# Material Safety Data Sheet

## Section 1. Chemical Product and Company Identification

<table>
<thead>
<tr>
<th>Common Name/ Trade Name</th>
<th>Acetone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer</td>
<td>SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248</td>
</tr>
<tr>
<td>Commercial Name(s)</td>
<td>Acetone PestiSolv</td>
</tr>
<tr>
<td>Synonym</td>
<td>2-propanone</td>
</tr>
<tr>
<td>Chemical Name</td>
<td>Acetone</td>
</tr>
<tr>
<td>Chemical Family</td>
<td>Aliphatic ketone. (Solvent.)</td>
</tr>
<tr>
<td>Chemical Formula</td>
<td>C3-H6-O</td>
</tr>
<tr>
<td>Supplier</td>
<td>SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248</td>
</tr>
<tr>
<td>Catalog Number(s).</td>
<td>AL1004, A1020, A1028, A1041, AC115, HS001, SP101, US020, US021, HP402, US401, GC001, SP403, PS404</td>
</tr>
<tr>
<td>CAS#</td>
<td>67-64-1</td>
</tr>
<tr>
<td>RTECS</td>
<td>AL3150000</td>
</tr>
<tr>
<td>TSCA</td>
<td>TSCA 8(b) inventory: Acetone</td>
</tr>
<tr>
<td>CI#</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

## Section 2. Composition and Information on Ingredients

### Exposure Limits

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>TWA (mg/m³)</th>
<th>STEL (mg/m³)</th>
<th>CEIL (mg/m³)</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Acetone</td>
<td>67-64-1</td>
<td>500</td>
<td>1000</td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

### Toxicological Data on Ingredients

**Acetone:**
- **ORAL (LD50):** Acute: 5800 mg/kg [Rat], 3000 mg/kg [Mouse]. 5340 mg/kg [Rabbit].
- **VAPOR (LC50):** Acute: 50100 mg/m³ 8 hours [Rat]. 44000 mg/m³ 4 hours [Mouse].

## Section 3. Hazards Identification

### Potential Acute Health Effects

Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (permeator).

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**Continued on Next Page**
### Potential Chronic Health Effects

**CARCINOGENIC EFFECTS:** A4 (Not classifiable for human or animal) by ACGIH.

**MUTAGENIC EFFECTS:** Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast.

**TERATOGENIC EFFECTS:** Not available.

**DEVELOPMENTAL TOXICITY:** Classified Reproductive system/toxin/female, Reproductive system/toxin/male [SUSPECTED].

The substance is toxic to central nervous system (CNS). The substance may be toxic to the reproductive system, heart. Repeated or prolonged exposure to the substance can produce target organs damage.

### Section 4. First Aid Measures

**Eye Contact**

Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Get medical attention.

**Skin Contact**

In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

**Serious Skin Contact**

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.

**Inhalation**

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms appear.

**Serious Inhalation**

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

**Ingestion**

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

**Serious Ingestion**

Not available.

### Section 5. Fire and Explosion Data

**Flammability of the Product**

Flammable.

**Auto-Ignition Temperature**

465°C (869°F)

**Flash Points**

CLOSED CUP: -20°C (-4°F). OPEN CUP: -9°C (15.8°F) (Cleveland).

**Flammable Limits**

LOWER: 2.6%  UPPER: 12.8%

**Products of Combustion**

These products are carbon oxides (CO, CO2).

**Fire Hazards in Presence of Various Substances**

Highly flammable in presence of open flames and sparks, of shocks, of heat.

**Explosion Hazards in Presence of Various Substances**

Risks of explosion of the product in presence of mechanical impact: Not available. Slightly explosive in presence of open flames and sparks, of acids.

**Fire Fighting Media and Instructions**

Flammable liquid, soluble or dispersed in water.

SMALL FIRE: Use DRY chemical powder.

LARGE FIRE: Use alcohol foam, water spray or fog.

**Special Remarks on Fire Hazards**

Not available.

**Special Remarks on Explosion Hazards**

Forms explosive mixtures with hydrogen peroxide, acetic acid, nitric acid, nitric acid + sulfuric acid, chromic anhydride, chromyl chloride, nitrosyl chloride, hexachloromelamine, nitrosyl perchlorate, nitril perchlorate, permonosulfuric acid, thiodiglycol + hydrogen peroxide, potassium ter-butoxide, sulfur dichloride, 1-methyl-1,3-butadiene, bromoform, carbon, air, chloroform, thiriazyl perchlorate.
**Section 6. Accidental Release Measures**

**Small Spill**
Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.

**Large Spill**
Flammable liquid. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

**Section 7. Handling and Storage**

**Precautions**
Keep locked up. Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/vapor/spray. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, reducing agents, acids, alkalis, moisture.

**Storage**
Store in a segregated and approved area (flammables area). Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Keep away from direct sunlight and heat and avoid all possible sources of ignition (spark or flame).

**Section 8. Exposure Controls/Personal Protection**

**Engineering Controls**
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

**Personal Protection**
Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

**Personal Protection in Case of a Large Spill**
Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits**
- TWA: 500 STEL: 750 (ppm) from ACGIH (TLV) [United States] [1999]
- TWA: 750 STEL: 1000 (ppm) from OSHA (PEL) [United States]
- TWA: 500 STEL: 1000 [Australia]
- TWA: 1185 STEL: 2375 (mg/m\(^3\)) [Australia]
- TWA: 750 STEL: 1500 (ppm) [United Kingdom (UK)]
- TWA: 1810 STEL: 3620 (mg/m\(^3\)) [United Kingdom (UK)]

Consult local authorities for acceptable exposure limits.

**Section 9. Physical and Chemical Properties**

<table>
<thead>
<tr>
<th>Physical state and appearance</th>
<th>Liquid.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor</td>
<td>Fruity. Mint-like. Fragrant. Ethereal</td>
</tr>
<tr>
<td>Taste</td>
<td>Pungent, Sweetish</td>
</tr>
<tr>
<td>Color</td>
<td>Colorless. Clear</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>58.08 g/mole</td>
</tr>
<tr>
<td>pH (1% soln/water)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>56.2°C (133.2°F)</td>
</tr>
<tr>
<td>Melting Point</td>
<td>-95.35 (-139.6°F)</td>
</tr>
<tr>
<td>Critical Temperature</td>
<td>235°C (455°F)</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.79 (Water = 1)</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>24 kPa (@ 20°C)</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>2 (Air = 1)</td>
</tr>
<tr>
<td>Volatility</td>
<td>Not available.</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>62 ppm</td>
</tr>
<tr>
<td>Water/Oil Dist. Coeff.</td>
<td>The product is more soluble in water; log(oil/water) = -0.2</td>
</tr>
</tbody>
</table>

*Continued on Next Page*
Acetone

Ionicity (in Water) Not available.
Dispersion Properties See solubility in water.
Solubility Easily soluble in cold water, hot water.

Section 10. Stability and Reactivity Data

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability</td>
<td>The product is stable.</td>
</tr>
<tr>
<td>Instability Temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Conditions of Instability</td>
<td>Excess heat, ignition sources, mechanical shock, exposure to moisture, air, or water, incompatible materials.</td>
</tr>
<tr>
<td>Incompatibility with various substances</td>
<td>Reactive with oxidizing agents, reducing agents, acids, alkalis, moisture.</td>
</tr>
<tr>
<td>Corrosivity</td>
<td>Non-corrosive in presence of glass.</td>
</tr>
</tbody>
</table>

Special Remarks on Reactivity Not available.
Special Remarks on Corrosivity Not available.
Polymerization Will not occur.

Section 11. Toxicological Information

Routes of Entry Absorbed through skin. Dermal contact. Eye contact. Inhalation.

Toxicity to Animals
WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE.
Acute oral toxicity (LD50): 3000 mg/kg [Mouse].
Acute toxicity of the vapor (LC50): 44000 mg/m³ 4 hours [Mouse].

Chronic Effects on Humans CARCINOGENIC EFFECTS: A4 (Not classifiable for human or animal.) by ACGIH.
MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast.
DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/female, Reproductive system/toxin/male [SUSPECTED].
Causes damage to the following organs: central nervous system (CNS).
May cause damage to the following organs: the reproductive system, heart.

Other Toxic Effects on Humans Hazardous in case of skin contact (irritant), of ingestion, of inhalation.
Slightly hazardous in case of skin contact (permeator).

Special Remarks on Toxicity to Animals Not available.
Special Remarks on Chronic Effects on Humans May affect genetic material (mutagenicity) based on studies with yeast (S. cerevisiae), bacteria, and hamster fibroblast cells. May cause reproductive effects (fertility) based upon animal studies.

Special Remarks on other Toxic Effects on Humans Acute Potential Health Effects:
Skin: May cause skin irritation. May be harmful if absorbed through the skin.
Eyes: Causes eye irritation, characterized by a burning sensation, redness, tearing, inflammation, and possible corneal injury.
Inhalation: Inhalation at high concentrations affects the sense organs, causes respiratory tract irritation. It also may affect the Central Nervous System (behavior) characterized by dizziness, drowsiness, confusion, headache, muscle weakness, and possibly motor incoordination, speech abnormalities, narcotic effects and coma. Inhalation may also affect the gastrointestinal tract (nausea, vomiting).
Ingestion: May cause irritation of the digestive (gastrointestinal) tract (nausea, vomiting). It may also affect the Central Nervous System (behavior), characterized by depression, fatigue, excitement, stupor, coma, headache, altered sleep time, ataxia, tremors as well as at the blood, liver, and urinary system (kidney, bladder, ureter) and endocrine system.
Chronic Potential Health Effects:
Skin: May cause dermatitis.
Eyes: Eye irritation.
Inhalation: May cause effects similar to those of acute inhalation.
Ingestion: May cause loss of appetite, heartburn, gastritis.
No permanent adverse health effects have been found.

Continued on Next Page
### Section 12. Ecological Information

<table>
<thead>
<tr>
<th>Ecotoxicity</th>
<th>Ecotoxicity in water (LC50): 5540 mg/l 96 hours [Trout]. 8300 mg/l 96 hours [Bluegill]. 7500 mg/l 96 hours [Fathead Minnow]. 0.1 ppm any hours [Water flea].</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOD5 and COD</td>
<td>Not available.</td>
</tr>
<tr>
<td>Products of Biodegradation</td>
<td>Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.</td>
</tr>
<tr>
<td>Toxicity of the Products of Biodegradation</td>
<td>The product itself and its products of degradation are not toxic.</td>
</tr>
<tr>
<td>Special Remarks on the Products of Biodegradation</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

### Section 13. Disposal Considerations

**Waste Disposal**

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

### Section 14. Transport Information

**DOT Classification**

CLASS 3: Flammable liquid.

**Identification**

: Acetone UNNA: 1090 PG: II

**Special Provisions for Transport**

Not available.

**DOT (Pictograms)**

![DOT Pictogram Class 3 Flammable Liquid]

### Section 15. Other Regulatory Information and Pictograms

**Federal and State Regulations**

- New York release reporting list: Acetone
- Rhode Island RTK hazardous substances: Acetone
- Pennsylvania RTK: Acetone
- Florida: Acetone
- Massachusetts RTK: Acetone
- New Jersey: Acetone
- California List of Hazardous Substances (8 CCR 339): Acetone
- Tennessee: Acetone
- TSCA 8(b) inventory: Acetone
- TSCA 5(e) substance consent order: Acetone
- TSCA 12(b) annual export notification: Acetone
- CERCLA: Hazardous substances.: Acetone: 5000 lbs. (2268 kg)

**California Proposition 65 Warnings**

**Other Regulations**


EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

**Other Classifications**

- **WHMIS (Canada)**
  - CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).
  - CLASS D-2B: Material causing other toxic effects (TOXIC).

- **DSCL (EEC)**
Acetone

R11- Highly flammable.
R36- Irritating to eyes.
S9- Keep container in a well-ventilated place.
S16- Keep away from sources of ignition - No smoking.
S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

HMIS (U.S.A.)

<table>
<thead>
<tr>
<th>Health Hazard</th>
<th>Fire Hazard</th>
<th>Reactivity</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>3</td>
<td>0</td>
<td>h</td>
</tr>
</tbody>
</table>

National Fire Protection Association (U.S.A.)

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
<th>Specific hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

WHMIS (Canada) (Pictograms)

DSCL (Europe) (Pictograms)

TDG (Canada) (Pictograms)

ADR (Europe) (Pictograms)

Protective Equipment

Gloves.

Lab coat.

Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

Splash goggles.

Continued on Next Page
# Section 16. Other Information

<table>
<thead>
<tr>
<th>MSDS Code</th>
<th>A3060</th>
</tr>
</thead>
</table>

**References**
- The Sigma-Aldrich Library of Chemical Safety Data, Edition II.
- LOLI, RTECS, HSDB databases.
Other MSDSs

**Other Special Considerations**
Not available.

Verified by Sonia Owen.  

**CALL (310) 516-8000**

**Notice to Reader**
All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user’s responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.