

Effective Date: February 2020
REF NO.:AK20/0004/ACETONE

ACETONE

1. Chemical Product and Company Identification

Product Identification:

ACETONE

Chemicals Name:

2-Propanone

Other Trade Name:

Propan-2-one, AC THINNER, ACETONE (MATERIAL NO: 85246380), AIKSOLV 11, AIKSOLV 110, CLEANING THINNER, Dimethyl Ketone, DMK, MARKING SOLVENT, RS-ACETONE, SOLVENT A, USA THINNER

Manufacturer/Supplier:

Aik Moh Paints & Chemicals Pte Ltd
20 TUAS STREET, SINGAPORE 638457
Tel : 6863 1993 Fax : 6863 8033
Website : www.aikmoh.com.sg

2. Hazards Identification

GHS Classification

Flammable Liquids	Category 2
Eye Damage/Irritation	Category 2
Specific Target Organ Toxicity (Single exposure)	Category 3

GHS Label Elements



Signal words: Danger

Physical hazards:

Hazard classification:
H225 - Highly flammable liquid and vapour

Health hazards:

Hazard classification:
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness

Precautionary Statement(s):

Prevention

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P233 - Keep container tightly closed.
P240 - Ground/bond container and receiving equipment.
P241 - Use explosion-proof electrical/ventilating/lighting/.../equipment.
P242 - Use only non-sparking tools.
P243 - Take precautionary measures against static discharge.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

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Response

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish
 P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Storage

P403 + P235 - Store in a well-ventilated place. Keep cool.

Disposal

P501 - Dispose of contents/container to an approved waste disposal plant.

3. Composition Information on Ingredients

Chemical identity : Acetone
Synonyms : 2-Propanone, Methyl ketone, Ketone propane, Beta-ketopropane
CAS No : 67-64-1
EINECS No :200-662-2

Classification of components according to GHS

Chemical Name	Hazard Class (category)	Hazard Statements	Concentration
Acetone	Flam. Liq., 2; Eye Irr., 2; STOT SE, 3;	H225; H319; H336	>99.5%

4. First-Aid Measures

Description of first aid measures

Inhalation : Move to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician immediately.

Skin Contact : Wash off immediately with soap and plenty of water while removing all contaminated clothing and shoes. Wash contaminated clothing before re-use. If skin irritation persists, call a physician.

Eye Contact : Immediately flush eyes with large amounts of water for at least 15 minutes and consult a physician.

Ingestion : If swallowed, seek medical advice immediately and show this label. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

Most important symptoms/effects, acute & delayed : Refer to SECTION 11

5. Fire Fighting Measures

Suitable Extinguishing Media : Alcohol-resistant foam. Water spray. Dry chemical. Carbon dioxide (CO2)

Unsuitable Extinguishing Media : No information available

Special hazards arising from the substance or mixture : Flash back possible over considerable distance. Vapours may form explosive mixtures with air.

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Special protective equipment for firefighters : Wear self-contained breathing apparatus and protective suit.

Other Advice : All storage areas should be provided with adequate fire fighting facilities

6. Accidental Release Measures

Personal Precautions, Protective equipment and Emergency Procedures : Keep people away from and upwind of spill/leak. Remove all sources of ignition. Do not breathe vapours. Ensure adequate ventilation.

Environmental Precautions : Should not be released into the environment. Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system.

Methods for cleaning up : Soak up with inert absorbent material and dispose of as hazardous waste.

Reference to other sections : Refer to Section 8 and 13.

7. Handling and Storage

Safe handling advice : Provide sufficient air exchange and/or exhaust in work rooms. Wear personal protective equipment. Take precautionary measures against discharges. Ensure all equipment is electrically grounded before beginning transfer operations.

Advice on protection against fire and explosion : Keep away from open flames, hot surfaces and sources of ignition. Use explosion-proof equipment.

Temperature class : T1

Fire-fighting class : Fires involving liquids or liquid containing substances. Also include substances which become liquid at elevated temperatures.

Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place. Keep away from direct sunlight.

Advice on common storage : Keep containers tightly closed in a cool, well-ventilated place.

8. Exposure Controls/Personal Protection

Components with workplace control parameters

National Occupational Exposure Limits

Components	Type	Control parameters	Update	Basis
Acetone	TWA	1,780 mg/m ³	2006	Singapore PELs
	TWA	750 ppm	2006	Singapore PELs

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STEL	2,380 mg/m ³	2006	Singapore PELs
STEL	1,000 ppm	2006	Singapore PELs

Exposure controls

Engineering measures

Provide sufficient air exchange and/or exhaust in work rooms.

Personal protection measures

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection

Gloves suitable for permanent contact:
 Material: butyl-rubber
 Break through time: 4 h
 Material thickness: 0.5 mm

Eye protection

: Safety glasses with side-shields

Skin and body protection

: Protective suit. Safety shoes

Hygiene measures

: Wash hands before breaks and immediately after handling the product. Take off all contaminated clothing immediately.

9. Physical and Chemical Properties

State of matter	Liquid; at 20°C; 1,013 hPa
Colour	Colourless
Odour	Pungent
Odour threshold pH	Data not available
Boiling point	56 °C
Melting point	-95 °C
Flash point	-20 °C
Evaporation rate	No data available
Flammability (solid, gas)	Data not available.
Auto-ignition temperature	465 °C
Lower explosion limit	2.6 %(V)
Upper explosion limit	12.8 %(V)
Vapour pressure	307 hPa; 25 °C
Relative vapour density	2
Density	0.79 g/cm ³
Water solubility	Soluble
Dynamic viscosity	0.32 mPa.s

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Kinematic viscosity	0.4 mm ² /s
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10. Stability and Reactivity

- Reactivity** : Stable under recommended storage conditions.
- Chemical Stability** : Stable under recommended storage conditions.
- Possibility of hazardous reaction** : Hazardous polymerisation does not occur.
- Conditions to Avoid** : Avoid heat, sparks, open flames and other ignition sources.
- Incompatible materials** : Strong oxidising agents. Acids. Halogenated compounds.
- Hazardous Decomposition Products** : Carbon oxides

11. Toxicological Information

- Acute Oral Toxicity** Acetone:
 LD 50 Rat: > 2,000 mg/kg (literature value)
- Acute Dermal Toxicity** Acetone:
 LD 50 Rabbit: >2,000 mg/kg (literature value)
- Acute Inhalation Toxicity** Acetone:
 LD 50 Rat: 4h; vapour; >20 mg/l; GLP: no (literature value)
- Skin Irritation** Acetone:
 Rabbit: moderately irritating; GLP: no (literature value)
- Eye Irritation** Acetone:
 Rabbit: irritating; GLP: no (literature value)
- Mutagenicity** Acetone:
 Ames test: Salmonella typhimurium; Not mutagenic; GLP: no (literature value)

12. Ecological Information

- Toxicity to daphnia and other aquatic invertebrates** Acetone:
 static test; Daphnia magna (Water flea); 48 h; > 100mg/l (literature value)
- Biodegradability** Acetone:
 Readily biodegradable (literature value)

13. Disposal Considerations

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Product : In accordance with local and national regulations. Do not contaminate ponds, waterways or ditches with chemical or used container. The product should not be allowed to enter drains, water courses or the soil.

14. Transport Information

ADR

UN number : 1090
Class : 3
Packaging group : II; F1
Proper shipping name : ACETONE

RID

UN number : 1090
Class : 3
Packaging group : II; F1
Proper shipping name : ACETONE

ADNR

UN number : 1090
Class : 3
Packaging group : II; F1
Proper shipping name : ACETONE

IMDG

UN number : 1090
Class : 3
EmS : F-E, S-D
Packaging group : II
Proper shipping name : ACETONE
Marine pollutant : Not a Marine Pollutant

ICAO/IATA

UN number : 1090
Class : 3
Packaging group : II
Proper shipping name : ACETONE

Transport in bulk according to Annex II Acetone
of MARPOL 73/78 and the IBC Code Pollution Category: Z

15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Canada. DSL - Domestic Substances List, part of All chemical constituents are listed in: Canada. DSL - Domestic Substances List, part of CEPA (See chapter 3)

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CEPA

Australia. AICS - Australian Inventory of Chemical Substances

All chemical constituents are listed in: Australia. AICS - Australian Inventory of Chemical Substances (See chapter 3)

New Zealand Inventory of Chemical Substances

All chemical constituents are listed in: New Zealand Inventory of Chemical Substances (See chapter 3)

Japan. ENCS - Existing and New Chemical Substances Inventory

All chemical constituents are listed in: Japan. ENCS - Existing and New Chemical Substances Inventory (See chapter 3)

Japan. Industrial Safety and Health Law - Inventory

All chemical constituents are listed in: Japan. Industrial Safety and Health Law - Inventory (See chapter 3)

Korea. KECI - Korean Existing Chemicals Inventory

All chemical constituents are listed in: Korea. KECI - Korean Existing Chemicals Inventory (See chapter 3)

Philippines. PICCS - Philippines Inventory of Chemicals and Chemical Substances

All chemical constituents are listed in: Philippines. PICCS - Philippines Inventory of Chemicals and Chemical Substances (See chapter 3)

China. IECSC - Inventory of Existing Chemical Substances in China

All chemical constituents are listed in: China. IECSC - Inventory of Existing Chemical Substances in China (See chapter 3)

Taiwan. Chemical Substances Inventory (TCSI)

All chemical constituents are listed in: Taiwan. Chemical Substances Inventory (TCSI) (See chapter 3)

USA TSCA Inventory

All chemical constituents are listed in: USA TSCA Inventory (See chapter 3)

16. Other Information

GHS Hazard Statements

H225	: Highly flammable liquid and vapour
H319	: Causes serious eye irritation.
H336	: May cause drowsiness or dizziness

Disclaimer

This information is based on our current knowledge and is intended to describe the product for the only. It should not therefore be construed as guaranteeing any specific property of the product.