Safety Data Sheet

Acetone

Section 1 - Chemical Product and Company Identification

SDS Name: Acetone
Catalog Numbers: A-108-8, A-105-7, C-206-3, F-1
Company Identification: Transene Company, Inc., DBA ROWLEY BIOCHEMICAL, Inc.
10 ELECTRONICS AVENUE
DANVERS, MA 01923
For information, call: 978-739-4883
Emergency Number: 800-424-9300
For CHEMTREC assistance, call: 800-424-9300

Section 2 - Hazards Identification

GHS Classifications Category

H225-Flammable liquids: 2
H303-Acute toxicity, oral: 5
H316-Skin corrosion/irritation: 3
H319-Serious eye damage/eye irritation: 2A
H336-Specific target organ toxicity, single exposure: 3
H373-Specific target organ toxicity, repeated exposure: 2

Pictogram or Hazard Symbols and Hazard Statement(s):

Signal word: Danger

Hazard Statements:

H225-Highly flammable liquid and vapour
H303-May be harmful if swallowed
H316-Causes mild skin irritation
H319-Causes serious eye irritation
H336-May cause drowsiness or dizziness
H373-May cause damage to organs through prolonged or repeated exposure (target organs: kidney, liver, spleen, and blood)

Precautionary Statements:

P210-Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources.
P233-Keep container tightly closed.
P240-Ground and bond container and receiving equipment.
P241-Use explosion-proof electrical/ventilating/lighting equipment.
P242-Use non-sparking tools.
P243-Take action to prevent static discharges.
P260-Do not breathe dust/fume/gas/mist/vapours/spray.
P261-Avoid breathing dust/fume/gas/mist/vapours/spray.
P264-Wash thoroughly after handling.
P271-Use only outdoors or in a well-ventilated area.
P280-Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312-If swallowed: Call a Poison Center/doctor if you feel unwell.
P303+P361+P353-If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340-If inhaled: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338-If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312-Call a Poison Center/doctor if you feel unwell.
P314-Get medical advice/attention if you feel unwell.
P332+P313-If skin irritation occurs: Get medical advice/attention.
P337+P313-If eye irritation persists: Get medical advice/attention.
P370+P378-In case of fire: Use dry chemical, carbon dioxide, dry sand, water spray, or alcohol-resistant foam to extinguish.
P403+P233-Store in a well-ventilated place. Keep container tightly closed.
P403+P235-Store in a well-ventilated place. Keep cool.
P405-Store locked up.
P501-Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
67-64-1	Acetone	100 v/v

Section 4 - First Aid Measures

Eye Exposure: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Get immediate medical attention.

Dermal Exposure: In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical advice.

Oral Exposure: If swallowed, seek immediate medical advice. Do NOT induce vomiting. Rinse mouth with water and drink small quantities of water (stop if the exposed person feels sick as vomiting may be dangerous). Never give anything by mouth to an unconscious person.

Inhalation Exposure: If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get immediate medical attention.

Section 5 - Fire Fighting Measures

General Information: Containers can build up pressure if exposed to heat and/or fire. As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. Flammable Liquid. Can release vapors that form explosive mixtures at temperatures above the flashpoint. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire.

Extinguishing Media: Use dry chemical, carbon dioxide, dry sand, water spray or alcohol-resistant foam. Use water spray to cool fire-exposed unopened containers. Do NOT use straight streams of water.

Hazardous Combustion Products: Carbon oxides, formaldehyde, methanol, irritating and toxic fumes and gases.

Flash Point: -20°C (-4°F) Closed Cup
Autoignition Temperature: 465°C (869°F)
Explosion Limits, Lower: 2.5 vol %
Upper: 12.8 vol %
NFPA Rating: (estimated) Health: 2; Flammability: 3; Instability: 0

NOTE: Static discharge could act as an ignition source.

Section 6 - Accidental Release Measures

Procedure(s) of Personal Precaution(s):
Wear personal protective equipment. Do not ingest or inhale. Do not get on skin or clothing. Do not get in eyes. Ensure adequate ventilation. Keep away from heat. Eliminate all sources of ignition. Take precautionary measures against static discharge.

Methods for Cleaning up: Absorb with sand, earth, or vermiculite. Carefully sweep up and containerize for proper disposal. Eliminate all sources of ignition. Use spark-proof tools and explosion-proof equipment. Do not release to the environment. Do not release to drains.

Section 7 - Handling and Storage

Use care when handling. Wear personal protective equipment. Wash thoroughly after handling. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale vapors. Keep in a tightly closed container. Store in a cool, dry, and well-ventilated place. Keep away from incompatible materials, ignition sources, or open flame. Protect from heat. Store away from direct sunlight. Use only non-sparking tools. Take

precautionary measures against static discharges. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded.

NOTE: Static discharge could act as an ignition source.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

Exposure Limits:

Chemical Name	ACGIH - TLV	NIOSH - IDLH	OSHA - Final PELs
Acetone CAS#67-64-1	250 ppm TWA 500 ppm STEL	250 ppm TWA 590 mg/m3 TWA 2500 ppm IDLH	1000 ppm TWA 2400 mg/m3 TWA

OSHA Vacated PELs: Acetone: 750 ppm TWA; 1800 mg/m3 TWA; 2400 mg/m3 STEL; 1000 ppm STEL

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Appearance: Clear, colorless
Odor: Fruity. Mint-like. Fragrant. Ethereal.
Vapor Pressure: 245.3 hPa at 20°C (68°F)
Odor Threshold: 19.8 ppm
Vapor Density: 2.0
pH: 5-6 at 395 g/L at 20°C (68°F)
Relative Density: Not available
Melting point/freezing point: -94°C (-137.2°F)
Solubility: Completely miscible in water
Boiling Point: 56°C (132.8°F) at 1.013 hPa
Flash Point: -20°C (-4°F) Closed Cup
Evaporation Rate: 5.6 (Butyl Acetate = 1)
Flammability (solid, gas): Not applicable
Partition coefficient: n-octanol/water: Not available

Autoignition Temperature: 465°C (869°F)
Decomposition Temperature: Distillable in an undecomposed state at normal temperature.
Viscosity: 0.32 mPa.s at 20°C (68°F)
Specific Gravity/Density: 0.790

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Incompatible materials, heat, flame, and sparks. Keep away from open flames, hot surfaces, and sources of ignition.
Incompatibilities with Other Materials: Strong oxidizing agents, strong reducing agents, strong bases, peroxides, halogenated compounds, alkali metals, amines, rubber, various plastics, and phosphorous oxychloride.
Hazardous Decomposition Products: Carbon oxides, formaldehyde, methanol, irritating and toxic fumes and gases.

Note: Static discharge could act as an ignition source.

Section 11 - Toxicological Information

CAS#67-64-1 Acetone: RTECS#: AL3150000
LD50 Oral: 5,800 mg/kg (rat)
LD50 Dermal: >15800 mg/kg (rabbit)
LC50 Inhalation: 76 mg/L 4h vapor (rat)

Carcinogenicity: Acetone CAS#67-64-1 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop. 65.

Information on the likely routes of exposure: Routes of entry anticipated: oral, dermal, inhalation, and eye.

Epidemiology: Not available.
Teratogenicity: Not available.
Reproductive Effects: Not available.
Developmental Effects: Not available.
Neurotoxicity: Not available.
Mutagenicity: Not available.
Specific Target Organ Toxicity, Single Exposure: Respiratory system and central nervous system.
Specific Target Organ Toxicity, Repeated Exposure: Kidney, liver, spleen, and blood.

Symptoms associated with exposure: Overexposure may cause headache, salivation, nausea, vomiting, tiredness and dizziness. Inhalation of vapors may irritate the respiratory tract. May cause pulmonary edema. Causes serious eye irritation. Causes mild skin irritation. May cause dermatitis. May cause drowsiness or dizziness. May cause kidney irregularities.

The toxicological properties of this material have not been thoroughly investigated.

Section 12 - Ecological Information

Ecotoxicity: Do not release to the environment. Do not release to drains.

CAS#67-64-1 Acetone:
LC50, freshwater fish: 5540 mg/L 96h (oncorhynchus mykiss)(rainbow trout)
LC50, freshwater fish: 1100 mg/L 96h (albumus alburnus)
LC50, freshwater fish: 11300 mg/L 96h (leuciscus idus)(golden orfe)
LC50, freshwater fish: 6100 mg/L 24h (salmo gairdneri)
EC50, water flea: 8800 mg/L 48h (daphnia magna)

Persistence and degradability: Readily biodegradable.
Bio-accumulative potential: Does not bio-accumulate.
Mobility: Will likely be mobile in the environment due to its volatility.

Section 13 - Disposal Considerations

DISPOSAL: Dispose of in accordance with all federal, state, and local regulations.

Section 14 – Transport Information

DOT
Proper shipping name: Acetone
UN1090
PG II
Hazard class 3 (flammable)

Section 15 - Regulatory Information

Canada Regulatory Information

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the SDS contains all the information required by the CPR.

Section 16 - Additional Information

SDS Creation Date: May 11, 2012
Revision #1: 12/3/14 RC
Revision #2: RC 6/8/15
Revision #3: 8-30-18
Revision #4: 9-30-19
Revision #5: 1-25-22

Revision #6: 7-27-23
Revision #7: 1-5-26

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