



MATERIAL SAFETY DATA SHEETS

4

Acetone

1. CHEMICAL IDENTITY

Chemical Name : Acetone

Chemical Classification: Flammable

Trade Name : Acetone

Synonyms: Dimethyl ketone, Propanone, 2-Propanone

Formula : C₃H₆O

CAS No: 67-64-1

UN No: 1090

Regulated Identification

Shipping Name : Acetone

Hazchem Code : 2YE

Codes / Label : Class 3, Flammable

Hazardous Waste ID No : 5

HAZARDOUS INGREDIENTS	C.A.S. No.	HAZARDOUS INGREDIENTS	C.A.S. No.
1 Acetone	67-64-1	3	
2		4	

2. PHYSICAL / CHEMICAL DATA

Boiling Pt. °C: 56.48

Physical State: Liquid

Appearance: Colourless

Melting Pt °C: -94.7

Vapour Pressure @ 35°C mmHg: 400mm Hg at 39.5°C

Odour: Fragrant mint. Fruity odor

Vapour Density(Air =1): 2

Solubility in water at 30°C g/100ml: Miscible

Others: Miscible with chloroform, diethyl ether, dimethylformamide, ethanol

Specific Gravity (Water =1): 0.7899 at 20 °C

pH : Neutral

3. FIRE / EXPLOSION HAZARD DATA

Flammability : Yes

LEL: 2.6

Flash Point °C in OC: -20

TDG Flammability: 3

UEL: 12.8

Flash Point °C in CC: -18

Autoignition Temperature °C : 465

Explosion sensitivity to impact: Stable

Explosion sensitivity to static Electricity:

Hazardous Combustion Products : Fire may produce irritating, corrosive and/or toxic gases.

Hazardous Polymerization : Will not occur

Combustible Liquid: Yes

Explosive Material: No

Corrosive Material No

Flammable Material: Yes

Oxidiser : No

Others:

Pyrophoric Material: No

Organic Peroxide : No

4. REACTIVITY DATA

Chemical Stability : Stable

Incompatibility with other material : Oxidising material, acids, chloroform, CrO and NOCl

Reactivity : Can react vigorously with oxidising materials, will react violently with bromoform, chloroform+alkalies, bromine, sulfur dichloride. Attacks many

plastics.

Hazardous Reaction Products : React to form explosive peroxide product with 2-methyl-1, 3-butadiene, hydrogen peroxide, peroxomonosulfuric acid.

5. HEALTH HAZARD DATA

Routes of entry: Inhalation, ingestion, skin and eyes.

Effects of Exposure / Symptoms:

Inhalation and ingestion: Inhalation of high concentrations may cause central nervous system effects characterized by headache, dizziness, unconsciousness and coma. Causes respiratory tract irritation. May cause liver and kidney damage. May cause motor incoordination and speech abnormalities. Skin: Exposure may cause irritation characterized by redness, dryness, and inflammation. Eyes: Produces irritation, characterized by a burning sensation, redness, tearing, inflammation, and possible corneal injury.

Emergency Treatment :

Inhalation: Remove the victim to fresh air area and provide artificial respiration or oxygen, if needed.

Skin: Remove the wetted clothes and wash the affected area with plenty of water.

Eyes: Irrigate with plenty of water for 15 mins. Seek medical aid immediately.

Ingestion: If large amounts are swallowed induce vomiting. Get medical aid promptly.

LD50 (oral-rat) mg/kg:	10.7 ml/kg	STEL:	750 ppm
LC50 (rat) mg/kg:		Odour Threshold:	Water: 20 mg/L; Air: 13 ppm
Permissible Exposure Limit:	1000 ppm (2400 mg/cu m)	TLV (ACGIH) :	500 ppm

NFPA Hazard	Health	Flammability	Reactivity	Special
Signals	1	3	0	

6. PREVENTIVE MEASURES

Personal Protective Equipment : Wear appropriate protective eyeglasses or chemical safety goggles.

Equipment : Wear appropriate protective gloves to prevent skin exposure.

Handling : Store in a dry, cool area. Avoid sparks, open flames and oxidising agents.

Storage : Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area.

Precautions : Avoid contact with liquid and vapour. Protective aprons, face shields and eye wash basins nearby should be provided.

7. EMERGENCY / FIRST AID MEASURES

FIRE:

Fire Extinguishing Media : Water spray, alcohol foam, CO₂, dry chemical powder.

Special Procedure : Keep the containers cool by spraying water if exposed to heat or flame.

Unusual Hazards : Flashback along vapour trail may occur.

EXPOSURE: First Aid Measures:

Inhalation: Remove the victim to fresh air area and provide artificial respiration or oxygen, if needed.

Skin: Remove the wetted clothes and wash the affected area with plenty of water.

Eyes: Irrigate with plenty of water for 15 mins. Seek medical aid immediately.

Ingestion: If large amounts are swallowed induce vomiting. Get medical aid promptly.

Antidotes / Dosages:

SPILLS :

Steps To Be Taken : Shut off leaks if without risk. Drench with water. Absorb spill with inert material.

Waste Disposal Method: Seal all the waste in vapour tight plastic bags for eventual disposal.

8. ADDITIONAL INFORMATION / REFERENCES

Reacts vigourously with oxidising agents. Potentially explosive reaction with acid+sulphuric acid, Bromine trifluoride, Nitrosylchloride+Platinum. Ignites on contact with activated Carbon,Chromium trioxide and Potassium-tert-butoxide.

The use of alcoholic beverages enhances toxic effects.

9. MANUFACTURERS / SUPPLIERS DATA

NAME OF FIRM :	Contact person
MAILING ADDRESS :	in Emergency :
TELEPHONE / TELEX NOS :	Local Bodies involved :
TELEGRAPHIC ADDRESS :	Standard Packing :
OTHERS :	Trem Card Details / Ref :

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