



# Safety Data Sheet

## SECTION 1: Identification

### 1.1. Product Identifier

**Trade Name or Designation:** Soap Titrant for Biodiesel, (Acetone/0.1 Normal HCl)

**Product Number:** S-0271

**Other Identifying Product Numbers:** S-0271-4L

### 1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent

### 1.3. Details of the Supplier of the Safety Data Sheet

**Company:** Reagents Inc.

**Address:** 4746 Sweden Road  
Charlotte, NC 28224 USA

**Telephone:** 800-732-8484

### 1.4. Emergency Telephone Number (24 hr)

CHEMTREC (USA) 800-424-9300  
CHEMTREC (International) 1+ 703-527-3887

## SECTION 2: Hazard(s) Identification

### 2.1. Classification of the Substance or Mixture (in accordance with OSHA HCS 29 CFR 1910.1200)

*For the full text of the Hazard and Precautionary Statements listed below, see Section 16.*

| Hazard Class                                                         | Category    | Hazard    |                                                                                      |
|----------------------------------------------------------------------|-------------|-----------|--------------------------------------------------------------------------------------|
|                                                                      |             | Statement | Precautionary Statements                                                             |
| Eye Damage / Irritation                                              | Category 2A | H319      | P264, P280, P305+P351+P338, P337+P313                                                |
| Reproductive Toxicity                                                | Category 2  | H361      | P201, P202, P280, P308+P313, P405, P501                                              |
| Specific Target Organs/Systemic Toxicity Following Repeated Exposure | Category 2  | H373      | P260, P314, P501                                                                     |
| Flammable Liquids                                                    | Category 2  | H225      | P210, P233, P240, P241, P242, P243, P280, P303+P361+P353, P370+P378, P403+P235, P501 |

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### 2.2. GHS Label Elements

Pictograms:



Signal Word: **Danger**

Hazard Statements:

| Hazard Number | Hazard Statement                                                   |
|---------------|--------------------------------------------------------------------|
| H225          | Highly flammable liquid and vapor.                                 |
| H319          | Causes serious eye irritation.                                     |
| H361          | Suspected of damaging fertility or the unborn child.               |
| H373          | May cause damage to organs through prolonged or repeated exposure. |

Precautionary Statements:

| Precautionary Number | Precautionary Statement                                                                                                          |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------|
| P201                 | Obtain special instructions before use.                                                                                          |
| P202                 | Do not handle until all safety precautions have been read and understood.                                                        |
| P210                 | Keep away from heat, sparks and open flame. No smoking.                                                                          |
| P233                 | Keep container tightly closed.                                                                                                   |
| P240                 | Ground container and receiving equipment.                                                                                        |
| P241                 | Use explosion-proof equipment.                                                                                                   |
| P242                 | Use only non-sparking tools.                                                                                                     |
| P243                 | Take precautionary measures against static discharge.                                                                            |
| P260                 | Do not breathe dust, fumes or mist.                                                                                              |
| P264                 | Wash arms, hands and face thoroughly after handling.                                                                             |
| P280                 | Wear protective gloves and eye protection.                                                                                       |
| P303+P361+P353       | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with 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. |
| P308+P313            | IF exposed or concerned: Get medical attention.                                                                                  |
| P314                 | Get medical attention if you feel unwell.                                                                                        |
| P337+P313            | If eye irritation persists: Get medical attention.                                                                               |
| P405                 | Store locked up.                                                                                                                 |
| P501                 | Dispose of contents in accordance with local, state, federal and international regulations.                                      |

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### 2.3. WHMIS Classification

WHMIS classification is not included based on the recommended option (Option 4) found in the Canada Gazette Part II, Vol. 149, No.3, page 458

### 2.4. Hazards not Otherwise Classified or Covered by GHS

Data not available.

## SECTION 3: Composition / Information on Ingredients

### 3.1. Components of Substance or Mixture

| Chemical Name     | Formula                    | Molecular Weight | CAS Number | Weight% |
|-------------------|----------------------------|------------------|------------|---------|
| Acetone           | $(\text{CH}_3)_2\text{CO}$ | 58.07 g/mol      | 67-64-1    | 87.62%  |
| Water             | $\text{H}_2\text{O}$       | 18.01 g/mol      | 7732-18-5  | 12.33%  |
| Hydrochloric Acid | HCl                        | 36.46 g/mol      | 7647-01-0  | 0.05%   |

## SECTION 4: First-Aid Measures

### 4.1. General First Aid Information

**Eye Contact:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Inhalation:** Not expected to require first aid. If necessary, remove to fresh air.

**Skin Contact:** IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

**Ingestion:** No action required to be taken. If necessary, dilute with water.

### 4.2. Most Important Symptoms and Effects, Acute and Delayed

May cause mild irritation to areas of contact.

### 4.3. Medical Attention or Special Treatment Needed

Not expected to require special treatment.

## SECTION 5: Fire-Fighting Measures

### 5.1. Extinguishing Media

Dry chemical, alcohol foam, carbon dioxide

### 5.2. Specific Hazards Arising from the Substance or Mixture

Highly flammable liquid and vapor.

### 5.3. Special Protective Equipment for Firefighters

Wear protective clothing and NIOSH-approved breathing equipment appropriate for the surrounding fire.

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### SECTION 6: Accidental Release Measures

#### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Ground container and receiving equipment. Use explosion-proof equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves and eye protection.

#### 6.2. Cleanup and Containment Methods and Materials

Absorb with suitable material and dispose of in accordance with local regulations.

### SECTION 7: Handling and Storage

#### 7.1. Precautions for Safe Handling and Storage Conditions

Store locked up.

### SECTION 8: Exposure Controls / Personal Protection

#### 8.1. Control Parameters

| Chemical Name                 | Limit Type  | Country | Exposure Limit                               | Information Source                                                     |
|-------------------------------|-------------|---------|----------------------------------------------|------------------------------------------------------------------------|
| Acetone (67-64-1)             | TWA         | USA     | 1000 ppm TWA<br>2400 mg/m <sup>3</sup> TWA   | U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)               |
| Acetone (67-64-1)             | TLV-STEL    | USA     | 750 ppm STEL                                 | ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL) |
| Acetone (67-64-1)             | TLV-TWA     | USA     | 500 ppm TWA                                  | ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)      |
| Hydrochloric Acid (7647-01-0) | TLV-Ceiling | USA     | 2 ppm Ceiling                                | ACGIH - Threshold Limit Values - Ceilings (TLV-C)                      |
| Hydrochloric Acid (7647-01-0) | PEL-Ceiling | USA     | 5 ppm Ceiling<br>7 mg/m <sup>3</sup> Ceiling | U.S. - OSHA - Final PELs - Ceiling Limits                              |

#### 8.2. Exposure Controls

**Engineering Controls:** No specific controls are needed. Normal room ventilation is adequate.

**Respiratory Protection:** No specific controls are needed. Normal room ventilation is adequate

**Skin Protection:** Wear protective gloves and eye protection.

**Eye Protection:** Wear protective gloves and eye protection.

#### 8.3. Personal Protective Equipment

Wear protective gloves and eye protection.

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### SECTION 9: Physical and Chemical Properties

#### 9.1. Basic Physical and Chemical Properties

**Appearance:** Colorless liquid

**Physical State:** Liquid

**Odor:** Data not available.

**Odor Threshold:** Data not available.

**pH:** Data not available.

**Melting/Freezing Point:** Data not available.

**Initial Boiling Point /Range:** Data not available.

**Flash Point:** Data not available.

**Evaporation Rate:** Data not available.

**Flammability:** Data not available.

**Flammability/Explosive Limits:** Data not available.

**Vapor Pressure:** Data not available.

**Vapor Density:** Data not available.

**Relative Density:** Data not available.

**Solubility:** Miscible

**Partition Coefficient (n-Octanol/Water):** Data not available.

**Auto-Ignition Temperature:** Data not available.

**Decomposition Temperature:** Data not available.

**Viscosity:** Data not available.

**Explosive Properties:** Data not available.

**Oxidizing Properties:** Data not available.

### SECTION 10: Stability and Reactivity

#### 10.1. Reactivity and Chemical Stability

Stable under normal conditions of use and storage.

#### 10.2. Possibility of Hazardous Reactions

Data not available.

#### 10.3. Conditions to Avoid and Incompatible Materials

Keep away from heat, sparks and open flame. No smoking. Keep container tightly closed.

#### 10.4. Hazardous Decomposition Products

May emit irritating fumes when heated to decomposition.

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### SECTION 11: Toxicological Information

#### 11.1. Information on Toxicological Effects

**Acute Toxicity - Oral Exposure:**

Not applicable.

**Acute Toxicity - Dermal Exposure:**

Not applicable.

**Acute Toxicity - Inhalation Exposure:**

Not applicable.

**Acute Toxicity - Other Information:**

Data not available.

**Skin Corrosion and Irritation:**

Not applicable.

**Serious Eye Damage and Irritation:**

Causes serious eye irritation. Wash arms, hands and face thoroughly after handling. Wear protective gloves and eye protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

**Respiratory Sensitization:**

Not applicable.

**Skin Sensitization:**

Not applicable.

**Germ Cell Mutagenicity:**

Not applicable.

**Carcinogenicity:**

Not applicable.

**Reproductive Toxicity:**

Suspected of damaging fertility or the unborn child. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves and eye protection. IF exposed or concerned: Get medical attention. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

**Specific Target Organ Toxicity from Single Exposure:**

Not applicable.

**Specific Target Organ Toxicity from Repeated Exposure:**

May cause damage to organs through prolonged or repeated exposure. Do not breathe dust, fumes or mist. Get medical attention if you feel unwell. Dispose of contents in accordance with local, state, federal and international regulations.

**Aspiration Hazard:**

Not applicable.

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### Additional Toxicology Information:

Data not available.

## SECTION 12: Ecological Information

### 12.1. Ecotoxicity

Not applicable.

### 12.2. Persistence and Degradability

Data not available.

### 12.3. Bioaccumulative Potential

Data not available.

### 12.4. Mobility in Soil

Data not available.

### 12.5. Other Adverse Ecological Effects

Data not available.

## SECTION 13: Disposal Considerations

### 13.1. Waste Treatment Methods

Data not available.

## SECTION 14: Transportation Information

### 14.1. Transportation by Land - Department of Transportation (DOT, United States of America)

**UN Number:** UN1090

**Proper Shipping Name:** Acetone Solution

**Hazard Class:** 3

**Packing Group:** II

**Hazard Placard Labels:**



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### 14.2. Transportation by Air - International Air Transport Association (IATA)

**UN Number:** UN1090

**Proper Shipping Name:** Acetone Solution

**Hazard Class:** 3

**Packing Group:** II

**Hazard Placard Labels:**



## SECTION 15: Regulatory Information

### 15.1. Occupational Safety and Health Administration (OSHA) Hazards

Not listed.

### 15.2. Superfund Amendments and Reauthorization Act (SARA) 302 Extremely Hazardous Substances

Hydrochloric Acid (CAS # 7647-01-0): 500 lb TPQ (gas only)

Hydrochloric Acid (CAS # 7647-01-0): 5000 lb EPCRA RQ (gas only)

### 15.3. Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals

Acetone (CAS # 67-64-1): 5000 lb final RQ; 2270 kg final RQ

Hydrochloric Acid (CAS # 7647-01-0): 5000 lb final RQ; 2270 kg final RQ

### 15.4. Superfund Amendments and Reauthorization Act (SARA) 313 Toxic Release Inventory (TRI)

Hydrochloric Acid (CAS # 7647-01-0): 1.0 % de minimis concentration (acid aerosols including mists, vapors, gas, fog, and other airborne forms of any particle size)

### 15.5. Massachusetts Right-to-Know Substance List

Acetone (CAS # 67-64-1): Present

Hydrochloric Acid (CAS # 7647-01-0): Extraordinarily hazardous

### 15.6. Pennsylvania Right-to-Know Hazardous Substances

Acetone (CAS # 67-64-1): Environmental hazard

Acetone (CAS # 67-64-1): Present

Hydrochloric Acid (CAS # 7647-01-0): Environmental hazard

Hydrochloric Acid (CAS # 7647-01-0): Present

Water (CAS # 7732-18-5): Present



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### 15.7. New Jersey Worker and Community Right-to-Know Components

Acetone (CAS # 67-64-1): flammable - third degree

Acetone (CAS # 67-64-1): sn 0006

Hydrochloric Acid (CAS # 7647-01-0): corrosive

Hydrochloric Acid (CAS # 7647-01-0): sn 1012

Hydrochloric Acid (CAS # 7647-01-0): SN 1012 TPQ: 500 lb ( $\geq 37\%$  concentration); SN 2909 TPQ: 500 lb (Hydrogen chloride gas only. NJ uses UN1050 for reporting purposes)

### 15.8. California Proposition 65

Not listed.

### 15.9. Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)

Acetone (CAS # 67-64-1): Present

Hydrochloric Acid (CAS # 7647-01-0): Present

Water (CAS # 7732-18-5): Present

### 15.10. United States of America Toxic Substances Control Act (TSCA) List

Acetone (CAS # 67-64-1): Present

Hydrochloric Acid (CAS # 7647-01-0): Present [T]

Water (CAS # 7732-18-5): Present

### 15.11. European Inventory of Existing Commercial Chemical Substances (EINECS), European List of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP)

Not listed.

## SECTION 16: Other Information

### 16.1. Full Text of Hazard Statements and Precautionary Statements

Highly flammable liquid and vapor. Causes serious eye irritation. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks and open flame. No smoking. Keep container tightly closed. Ground container and receiving equipment. Use explosion-proof equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust, fumes or mist. Wash arms, hands and face thoroughly after handling. Wear protective gloves and eye protection.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical attention. Get medical attention if you feel unwell. If eye irritation persists: Get medical attention. In case of fire: Use dry chemical, foam or carbon dioxide to extinguish.

Store in a well-ventilated place. Keep cool. Store locked up.

Dispose of contents in accordance with local, state, federal and international regulations.



## Safety Data Sheet

### 16.2. Miscellaneous Hazard Classes

**Canadian Carcinogenicity Hazard Class:** Not Applicable.

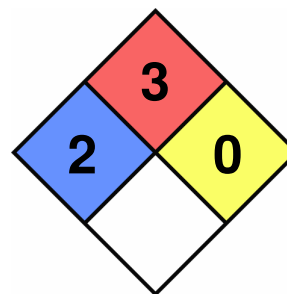
**Physical Hazards Not Otherwise Classified (PHNOC):** Not Applicable.

**Health Hazards Not Otherwise Classified (HHNOC):** Not Applicable.

**Biohazardous Infectious Materials Hazard Class:** Not Applicable.

### 16.3. National Fire Protection Association (NFPA) Rating

**Health:** 2  
**Flammability:** 3  
**Reactivity:** 0  
**Special Hazard:**



### 16.4. Document Revision

**Last Revision Date:** 6/23/2015

### DISCLAIMER

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and REAGENTS, INC. assumes no legal responsibility or liability whatsoever resulting from its use.