

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Cyclohexanone ACS Grade

Synonyms: cyclohexanone

CAS Number: 108-94-1

Grade/Purity: ACS Reagent Grade

Product Type: Solvents

Product Use: Industrial, Manufacturing or Laboratory use

Manufacturer/Supplier: Alliance Chemical, 204 South Edmond St, Taylor, Texas 76574

Information: 512-365-6838 | www.alliancechemical.com

Emergency: CHEMTEL - 800-255-3924 (24 Hours/Day, 7 Days/Week)

2. HAZARDS IDENTIFICATION

Signal Word: Danger

GHS Pictograms:



Hazard Statements:

H226	Flammable liquid and vapour
H302	Harmful if swallowed
H312	Harmful in contact with skin
H315	Causes skin irritation
H318	Causes serious eye damage
H332	Harmful if inhaled
H335	May cause respiratory irritation

Precautionary Statements:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical, ventilating, and lighting equipment.
P242	Use non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing dust, fume, gas, mist, vapours or spray.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves, protective clothing, and eye/face protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P313	Get medical advice or attention.
P370+P378	In case of fire: Use appropriate media to extinguish.

P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents and container in accordance with local, regional, national, and international regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	% MIN	% MAX	CAS #	EINECS# / ELINCS#	FORMULA	MOLECULAR WEIGHT
Cyclohexanone	99	100	108-94-1	203-631-1	C ₆ H ₁₀ O	98.14 g/mol

4. FIRST-AID MEASURES

Eyes	Rinse with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention immediately.
Skin	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing. Wash with soap. Get medical attention immediately.
Inhalation	Move person to fresh air and keep comfortable for breathing. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately.
Ingestion	Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention immediately.

5. FIRE-FIGHTING MEASURES

Suitable Media	Alcohol-resistant foam, CO ₂ , dry chemical powder. Water spray may be used to cool fire-exposed containers.
Unsuitable Media	Do not use a solid water stream — may scatter and spread fire.
Protective Equipment	Wear self-contained breathing apparatus and full protective clothing.
Combustion Products	May include carbon oxides and other toxic fumes. See Section 10.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Use PPE as described in Section 8. Ensure adequate ventilation. Evacuate personnel to safe areas.
Environmental	Prevent leakage or spillage from entering drains, sewers, or waterways.
Containment & Cleanup	Absorb with inert material. Collect in appropriate waste container. Dispose per applicable regulations.

7. HANDLING AND STORAGE

Safe Handling	Use with adequate ventilation. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. Keep container closed when not in use.
Safe Storage	Store in a cool, dry, well-ventilated area away from heat, sparks, and open flame. Keep away from incompatible materials (see Section 10). Keep containers tightly closed. Ground and bond containers when transferring material.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Use adequate ventilation. Provide eyewash stations and quick-drench showers accessible to areas of use.

Occupational Exposure Limits:

No established occupational exposure limits.

Eyes	Wear chemical safety goggles or face shield.
Skin	Wear chemical-resistant gloves and protective clothing.
Inhalation	Use a NIOSH-approved respirator with organic vapor cartridges. For confined spaces or exposures above the OEL, use supplied-air respiratory protection.

Exposure limits sourced from NIOSH Pocket Guide and OSHA 29 CFR 1910.1000. Hazard classification from ECHA Classification and Labelling Inventory (CLP Annex VI).

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Colorless liquid
Odor	ODOR REMINISCENT OF PEPPERMINT & ACETONE
Particle Characteristics	Not Applicable
pH	Not Available
Melting Point	3 °F (NTP, 1992)
Boiling Point	312.1 °F at 760 mmHg (NTP, 1992)
Flash Point	111 °F (NTP, 1992)
Vapor Pressure	5.2 mmHg at 77 °F ; 10 mmHg at 101.7 °F (NTP, 1992)
Specific Gravity	0.948
Solubility	Soluble in water, alcohols, ethers, and most organic solvents
Molecular Formula	C ₆ H ₁₀ O
Molecular Weight	98.14 g/mol

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended storage conditions.
Hazardous Reactions	None under normal processing conditions.
Conditions to Avoid	Heat, sparks, open flame, and incompatible materials.
Incompatible Materials	Strong oxidizing agents, sources of ignition, heat.
Decomposition Products	May produce carbon oxides and other toxic fumes when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: See Section 2 for GHS hazard classification.

IARC	Group 3 — not classifiable as to its carcinogenicity to humans (Cyclohexanone; IARC agent: Cyclohexanone, Vol. 47, 71).
NTP	Not listed as carcinogen.
OSHA	Not listed as carcinogen.

12. ECOLOGICAL INFORMATION

Ecotoxicity	Fish LC50: 527 mg/L (96 h, Pimephales promelas (flow-through, 25 °C, hardness 45.5 mg/L CaCO ₃))
Persistence	Low persistence — Readily biodegradable (model river/lake half-lives 4.1 d / 33 d)
Bioaccumulation	BCF Bioconcentration expected minimal
Mobility in Soil	Highly mobile in soil

13. DISPOSAL CONSIDERATIONS

Dispose of contents/container in accordance with applicable federal, state, and local regulations. Do not dispose of into drains or waterways.

14. TRANSPORT INFORMATION

US DOT	UN1915, Cyclohexanone, 3, PG III
IMDG	UN1915, Cyclohexanone, 3, PG III
IATA/ICAO	UN1915, Cyclohexanone, 3, PG III
Marine Pollutant	No

15. REGULATORY INFORMATION

TSCA Inventory	Listed.
SARA 313 (TRI)	Not listed.
California Prop 65	Not listed.
SARA 311/312	See Section 2 for hazard classifications.

Data retrieved as of — TSCA Inventory: 2026-09-02; SARA 313 (TRI): 2026-09-02; California Prop 65: 2026-09-02

16. OTHER INFORMATION

Revision Date: 09/21/2026

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