Global Chemie ASCC

Safety Data Sheet

Acetone

1. Identification of the substance or mixture and of the supplier

Trade Name	:	Acetone Dimethyl Ketone
Material Uses	:	Solvent for resin, lacquers, wax, printing ink, adhesives, plastics and polishes agent. Raw material for used in the chemical industry such as paints, rubbers, plastic, cosmetics, pharmaceuticals, and dehydrate agents.
Supplier	:	**Global Chemie ASCC Limited** 140/31 Moo12 T.Rachathewa A.Bangplee Samutprakarn 10540 **Telephone**: +66 2 763 7782 - 4 (Auto) **Fax**: + 66 2 763 7785 www.gctcl.com
Emergency Contact	:	0819285826

2. Hazards Identification

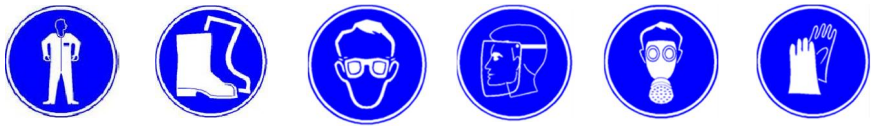
GHS Classification	:	Flammable liquids : Category 2 Eye irritation : Category 2 Specific target organ toxicity following single exposure : Category 3
Signal word	:	Warning
Health Hazard	:	Vapours may cause drowsiness and dizziness. Irritating to eyes, skin and respiratory system.
Environmental Hazard	:	Not classified as dangerous under EU criteria.
GHS Pictogram	:	

GHS Precautionary statements

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

Prevention	P210	Keep away from heat/sparks/open flames/hot surfaces and non-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 measure against static discharge.
	P261	Avoid breathe 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/eye protection/face protection.
Response	<u>If on skin</u>	
	P303+P361 +P353	Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
	P370+P378	In case of fire: Use manufacturer/supplier or the competent authority to specify appropriate media for extinction.
	<u>If in eye</u>	
	P305+P351 +P338	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P337+P313	If eye irritation persists: Get medical advice/attention.
	<u>If inhaled</u>	
	P304+P340	Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Storage	P403+P233	Store in a well-ventilated place. Keep container tightly closed.
	P235	Keep cool.
	P405	Store locked up.
Disposal	P501	Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.

Precautionary Pictograms



3. Composition/Information on ingredients

Chemical Name	:	2-Propanone
Common Name	:	Acetone, Dimethyl Ketone
Synonyms Name	:	Dimethyl Formaldehyde
CAS No.	:	67-64-1
UN No.	:	1090
Molecular Weight	:	58.08
Molecular Formula	:	CH_3COCH_3

4. First-aid measures

Inhalation	:	Remove to fresh air. If the victim has difficulty breathing or tightness of the chest, give 100% oxygen with rescue breathing or CPR as required and transport to the nearest medical facility.
Skin Contact	:	Remove contaminated clothing. Immediately flush skin with large amounts of water for at least 15 minutes, and follow by washing with soap and water if available.
Eye Contact	:	Immediately flush eyes with large amounts of water for at least 10 minutes while holding eyelids open. Transport to the nearest medical facility for additional treatment.
Ingestion	:	Immediately make victim drink plenty of water. Do not induce vomiting; Do not eat milk and castor oil, transport to nearest medical facility for additional treatment.

5. Fire-fighting measures

Suitable extinguishing media	:	Water spray or fog, Dry chemical powder, Alcohol-resistant foam and Carbon dioxide.
Specific hazard arising from the chemical	:	May produce toxic fumes of carbon monoxide, carbon dioxide if burning.
Special protective action for fire-fighters	:	Keep adjacent containers cool by spraying with water.
Protective Equipment.	:	Wear full protective clothing and self-contained breathing apparatus.

6. Accidental Release Measures

Protective Measures	:	• Observe all relevant local and international regulations. • Avoid contact with spilled or released material. Immediately remove all contaminated clothing. For guidance on selection of personal protective equipment see chapter 8 this Material Safety Data Sheet. Shut off leaks, if possible without personal risks. Remove all possible sources of ignition in the surrounding area. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers. • Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding (earthing) all equipment.
Clean-Up Methods		
◆ Small spillage (< 200 LT)	:	Transfer by mechanical means to a labeled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.
◆ large spillage (> 200 LT)	:	Transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.
Other Information	:	Notify authorities if any exposure to the general public or the environment occurs or is likely to occur. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.

7. Handling And Storage

Handling	:	Avoid contact with skin, eyes, and clothing. Do not breathe vapours. Extinguish any naked flame. Remove ignition sources. Avoid sparks. Do not smoke. The vapour is heavier than air spreads along the ground and distant ignition is possible. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Do not use compressed air for filling, discharging, or handling operations. Handle and open container with care in well-ventilated area. Do not empty into drains.
Storage	:	Must be stored in a diked (bunded) well-ventilated area, away from sunlight, ignition sources and other sources of heat. Bulk storage tanks should be diked (bunded). Keep away from aerosols, flammables, oxidizing agents, corrosives. Storage Temperature: Ambient.
Product Transfer	:	Keep containers closed when not in use. Do not use compressed air for filling, discharging, or handling operations. If positive displacement pumps are used, these must be fitted with a non-integral pressure relief valve. Ensure electrical continuity by bonding and grounding (earthing) all equipment.

Recommended Materials	:	For containers, or container linings use mild steel, stainless steel.
Additional Advice	:	Containers even those that have been emptied, can contain explosive vapours. Do not cut, drill, grind, weld or perform similar operations on or near containers.

8. Exposure Controls and Personal Protection

Exposure Standard	:	Occupational Exposure Limits • TLV-TWA = 750 ppm (1780 mg/m^3) • TLV-STEL = 1,000 ppm (2,380 mg/m^3) • REL-TWA = 250 ppm (600 mg/m^3)
Engineering Controls Workplace	:	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective threshold limit value.
Respiratory Protection	:	Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.
Hand Protection	:	Butyl rubber gloves, Nature rubber gloves, Neoprene rubber gloves, Nitrile rubber gloves.
Eye Protection	:	Chemical splash goggles (chemical monogoggles).
Other Protection	:	Use protective clothing which is chemical resistant to this material. Safety shoes and boots should also be chemical resistant.

9. Physical and Chemical Properties

Appearance	:	Clear liquid.
Odour	:	Specially odour.
pH Value	:	No data available.
Boiling Point (°C)	:	55.8 °C
Melting Point (°C)	:	- 95 °C
Flash Point	:	- 18 °C (Abel)
Evaporating Rate	:	5.6 (Filter Paper Method) 7.8 (Thin Film Method)
Lower/Upper Flammability limits	:	2.6 - 13 %V
Vapour Pressure (kPa)	:	24.7 kPa @ 20 °C 51.684 kPa @ 100 °C

Specific Gravity	:	0.791 @ 20 °C (ASTM D4052)
Density (g/cm^3)	:	0.790 - 0.792 @ 20 °C (ASTM D4052)
Vapour Density	:	2 @ 20 °C (air = 1)
Solubility in Water	:	Soluble complete @ 20 °C (ASTM D1722)
Auto Ignition Temperature	:	540 ° C

10. Stability and Reactivity

Chemical Reactivity	:	Stable under normal conditions.
Stability	:	Stable under normal conditions.
Hazardous Polymerisation	:	No.
Conditions to Avoid	:	Heat, flame, spark and other ignition sources.
Materials to Avoid	:	Natural rubbers, synthesis rubbers and Strong oxidizing agents.
Hazardous Decomposition Products	:	Thermal decomposition is highly dependent on conditions. Carbon monoxide, carbon dioxide and other organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation. May form explosive peroxides.

11. Toxicological Information

Acute Toxicity

◆ LD_{50} Acute oral toxicity	:	5,800 mg/kg (rat)
◆ LD_{50} Acute dermal toxicity	:	15,700 mg/kg (rabbit)
◆ LC_{50} Acute Inhalation Toxicity	:	16,000 ppm/4 hours (rat)
Skin Irritation	:	Irritating to skin. Prolonged/repeated contact may cause defatting of the skin which can lead to dermatitis.
Eye Irritation	:	Irritating to eyes.
Respiratory Irritation	:	Inhalation of vapours or mists may cause irritation to the respiratory system.
Carcinogenicity	:	No data available.

12. Ecological Information

Acute Toxicity

◆ Fish	:	Low toxicity	: LC/EC/IC_{50} > 1000 mg/l
◆ Aquatic Invertebrates	:	Low toxicity	: LC/EC/IC_{50} > 1000 mg/l
◆ Algae	:	Low toxicity	: LC/EC/IC_{50} > 1000 mg/l
◆ Micro organisms	:	Low toxicity	: LC/EC/IC_{50} > 1000 mg/l

Mobility	:	Dissolves in water. If product enters soil, it will highly mobile and may contaminate groundwater.
Persistence / Degradability	:	Readily biodegradable.
Bio-accumulation	:	Not expected to bioaccumulate significantly

13. Disposal Considerations

Material Disposal	:	Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classifications and disposal methods in compliance with applicable regulations.
Container Disposal	:	Drain container thoroughly. After draining, vent in a safe place away from sparks and fire. Refer to Section 7 before handling the product or containers. Residues may cause an explosion hazard. Do not puncture, cut or weld unclenaed drums. Send to drum recoverer or metal reclaimer.
Local Legislation	:	Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.

14. Transport Information

Road/Rail Transport ADR/RID

◆ UN. Number	:	1090
◆ Class/Item	:	3/3 (b)
◆ Hazard Symbol	:	Flammable Liquid
◆ Proper Shipping Name	:	Acetone
◆ Packing Group	:	II

Maritime Transport IMO

◆ UN. Number	:	1090
◆ Class	:	3.1
◆ Packing Group	:	II
◆ Hazard Symbol	:	Flammable Liquid
◆ Proper Shipping Name	:	Acetone
◆ Marine Pollutant	:	No

Air Transport IATA/ICAO

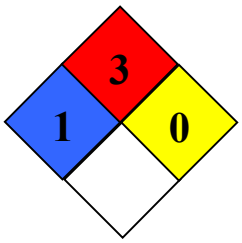
- UN. Number : 1090
- Class : 3
- Packing Group : II
- Hazard Symbol : Flammable Liquid
- Proper Shipping Name : Acetone

15. Regulatory Information

EC Label Name	:	Acetone
EC Classification	:	Highly Flammable
EINECS (EC)	:	200-662-2
EC Annex I Number	:	606-001-008
MITI (Japan)	:	2-542

16. Other Information

National Fire Protection Association (USA) :



Health
Fire Hazard
Reactivity
Specific Hazard

MSDS Distribution : The information in this document should be made available to all who may handle the product.

Prepared By : Quality Control Department.
Global Chemie ASCC Limited

Disclaimer : The information contained herein is based on our current knowledge of the underlying data and is intended to describe the product for the purpose of health, safety and environmental requirements only. No warranty of guarantee is expressed or implied regarding the accuracy of these data or the results to be obtained from the use of the product.

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