

SAFETY DATA SHEET

1 PRODUCT AND COMPANY IDENTIFICATION

Product name: Acetone

Product No.: 9005-69, 9005-05, 9005-14, 9005-18, 9005-03, 9005-08, 9005-16, 9005-68

Synonyms, Trade Names:

2-Propanone, Dimethyl ketone

Manufacturer:

Avantor Performance Materials, Inc.
3477 Corporate Parkway, Suite 200
Center Valley, PA 18034
U.S.A.

Telephone:

Customer Service: 855-282-6867

Contact Person: Environmental Health & Safety

e-mail: info@avantormaterials.com

Emergency telephone:

24 Hour Emergency: 908-859-2151
Chemtrec: 800-424-9300

2 HAZARDS IDENTIFICATION

Emergency Overview:

Appearance:

Color: Colorless
Form : Liquid
Odor: Sweet mint-like

Signal words DANGER!

Potential Health Effects:

General Causes skin and eye irritation. Harmful if swallowed. Prolonged or repeated skin contact may cause drying, cracking, or irritation. High vapor concentrations may cause drowsiness and irritation of the eyes or respiratory tract.

Potential Physical / Chemical Effects:

Flammable liquid and vapor.

Inhalation:

May cause irritation to the mucous membranes and upper respiratory tract. In high concentrations, vapors and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea.

Skin:

Prolonged or repeated contact with skin may cause redness, itching, irritation and eczema/chapping.

Eye:

Causes eye irritation.

Ingestion:

Irritating. May cause nausea, stomach pain and vomiting. Ingestion may result in vomiting; aspiration (breathing) of vomitus into lungs must be avoided as even small quantities may result in aspiration pneumonitis.

Chronic Effects:

Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Signs and Symptoms:

Pre-existing conditions which may be aggravated by exposure include

emphysema and asthma.

Routes of Exposure: Skin and/or eye contact., Inhalation, Ingestion

Target Organs: Central nervous system

OSHA Regulatory Status This product is hazardous according to OSHA 29CFR 1910.1200.

Environment: The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

3 COMPOSITION / INFORMATION ON INGREDIENTS

General information:

Hazardous Component(s):

Chemical name	CAS-No.	Concentration
ACETONE	67-64-1	99 - 100%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4 FIRST AID MEASURES

General: Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in attendance.

Inhalation: Move to fresh air. Get medical attention if symptoms persist.

Skin contact: Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention if symptoms occur. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Call a physician or poison control center immediately.

Ingestion: Call a physician or poison control center immediately. Do NOT induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Notes to the physician:

Treatment: Symptoms may be delayed.

5 FIRE-FIGHTING MEASURES

Extinguishing media: Water spray, foam, dry powder or carbon dioxide.

Unsuitable extinguishing media: Avoid water in straight hose stream; will scatter and spread fire.

Unusual Fire & Explosion Hazards: Vapors may cause a flash fire or ignite explosively. Vapors may travel considerable distance to a source of ignition and flash back. Prevent buildup of vapors or gases to explosive concentrations. Heat may cause the containers to explode.

Special Fire Fighting Procedures: Use water spray to keep fire-exposed containers cool. Water may be ineffective in fighting the fire. Fight fire from a protected location. Move containers from fire area if you can do so without risk.

Protective Measures: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6 ACCIDENTAL RELEASE MEASURES

Personal precautions: See Section 8 of the MSDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away. Ventilate closed spaces before entering them. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep upwind.

Environmental precautions: Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

Spill Cleanup Methods: Eliminate all ignition sources if safe to do so. Stop leak if possible without any risk. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. Dike far ahead of larger spill for later recovery and disposal.

Notification Procedures: Inform authorities if large amounts are involved.

7 HANDLING AND STORAGE

Handling: DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Take precautionary measures against static discharges. Use personal protective equipment as required. Do not get in eyes, on skin, on clothing. Use only with adequate ventilation. Wash hands thoroughly after handling. Ground/bond container and receiving equipment. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use.

Storage: Keep away from food, drink and animal feedingstuffs. Keep container tightly closed in a cool, well-ventilated place. Ground container and transfer equipment to eliminate static electric sparks. Comply with all national, state, and local codes pertaining to the storage, handling, dispensing, and disposal of flammable liquids.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits

Chemical name	Type	Exposure Limit values	Source
ACETONE	TWA	500 ppm	US. ACGIH Threshold Limit Values (2011)
	STEL	750 ppm	US. ACGIH Threshold Limit Values (2011)
ACETONE	PEL	1,000 ppm 2,400 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	750 ppm 1,800 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	STEL	1,000 ppm 2,400 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)

Biological limit values

Chemical name	Exposure Limit values	Source
ACETONE (acetone: Sampling time: End of shift.)	50 mg/l (Urine)	ACGIH BEL (2011)

Protective Measures:

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the immediate work area. Use explosion-proof ventilation equipment.

Respiratory Protection:

In case of inadequate ventilation use suitable respirator. Chemical respirator with organic vapor cartridge.

Eye protection:

Wear safety glasses with side shields (or goggles) and a face shield.

Skin and Body Protection:

Wear suitable protective clothing and gloves.

Hygiene measures:

Provide eyewash station and safety shower. Observe good industrial hygiene practices. Do not eat, drink or smoke when using the product. Wash hands before breaks and immediately after handling the product. Wash contaminated clothing before reuse. Do not get this material in contact with skin. Avoid contact with eyes. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical State:	Liquid
Form:	Liquid
Color:	Colorless
Odor:	Sweet, mint-like
Odor Threshold:	No data available.
pH:	No data available.
Freezing point:	-94.7 °C
Boiling Point:	56.05 °C (101.325 kPa)
Flash Point:	-20 °C (Closed Cup)
Evaporation Rate:	No data available.

Flammability (solid, gas):	Class IB Flammable Liquid
Flammability Limit - Upper (%)-:	12.8 %(V)
Flammability Limit - Lower (%)-:	2.6 %(V)
Vapor pressure:	30.93 kPa (25 °C)
Vapor density (air=1):	No data available.
Relative density:	0.7899
Solubility(ies)	
Solubility in Water:	No data available.
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	-0.24
Autoignition Temperature:	869 °F
Decomposition Temperature:	No data available.
Viscosity:	No data available.
Explosive properties:	No data available.
Oxidizing properties:	No data available.

10 STABILITY AND REACTIVITY

Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	Hazardous polymerization does not occur.
Conditions to avoid:	Heat, sparks, flames.
Incompatible materials:	Oxidizers, acids
Hazardous decomposition products:	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

11 TOXICOLOGICAL INFORMATION

Product:	
Acute Toxicity (Oral):	LD 50 (Rat): 5,800 mg/kg
Acute Toxicity (Dermal):	LD 50 (Rabbit): 20,000 mg/kg
Acute Toxicity (Inhalation):	LC 50 (Rat, 4 h): 76 mg/l
Inhalation:	May cause irritation to the respiratory system.
Ingestion:	Harmful if swallowed.
Skin corrosion/irritation:	Causes mild skin irritation. Prolonged or repeated skin contact may cause drying, cracking, or irritation.
Serious eye damage/eye irritation:	Causes eye irritation.
Respiratory sensitizer/Skin sensitizer:	Not a skin sensitizer.
Carcinogenicity:	This substance has no evidence of carcinogenic properties.

Mutagenesis:	No mutagenic components identified
Reproductive toxicity:	Suspected of damaging fertility or the unborn child.
Other Effects:	None known.

12 ECOLOGICAL INFORMATION

Ecotoxicity:	The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Product:	
Acute toxicity(Fish):	LC 50 (Fathead minnow (<i>Pimephales promelas</i>), 96 h): 5,490 - 7,030 mg/l Mortality LC 50 (Bluegill (<i>Lepomis macrochirus</i>), 96 h): 8,300 mg/l Mortality
Chronic Toxicity(Fish):	No data available.
Acute toxicity(Aquatic invertebrates):	LC 50 (Brine shrimp (<i>Artemia salina</i>), 24 h): 2,100 mg/l Mortality LC 50 (Water flea (<i>Daphnia magna</i>), 48 h): 12,100 mg/l Mortality
Chronic Toxicity(Aquatic invertebrates):	No data available.
Acute toxicity(Aquatic plants):	No data available.
Persistence and degradability:	Expected to be readily biodegradable.
Bioaccumulative potential:	No data available on bioaccumulation.
Mobility:	No data available.

13 DISPOSAL CONSIDERATIONS

Disposal Methods:	Discharge, treatment, or disposal may be subject to national, state, or local laws. Since emptied containers retain product residue, follow label warnings even after container is emptied.
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14 TRANSPORT INFORMATION

DOT

UN number: UN 1090
 Proper Shipping Name: Acetone
 Transport hazard class(es): 3
 Subsidiary risk label: –
 Packing group: II
 Label(s): 3
 Marine Pollutant

IMDG - International Maritime Dangerous Goods Code

UN number: UN 1090
 UN proper shipping name: ACETONE
 Transport hazard class(es): 3
 Subsidiary risk label: –
 Packing group: II
 Label(s): 3
 Marine Pollutant:
 EmS No.: F-E; S-D

IATA

UN number: UN 1090
 Proper Shipping Name: Acetone
 Transport hazard class(es): 3
 Subsidiary risk label: –
 Packing group: II
 Label(s): 3

15 REGULATORY INFORMATION

Inventory Status:

Australia AICS:	On or in compliance with the inventory
Canada DSL Inventory List:	On or in compliance with the inventory
EU EINECS List:	On or in compliance with the inventory
EU ELINCS List:	Not in compliance with the inventory.
Japan (ENCS) List:	On or in compliance with the inventory
EU No Longer Polymers List:	Not in compliance with the inventory.
China Inv. Existing Chemical Substances:	On or in compliance with the inventory
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory
Canada NDSL Inventory:	Not in compliance with the inventory.
Philippines PICCS:	On or in compliance with the inventory
US TSCA Inventory:	On or in compliance with the inventory
New Zealand Inventory of Chemicals:	On or in compliance with the inventory
Switzerland Consolidated Inventory:	Not in compliance with the inventory.
Japan ISHL Listing:	On or in compliance with the inventory
Japan Pharmacopoeia Listing:	Not in compliance with the inventory.

US Regulations

- **CERCLA Hazardous Substance List (40 CFR 302.4):**
- **Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3):**
None
- **Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):**
None

SARA Title III

• **Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):**

None
None

• **Section 311/312 (40 CFR 370):**

Acute (Immediate) Chronic (Delayed) Fire Reactive Pressure Generating

• **Section 313 Toxic Release Inventory (40 CFR 372):**

None present or none present in regulated quantities.

State Regulations

• **California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):**

No ingredient regulated by CA Prop 65 present.

• **Massachusetts Right-To-Know List:**

ACETONE Listed

• **New Jersey Right-To-Know List:**

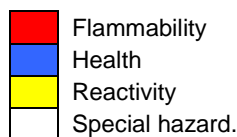
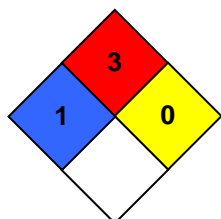
ACETONE Listed

• **Pennsylvania Right-To-Know List:**

ACETONE Listed

16 OTHER INFORMATION

NFPA Hazard ID



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

Revision Information:

Issue Date: 01-08-2013

SDS No:

Disclaimer:

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