Fax:

1.4 Emergency telephone number

CHEMTREC 1 800 424-9300 Emergency number:

#### 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

**GHS** classification

Flam. Liq. (Category 2), H225 Eye irritant (Category 2A), H319

2.2 Label elements, including precautionary statements

Signal word: Hazards statements:

Danger
H225 - Highly flammable liquid and vapor, H319 - Causes serious eye irritation. Precautionary statements: P210 - Keep away from heat, hot surfaces, open flames, sparks, P280 - Wear protective gloves, eye protection

2.3 Hazards not otherwise classified: none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substance: Not applicable

3.2 Mixture

Chemical Name	Product identifier	%	GHS-US classification	
Water Isopropanol	CAS# 7732-18-5 CAS# 67-63-0	30% 70%	Not classified Flam. Liq. 2, H225; Eye Irrit. 2A; STOT SE 3, H336	

3.3 Chemicals where a trade secret is claimed: None

### 4. FIRST AID MEASURE

#### 4.1 Description of the first aid measure:

INGESTION: Never give anything by mouth to unconscious person. Rinse mouth and get conscious person drink a glass of milk or water. Do NOT induce vomiting unless directed to do so by medical personnel. Get immediate medical attention.

INHALATION: Remove to fresh air. Get medical attention if necessary.

EYE CONTACT: Wash immediately with plenty of water, and continue washing for at least 15min., occasionally lifting upper and lower eyelids. Seek medical attention if necessary.

SKIN CONTACT: Flush thoroughly with mild soap and water. Remove contaminated clothing. Get medical attention if irritation develop.

4.2 Most important symptoms and effects, both acute and delayed: Exposure to high concentrations may cause coughing and central nervous system depression. Dizziness. Headache.

## 5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Use TriClass, dry chemical extinguisher.

5.2 Special hazard arising from the substance or mixture: Vapor spreads at floor level.

5.3 Advice for firefighters: Use self-contained breathing apparatus and protective clothing.

### 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions: Wear laboratory grade gloves, eye protection and a lab coat.

6.2 Emergency procedures: Restrict unprotected personnel from the area.

6.3 Methods and material used for containment and cleanup procedure: For small spill use paper towel.

#### 7. HANDLING AND STORAGE

- 7.1 Precaution for safe handling: Read label on container before using. Do not wear contact lenses when working with chemicals. For laboratory use only. Not for drug, food or household use. Use only under adult supervision. Use hood or with adequate ventilation. Avoid breathing vapor. Wash hands thoroughly after handling.
- 7.2 Storage: Keep container tightly closed in cool, well ventilated area. Keep away from open flames, sparks and heat.
- 7.3 incompatibility: Refer to section 10.

8.1 Control parameters: ACGIH: STEL: 980g/m3; USA OSHA: TWA: 490g/m3

8.2 Exposure controls: Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits.

Respiratory protection: Non should be needed if normal laboratory handling at room temperature. Use self-contained breathing apparatus in high vapor concentrations.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid. Appearance: Transparent.

Odor: Alcohol pH: Not available

Vapor Pressure (mm Hg): 32.4 at 20 °C/68°F (Isopropyl alcohol)

Vapor Density: the Not available **Evaporation Rate: Not available** 

Viscosity: N/A

Flash point: 12°C/53.6°F (isopropyl alcohol) Autoignition: 399 °C/750.2°F (Isopropyl alcohol) Boiling point: 82°C/180°F (isopropyl alcohol) Melting point: -89.5°C/-129.1°F (isopropyl alcohol)

Freezing point: Not available Decomposition temp: Not available Solubility: Miscible in water and alcohol Specific gravity (H2O = 1): 0.786 g/cm3 Percent volatile (%): Not available Molecular formula: Mixture Molecular weight: Mixture

## **10. STABILITY AND REACTIVITY**

Chemical Stability: Stable

Conditions to Avoid: High temperatures, sparks open flames and incompatible materials. Incompatibilities: Alkali metals, metals, organic materials, strong oxidizing agents, amines. Hazardous decomposition: not available.

Hazardous polymerization: Will not occur.

## 11. TOXICOLOGICAL INFORMATION

Acute effects: Eyes: Material is irritating to eyes. Skin: May cause mild skin irritation. Inhalation of large quantities might produce nausea, dizziness and headache. Ingestion: Ingestion may affect reversible liver effects and Central System Depression similar to inhalation.

Toxicological data: ORAL LDsolsopropyl alcohol: 5045mg/kg [Rat]. 3600mg/kg [Mouse]. 6410 mg/kg [Rabbit]

DERMAL LDsolsopropyl alcohol: 12800 mg/kg 4h [Rabbit].

Carcinogenicity:

California prop 65: Not classified

## 12. ECOLOGICAL INFORMATION

Data not available.

#### 13. DISPOSAL CONSIDERATION

Disposal of in accordance with all local, state, and federal regulations.

## 14. TRANSPORT INFORMATION

UN number: 1219

Shipping name: Isopropanol solution

Hazard Class: 3 Packing group: PG II Exceptions: Lty Qty ≤1L

## 15. REGULATORY INFORMATION

TSCA-listed, EINECS-listed (200-661-7) isopropyl alcohol. R11- Highly flammable, R36- Irritating to eyes, R67-Vapors may cause drowsiness and dizziness.

# 16. OTHER INFORMATION

The Safety Data Sheet (5DS) is for guidance and is based upon information and tests believed to be reliable. LAB-AIDS® makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation and verification. The data should not be confused with local, state, federal regulations, or insurance mandates, and CONSTITUTE NO WARRANTY. Any use of these data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond LAB-AIDS, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

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Version: SDS 240.03.00 Revision Date: March 27, 2015



Pictogram:

Version: SDS\_240.04.00 Revision Date: March 27, 2015

## 1. IDENTIFICATION

1.1 Product Identifiers

**Product Name: Macerated Stem Tissue** Alternative names: 70% isopropyl alcohol

**Product Number:** 61-3EA

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

For laboratory and educational use only Identified uses:

1.3 Details of the supplier of the safety data sheet
Company: LAB-AIDS®, Inc, 17 Colt Ct., Ronkonkoma, NY 11779, USA
Telephone: +1 800 381 8003.

Telephone: +1 631 820 8268 Fax:

1.4 Emergency telephone number

CHEMTREC 1 800 424-9300 Emergency number:

## 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

**GHS** classification

Flam. Liq. (Category 2), H225 Eye irritant (Category 2A), H319

2.2 Label elements, including precautionary statements

Signal word: Danger Hazards statements: H225 - Highly flammable liquid and vapor, H319 - Causes serious eye irritation.

P210 - Keep away from heat, hot surfaces, open flames, sparks, P280 - Wear protective gloves, eye protection Precautionary statements:

2.3 Hazards not otherwise classified: none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substance: Not applicable

3.2 Mixture

Chemical Name	Product identifier	96	GHS-US classification	
Water CAS# 7732- Isopropanol CAS# 67-63		30% 70%	Not classified Flam. Liq. 2, H225; Eye Irrit. 2A; STOT SE 3, H336	

3.3 Chemicals where a trade secret is claimed: None

## 4. FIRST AID MEASURE

4.1 Description of the first aid measure:

INGESTION: Never give anything by mouth to unconscious person. Rinse mouth and get conscious person drink a glass of milk or water. Do NOT induce vomiting unless directed to do so by medical personnel. Get immediate medical attention.

INHALATION: Remove to fresh air. Get medical attention if necessary.

EYE CONTACT: Wash immediately with plenty of water, and continue washing for at least 15min., occasionally lifting upper and lower eyelids. Seek medical

attention if necessary.

SKIN CONTACT: Flush thoroughly with mild soap and water. Remove contaminated clothing. Get medical attention if irritation develop.

4.2 Most important symptoms and effects, both acute and delayed: Exposure to high concentrations may cause coughing and central nervous system depression. Dizziness. Headache.

## **5. FIREFIGHTING MEASURES**

5.1 Extinguishing media

Suitable extinguishing media: Use TriClass, dry chemical extinguisher.

5.2 Special hazard arising from the substance or mixture: Vapor spreads at floor level.

5.3 Advice for firefighters: Use self-contained breathing apparatus and protective clothing.

# 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions: Wear laboratory grade gloves, eye protection and a lab coat.

6.2 Emergency procedures: Restrict unprotected personnel from the area.

6.3 Methods and material used for containment and cleanup procedure: For small spill use paper towel.

## 7. HANDLING AND STORAGE

- 7.1 Precaution for safe handling: Read label on container before using. Do not wear contact lenses when working with chemicals. For laboratory use only. Not for drug, food or household use. Use only under adult supervision. Use hood or with adequate ventilation. Avoid breathing vapor. Wash hands thor-
- 7.2 Storage: Keep container tightly closed in cool, well ventilated area. Keep away from open flames, sparks and heat.
- 7.3 incompatibility: Refer to section 10.

8.1 Control parameters: ACGIH: STEL: 980g/m3; USA OSHA: TWA: 490g/m3

8.2 Exposure controls: Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits.

Respiratory protection: Non should be needed if normal laboratory handling at room temperature. Use self-contained breathing apparatus in high vapor concentrations

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid. Appearance: Transparent.

Odor: Alcohol pH: Not available

Vapor Pressure (mm Hg): 32.4 at 20 °C/68°F (Isopropyl alcohol)

Vapor Density: the Not available **Evaporation Rate: Not available** 

Viscosity: N/A

Flash point: 12°C/53.6°F (isopropyl alcohol) Autoignition: 399 °C/750.2°F (Isopropyl alcohol) Boiling point: 82°C/180°F (isopropyl alcohol) Melting point: -89.5°C/-129.1°F (isopropyl alcohol)

Freezing point: Not available Decomposition temp: Not available Solubility: Miscible in water and alcohol Specific gravity (H2O = 1): 0.786 g/cm3 Percent volatile (%): Not available Molecular formula: Mixture Molecular weight: Mixture

### 10. STABILITY AND REACTIVITY

Chemical Stability: Stable

Conditions to Avoid: High temperatures, sparks open flames and incompatible materials. Incompatibilities: Alkali metals, metals, organic materials, strong oxidizing agents, amines. Hazardous decomposition: not available.

Hazardous polymerization: Will not occur.

#### 11. TOXICOLOGICAL INFORMATION

Acute effects: Eyes: Material is irritating to eyes. Skin: May cause mild skin irritation. Inhalation: Inhalation of large quantities might produce nausea, dizziness and headache. Ingestion: Ingestion may affect reversible liver effects and Central System Depression similar to inhalation.

Toxicological data: ORAL LD<sub>so</sub>lsopropyl alcohol: 5045mg/kg [Rat]. 3600mg/kg [Mouse]. 6410 mg/kg [Rabbit]

DERMAL LDsolsopropyl alcohol: 12800 mg/kg 4h [Rabbit]

Carcinogenicity:

California prop 65: Not classified

## 12. ECOLOGICAL INFORMATION

Data not available.

### 13. DISPOSAL CONSIDERATION

Disposal of in accordance with all local, state, and federal regulations.

## 14. TRANSPORT INFORMATION

UN number: 1219

Shipping name: Isopropanol solution

Hazard Class: 3 Packing group: PG II Exceptions: Lty Qty ≤1L

## 15. REGULATORY INFORMATION

TSCA-listed, EINECS-listed (200-661-7) isopropyl alcohol. R11- Highly flammable, R36- Irritating to eyes, R67-Vapors may cause drowsiness and dizziness.

# 16. OTHER INFORMATION

The Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. LAB-AIDS® makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation and verification. The data should not be confused with local, state, federal regulations, or insurance mandates, and CONSTITUTE NO WARRANTY. Any use of these data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and more than the science instructor to be in accordance with applicable local, state or federal laws and more than the science instructor to be in accordance with applicable local, state or federal laws and more than the science instructor to be in accordance with applicable local, state or federal laws and more than the science instructor to be in accordance with applicable local, state or federal laws and more than the science instructor to be in accordance with applicable local, state or federal laws and more than the science instructor to be in accordance with applicable local, state or federal laws and more than the science instructor to be in accordance with applicable local, state or federal laws and more than the science instructor to be in accordance with applicable local, state or federal laws and more than the science instructor to be in accordance with applicable local, state or federal laws and more than the science instructor to be in accordance with applicable local, state or federal laws and more than the science instructor to be in accordance with applicable local, state or federal laws and more than the science instructor to be in accordance with applicable local, state or federal laws and more than the science instructor to be in accordance with applicable local, state or federal laws and more than the science in the science The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond LAB-AIDS, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

Version: SDS\_240.04.00 Revision Date: March 27, 2015



Version: SDS\_285.01.00 Revision Date: May 26, 2015

## 1. IDENTIFICATION

1.1 Product Identifiers

Product Name: Glycerine Solution Alternative names: Glycerin water solution. Product Number: 61-5EA, 61-5EA-B

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

Identified uses: For laboratory and educational use only

1.3 Details of the supplier of the safety data sheet
Company: LAB-AIDS®, Inc, 17 Colt Ct., Ronkonkoma, NY 11779, USA
Telephone: +1 800 381 8003.

Telephone: +1 631 820 8268 Fax:

1.4 Emergency telephone number: Emergency number: CHEMTREC 1 800 424-9300

#### 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture GHS classification Not classified

2.2 Label elements, including precautionary statements

Signal word: Not classified Hazards statements: Not classified Precautionary statements: Not classified Pictogram: Not classified

2.3 Hazards not otherwise classified: none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substance: Not applicable

3.2 Mixture

Chemical Name	Product identifier	%	GHS-US classification	
Water Glycerol	CAS# 7732-18-5 CAS# 56-81-5	90% 10%	Not classified Not classified	

3.3 Chemicals where a trade secret is claimed: None

### 4. FIRST AID MEASURE

4.1 Description of the first aid measure:

INGESTION: Never give anything by mouth to unconscious person. Rinse mouth and get conscious person drink a glass of milk or water. Do NOT induce vomiting unless directed to do so by medical personnel. Get immediate medical attention.

INHALATION: Remove to fresh air. Get medical attention if necessary.

EYE CONTACT: Wash immediately with plenty of water, and continue washing for at least 15min., occasionally lifting upper and lower eyelids. Seek medical attention if necessary

SKIN CONTACT: Flush thoroughly with mild soap and water. Remove contaminated clothing. Get medical attention if irritation develop.

4.2 Most important symptoms and effects, both acute and delayed: Refer to section 11.

4.3 Indication of any immediate medical attention and special treatment needed: No additional information available.

## 5. FIREFIGHTING MEASURES

5.1 Extinguishing media: Nonflammable liquid

Suitable extinguishing media: Use TriClass, dry chemical extinguisher for surrounding fires.

5.2 Special hazard arising from the substance or mixture: Not available.

5.3 Advice for firefighters: Use self-contained breathing apparatus and protective clothing.

### 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions: Wear laboratory grade gloves, eye protection and a lab coat.

6.2 Emergency procedures: Restrict unprotected personnel from the area.

6.3 Methods and material used for containment and cleanup procedure: Mop up the area.

### 7. HANDLING AND STORAGE

7.1 Precaution for safe handling: Read label on container before using. Do not wear contact lenses when working with chemicals. For laboratory use only. Not for drug, food or household use. Use only under adult supervision. Wash hands thoroughly after handling.

7.2 Storage: Keep container in cool, well-ventilated area.

7.3 incompatibility: Refer to section 10.

8.1 Control parameters: ACGIH: Not classified

8.2 Exposure controls: Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits.

Respiratory protection: Non should be needed if normal laboratory handling at room temperature.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid. Appearance: Clear. Odor: Not available pH: Not available

Vapor Pressure ( mm Hg): Not available

Vapor Density: Not available

**Evaporation Rate: Not available** Viscosity: N/A

Flash point: N/A Autoignition: N/A Boiling point: ≈100°C Melting point: Not available Freezing point: Not available Decomposition temp: Not available

Solubility: Not available

Specific gravity (H2O = 1): ≈1 at 20°C

Percent volatile (%): 100% Molecular formula: Mixture Molecular weight: Mixture

## 10. STABILITY AND REACTIVITY

Chemical Stability: Stable Conditions to Avoid: Not available. Incompatibilities: Not available Hazardous decomposition: Not available. Hazardous polymerization: Will not occur.

### 11. TOXICOLOGICAL INFORMATION

Acute effects: Eyes: Data not available. Skin: Data not available. Inhalation: Data not available. Ingestion: Not Data not available.

Toxicological data

Acute oral toxicity ORAL LD50: Not available Acute vapor toxicity IHL-LC50: Not available DERMAL LDso: Not available

Carcinogenicity: California prop 65: Not classified

## 12. ECOLOGICAL INFORMATION

Not available.

# 13. DISPOSAL CONSIDERATION

Disposal of in accordance with all local, state, and federal regulations, or contact with a licensed chemical disposal agency.

#### 14. TRANSPORT INFORMATION

UN number: N/A Shipping name: N/A Hazard Class: N/A Packing group: N/A Exceptions: Ltd Qty. N/A

## 15. REGULATORY INFORMATION

TSCA-listed.

## **16. OTHER INFORMATION**

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Version: SDS\_285.01.00 Revision Date: May 26, 2015



Version: SDS 286.01.00 Revision Date: May 26, 2015

#### 1. IDENTIFICATION

1.1 Product Identifiers

Product Name: Differential Stain

Alternative names: Denatured alcohol based stain.

Product Number: 61-1EA

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

Identified uses: For laboratory and educational use only

1.3 Details of the supplier of the safety data sheet
Company: LAB-AIDS®, Inc, 17 Colt Ct., Ronkonkoma, NY 11779, USA
Telephone: +1 800 381 8003.

Telephone: Fax: +1 631 820 8268

1.4 Emergency telephone number

Emergency number: CHEMTREC 1 800 424-9300

## 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

**GHS** classification

Flam. Liq. (Category 2), H225 Eye Irrit. (Category 2A) H319 Oral Tox. (Category 4) H302

2.2 Label elements, including precautionary statements

Signal word: Danger Pictogram: Hazards statements: H225 - Highly flammable liquid and vapor, H336- May cause drowsiness or dizziness,

P210 - Keep away from heat, hot surfaces, open flames, sparks, P280 - Wear protective gloves, eye protection Precautionary statements:

2.3 Hazards not otherwise classified: none

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substance: Not applicable

#### 3.2 Mixture:

Chemical Name	Product identifier	%	GHS-US classification	
Water	CAS# 7732-18-5	>50%	Not classified	
Ethyl alcohol	CAS# 64-17-S	<50%	Flam. Liq. 2, H225; STOT SE 3; H336	
Methanol	CAS# 67-56-1	<2.5%	Flam. Liq. 2, H225; Acute Tox. 3, H301+H302+H303	
Ethyl Acetate	CAS# 141-78-6	<2%	Flam. Liq. 2, H225; Skin Irrit. 2, H315; Eye Irrit. 2A, H319	
Methyl isobutyl ketone	CAS# 108-10-1	<1%	Flam. Lig. 2, H225; Eye Irrit. 2A, H319	
Formaldehyde	CAS# 50-00-0	>1%	Flam. Liq. 4, H227; Acute Tox. 3, H301+H302+H303	
Safranine O	CAS# 477-73-5	<1%	Eye Dam. 1, H318	
Sodium Acetate	CAS# 127-09-3	<1%	Not classified	

3.3 Chemicals where a trade secret is claimed: Concentration of the ingredients

## 4. FIRST AID MEASURE

### 4.1 Description of the first aid measure:

INGESTION: Never give anything by mouth to unconscious person. Rinse mouth and get conscious person drink a glass of milk or water. Do NOT induce vomiting unless directed to do so by medical personnel. Get immediate medical attention.

INHALATION: Remove to fresh air. Get medical attention if necessary.

EYE CONTACT: Wash immediately with plenty of water, and continue washing for at least 15min., occasionally lifting upper and lower eyelids. Seek medical attention if necessary

SKIN CONTACT: Flush thoroughly with mild soap and water. Remove contaminated clothing. Get medical attention if irritation develop.

4.2 Most important symptoms and effects, both acute and delayed: Refer to section 11.

4.3 Indication of any immediate medical attention and special treatment needed: No additional information available.

## 5. FIREFIGHTING MEASURES

5.1 Extinguishing media: Flammable liquid.

Suitable extinguishing media: Use water spray, alcohol-resistant foam, or TriClass, dry chemical extinguisher.

5.2 Special hazard arising from the substance or mixture: Vapor spreads at floor level. Flash back possible over considerable distance.

5.3 Advice for firefighters: Use self-contained breathing apparatus and protective clothing.

## **6. ACCIDENTAL RELEASE MEASURES**

6.1 Personal precautions: Wear laboratory grade gloves, eye protection and a lab coat.

6.2 Emergency procedures: Restrict unprotected personnel from the area.

6.3 Methods and material used for containment and cleanup procedure: Contain the spill with an inert absorbent material and deposit in a sealed container. For small spill use paper towel. Dry material place in trash. Ventilate and wash spill area with soap and water.

#### 7. HANDLING AND STORAGE

7.1 Precaution for safe handling: Read label on container before using. Keep away from heat, sparks and flame. Vapor forms from this product and may travel, or be moved by air currents and ignited by pilot lights, static discharges, flames, sparks, heaters or other ignition sources. Ensure all equipment is electrically grounded before beginning transfer operations.

Do not wear contact lenses when working with chemicals. For laboratory use only. Not for drug, food or household use. Use only under adult supervision. Avoid breathing vapor. Use hood or with adequate ventilation. Wash hands thoroughly after handling.

7.2 Storage: Flammable cabinet. Keep container in cool, well-ventilated area.

7.3 incompatibility: Refer to section 10.

8.1 Control parameters: ACGIH: TWA: 400ppm (Ethyl Acetate); USA OSHA: TWA: 200ppm (Methanol); ACGIH: TWA: 1000ppm (Ethanol).

8.2 Exposure controls: Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits.

Respiratory protection: Non should be needed if normal laboratory handling at room temperature.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid. Appearance: Red. Odor: Strong alcohol odor pH: Not available

Vapor Pressure (mm Hg): 66.661hPa Vapor Density: Not available Evaporation Rate: Not available Viscosity: Not available Flash point: 13 °C (55 °F) (ethanol)

Autoignition: ca. 400 °C, 752 °F; ASTM D 2155 (ethanol)

Flammability: Explosion limits: Lower: 3.3% Boiling point: 74-80 °C (165.2-176 °F) (ethanol) Upper: 19.0% (ethanol)

Melting point: -114°C (-173° F) (ethanol)

Freezing point: Not available Decomposition temp: Not available

Solubility: Miscible in water and many organic solvents Specific gravity (H<sub>2</sub>O = 1): 0.79 g/cm3 @ 15.5 °C, 60 °F (ethanol)

Percent volatile (%): Not available Molecular formula: Mixture Molecular weight: Mixture

## 10. STABILITY AND REACTIVITY

Chemical Stability: Stable

Conditions to Avoid: High temperatures, sparks open flames and incompatible materials.

Incompatibilities: Strong oxidizing agents, acids, peroxides, acid chlorides, acid anhydrides, alkali metals, ammonia. Hazardous decomposition: N/A

Hazardous polymerization: Will not occur

## 11. TOXICOLOGICAL INFORMATION

Acute effects: Eye: Causes eye irritation. Skin: May cause mild skin irritation. May be absorbed through skin. Inhalation: Inhalation of high concentration may affect CNS characterized by headache, dizziness, confusion, and loss of coordination. Ingestion: May be harmful if swallowed. Ingested doses will produce nausea, dizziness and headache. May affect behavior, brain, CNS.

Toxicological data: ORAL LD<sub>50</sub>: 2000mg/kg [Rat] (Ethanol) VAPOR LC<sub>50</sub>: >20 mg/l [Mouse] 4h (Ethanol) DERMAL LDso: >2000mg/kg [Rabbit] (Ethanol)

ORAL LDsoMethyl alcohol: >50-300 mg/kg [Rat]. VAPOR LCsoMethyl alcohol: >2-10 mg/l [Rat]. DERMAL LD<sub>50</sub>Methyl alcohol: >200-1000 mg/kg [Rabbit] ORAL LD50: >2000mg/kg [Rat] (Ethyl Acetate)

VAPOR LC50: Not available

DERMAL LD50: >2000mg/kg [Rabbit] (Ethyl Acetate)

ORAL LDsoMIBK: >2000 mg/kg [Rat]. VAPOR LCsoMIBK: >10-20 mg/l 4h [Rat]. DERMAL LDsoMIBK: >2000 mg/kg [Rabbit]

Carcinogenicity:

California prop 65: Methanol, Formaldehyde, Methyl isobutyl ketone.

## 12. ECOLOGICAL INFORMATION

LC50 (Pimephales promelas (fathead minnow)) 96 hours: > 100 mg/l; flow-through test Test substance: Ethanol;

LC50 (Pimephales promelas (fathead minnow)) 96 hours: 29,400 mg/l Test substance: Methanol;

LC50 (Pimephales promelas (fathead minnow)) 96 hours: > 100 mg/l; semi-static test Test substance: Ethyl Acetate;

LC50 (Danio rerio (zebra fish)) 96 hours: > 100 mg/l; static test, Test substance MIBK

## 13. DISPOSAL CONSIDERATION

Disposal of in accordance with all local, state, and federal regulations, or contact with a licensed chemical disposal agency.

## 14. TRANSPORT INFORMATION

UN number: 1987

NA: N/A

Shipping name: ALCOHOLS, NOS

Hazard Class: 3 Packing group: PG II Exceptions: Lty Qty ≤1L

## 15. REGULATORY INFORMATION

TSCA-listed, EINECS-listed (200-578-6) ethanol, (200-659-6) methanol, (205-500-5) Ethyl Acetate, (203-550-1) MIBK. WHMIS (Canada): Class B, Division 2: Flammable liquid. Class D, Division 2, Subdivision A: Very toxic material. Class D, Division 2, Subdivision B: Toxic material.

### **16. OTHER INFORMATION**

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