

Acetone

Safety data sheet in the 16-section GHS format · CAS 67-64-1

Velora Chemicals Private Limited
Ahmedabad, Gujarat, India
+91 99255 22674 · info@velorachemicals.com

1. Identification of the substance and of the supplier

Product name	Acetone
Synonyms	dimethyl ketone, propanone, acetone solvent, acetone 99.5
C.A.S. number	67-64-1
Molecular formula	C ₃ H ₆ O (CH ₃ -CO-CH ₃)
Grade supplied	99.5% min
Product group	Solvents & Organic Chemicals
Identified uses	Paints & coatings, Adhesives, Pharmaceuticals, Plastics & fibres, Industrial cleaning
Supplier	Velora Chemicals Private Limited
Emergency contact	Medical, fire or spill emergency — call the emergency services first: 112 (all-India), 101 fire, 108 ambulance. Velora Chemicals Private Limited does not at present operate a 24-hour chemical emergency advice line, and this sheet does not pretend otherwise. Every consignment despatched by road carries an emergency information panel under rule 134 of the Central Motor Vehicles Rules 1989 bearing a number from which expert advice on this material can be obtained, and the producer's safety data sheet issued with the consignment carries the producer's own 24-hour number where one is operated. For product, grade and documentation queries in business hours: +91 99255 22674.

2. Hazards identification

GHS signal word	Danger
Hazard classification	EU harmonised classification - CLP Annex VI, Index 606-001-00-8: Flam. Liq. 2 - H225; Eye Irrit. 2 - H319; STOT SE 3 - H336; plus supplemental EUH066 (repeated exposure may cause skin dryness or cracking)

3. Composition / information on ingredients

Substance	Acetone
C.A.S. number	67-64-1
Molecular weight	58.1 (ILO ICSC 0087 and NIOSH Pocket Guide)
Composition	99.5% min

4. First-aid measures

Eye contact	Rinse immediately and thoroughly with plenty of lukewarm running water for at least 15 minutes, holding the eyelids apart and rinsing under the eyelids; remove contact lenses if easily possible and continue rinsing. Refer for medical attention if pain, redness or visual disturbance persists.
-------------	--

Skin contact	Remove contaminated clothing and shoes immediately. Wash the affected skin with plenty of soap and water. Refer for medical attention if irritation develops. Launder clothing before reuse; repeated or prolonged contact defats the skin and causes dryness and cracking (EUH066), so gloves and barrier cream matter for routine handlers.
Inhalation	Move the casualty to fresh air at once and keep them at rest in a position comfortable for breathing; loosen tight clothing. Give oxygen if breathing is difficult and artificial respiration if breathing has stopped. Because the vapour causes drowsiness and dizziness (H336), do not allow the casualty to walk about unaccompanied or return to the area until it is ventilated. Refer for medical attention.
Ingestion	Do NOT induce vomiting - aspiration of acetone into the lungs must be avoided. Rinse the mouth with water. Give nothing by mouth to an unconscious or drowsy casualty. Call a physician or poison centre immediately and obtain medical attention.
5. Fire-fighting measures	
Flash point	-18 C closed cup (ILO ICSC 0087). Producer sheets give -17 C and the NIOSH Pocket Guide gives 0 F (-17.8 C). Always quote the closed-cup value and say so.
Suitable extinguishing media	This material has a flash point and burns. Use alcohol-resistant foam, dry chemical powder or carbon dioxide; water spray or fog to cool surrounding surfaces and containers. Confirm the medium against the producer's safety data sheet for the grade supplied.
Unsuitable extinguishing media	Do not use a high-pressure water jet: it will spread the material and the fire. A vapour flash-back to the source and re-ignition of cooled but still-hot material are both foreseeable; do not approach a container that may be pressurised or a pool fire without cover.
Special hazards arising from the substance	Hazardous gases and decomposition products may be formed in a fire, from this substance or from its packaging and the materials stored with it. Packaging and pallets are themselves a substantial fire load.
Advice for fire-fighters	Fire-fighters must wear self-contained breathing apparatus and full protective clothing. Keep unnecessary personnel away and upwind. Prevent firefighting run-off from entering drains, surface water or groundwater.

6. Accidental release measures

Keep unnecessary personnel away and upwind, and ventilate. Wear the protective equipment in section 8 before approaching. Stop the leak if it is safe to do so, then bund or dike the spill and prevent entry to drains, surface water and groundwater. Absorb with an inert absorbent and collect into labelled, closable containers for disposal under section 13. Do not return spilled material to the original container.

7. Handling and storage

- Highly flammable (Class 3, UN 1090), with a flash point well below room temperature. The vapour is heavier than air and can travel to an ignition source — store in a ventilated flameproof area, earth and bond drums and tankers during transfer, and allow no naked flames or sparks.
- Acetone attacks many plastics, rubbers and paints. Check gaskets, hoses and seals: PTFE, EPDM or butyl for seals and hoses; stainless or carbon steel for tanks and lines. Viton (FKM), nitrile, neoprene and PVC are attacked.
- Keep it away from strong oxidisers. The vapour causes drowsiness and dizziness and the liquid irritates eyes; use with good ventilation and eye protection.

Storage: Store in the original, tightly closed, correctly labelled container in a cool, dry, well-ventilated, fire-resistant store, away from all sources of ignition, heat, hot surfaces, sparks, open flames and direct sunlight, and separated from oxidisers, acids and bases. Earth and bond drums, tanks and transfer lines and use non-sparking tools and explosion-protected electrical equipment - the liquid is a poor conductor and accumulates static. Keep the store banded and without drain or sewer access. Do not store with foodstuffs. Keep containers closed when not in use; do not use compressed air to transfer.

8. Exposure controls / personal protection

Engineering controls. Enclose every transfer, tipping, bag-slitting and sampling point and fit local exhaust extraction at each, and keep airborne concentrations below the limit in force at the place of use. Provide an eyewash within reach of the working position, and a safety shower wherever the material is classified corrosive or irritant or is handled in quantity. Do not eat, drink or smoke in the handling area; wash before breaks. Where no limit is stated above, occupational exposure limits vary by jurisdiction: check the limit in force at the place of use and the producer's sheet for the grade supplied, and record which value your assessment adopted. Select eye, skin and respiratory protection on the strength of a measured or modelled exposure assessment, not on this sheet alone.

9. Physical and chemical properties

Appearance	Clear, colourless, mobile, volatile liquid with a characteristic sweet mint-like solvent odour
Physical state	Liquid
Melting / freezing point	-95
Boiling point	56 (producer sheets give 55-57 C; NIOSH gives 133 F = 56.1 C)
Relative density	0.79 g/cm ³ at 20 C (relative density 0.79, water = 1); vapour density about 2.0 relative to air, so vapour sinks and travels along the ground
Solubility in water	Completely miscible with water in all proportions; also miscible with ethanol, diethyl ether and most organic solvents
pH	Not applicable - acetone is a neutral, non-ionising organic liquid and no meaningful aqueous pH is defined. Producer SDSs state 'not applicable'. Commercial 99.5% grades specify acidity as % free acid (as acetic acid) rather than pH.
Flash point	-18 C closed cup (ILO ICSC 0087). Producer sheets give -17 C and the NIOSH Pocket Guide gives 0 F (-17.8 C). Always quote the closed-cup value and say so.
Auto-ignition / ignition temperature	Not available
Explosive / dust-explosion properties	Not available
Vapour pressure	Not available
Vapour density	Not available
Partition coefficient (log Pow)	Not available
Particle characteristics	Not available
Molecular weight	58.1 (ILO ICSC 0087 and NIOSH Pocket Guide)

10. Stability and reactivity

Incompatible materials	Strong oxidising agents - nitric acid, sulfuric/nitric mixtures, hydrogen peroxide, peroxides, chromic acid, chlorates, perchlorates (contact can generate explosive peroxides and cause violent reaction). Strong acids and strong bases. Alkali metals and alkaline-earth metals. Amines and ammonia. Halogens, and bromoform/chloroform in the presence of base (forms explosive products). Acetone also dissolves or crazes many plastics, coatings, resins and rubbers - check gasket, hose and liner compatibility before use.
-------------------------------	--

Conditions to avoid

Store in the original, tightly closed, correctly labelled container in a cool, dry, well-ventilated, fire-resistant store, away from all sources of ignition, heat, hot surfaces, sparks, open flames and direct sunlight, and separated from oxidisers, acids and bases. Earth and bond drums, tanks and transfer lines and use non-sparking tools and explosion-protected electrical equipment - the liquid is a poor conductor and accumulates static. Keep the store banded and without drain or sewer access. Do not store with foodstuffs. Keep containers closed when not in use; do not use compressed air to transfer.

11. Toxicological information

The health hazards classified for this substance are listed in section 2, and the corresponding first-aid measures in section 4. Numerical toxicological endpoints are not reproduced here: refer to the producer's safety data sheet for the grade supplied, and to the ECHA and PubChem entries for the substance.

12. Ecological information

Where section 2 or section 14 classifies this substance as hazardous to the aquatic environment, prevent any release to drains, surface water or groundwater and treat aqueous effluent before discharge. Otherwise, refer to the producer's sheet.

13. Disposal considerations

Dispose of the substance and its container through an authorised facility under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 where the waste is scheduled under those Rules, and otherwise as non-hazardous industrial waste, in each case under the conditions of the State Pollution Control Board consent in force at the site. Whether a particular waste stream is scheduled depends on the substance and on what it has been mixed with, so classify the waste before consigning it. Do not reuse empty containers for any other purpose.

14. Transport information

UN number	UN 1090
------------------	---------

Class	3 (flammable liquid)
--------------	----------------------

Packing group	II
----------------------	----

Proper shipping name	ACETONE
-----------------------------	---------

15. Regulatory information

Supply in India is subject to the Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 where the substance is scheduled, and to any product-specific licensing named on the product page. Classification and labelling follow the GHS as adopted in the jurisdiction of use.

Note: The practical hazard exceeds what the flash point alone suggests: acetone's vapour is about twice as dense as air, so it collects in pits, sumps and along floors and can reach an ignition source many metres from the point of release. Flash point figures differ between sheets only because of open-cup versus closed-cup method, not because of product quality; the closed-cup value is about -18 C. Auto-ignition temperature 465 C; explosive limits about 2.2-13 vol% in air (ILO ICSC 0087), with one producer sheet giving an upper limit of 14.3 vol% - the lower figure is the conservative one to design to. Vapour pressure is high (24 kPa / about 180 mmHg at 20 C), so drums breathe and partly emptied containers develop flammable headspaces. A 99.5% min commercial grade behaves as the pure solvent for all safety purposes. Acetone is not classified as hazardous to the aquatic environment and carries no environmental transport marking, but it is fully water-miscible and must still be kept out of drains.

16. Other information

Version	1.0
----------------	-----

Date of issue	07 October 2026
----------------------	-----------------

Supersedes	No previous version
-------------------	---------------------

Regulatory basis as at the date of issue

EU CLP Regulation 1272/2008 as amended, including Annex VI harmonised classifications; UN Model Regulations and the IMDG Code Amendment 42-24, mandatory from 1 January 2026; ADR 2025; and, in India, the Manufacture, Storage and Import of Hazardous Chemical Rules 1989 and the Central Motor Vehicles Rules 1989.

How this sheet was compiled and what governs. This sheet was prepared by Velora Chemicals Private Limited as the supplier, from PubChem, the ECHA CLP inventory including Annex VI harmonised classifications, ILO International Chemical Safety Cards and published producer safety data sheets. Values that could not be confirmed from those sources are shown as "Not available" rather than estimated. **The producer's safety data sheet for the specific grade and lot supplied is the governing document** and is issued with the consignment; where the two differ, the producer's sheet prevails. This sheet carries no warranty of the properties of any particular batch. Velora Chemicals Private Limited is a bulk supplier and trader, not a manufacturer.

Sources consulted: https://chemicalsafety.ilo.org/dyn/icsc/showcard.display?p_card_id=0087; <https://www.cdc.gov/niosh/npg/npgd0004.html>; https://assets.fishersci.com/TFS-Assets/CCG/EU/SDS/SDS_15633670_EN.pdf