

TECHNICAL DATA SHEET

Cyclohexanone Technical Grade

Technical Grade

|            |                               |            |
|------------|-------------------------------|------------|
| CAS NUMBER | ALLIANCE CODE                 | GENERATED  |
| 108-94-1   | cyclohexanone-technical-grade | 2026-08-31 |
| REVISION   | REVIEWED                      |            |
| 1.3        | 2026-07-17 · Andre Taki       |            |

IDENTITY & COMPOSITION

|                                  |                                |
|----------------------------------|--------------------------------|
| PRODUCT NAME                     | ALLIANCE CODE                  |
| Cyclohexanone Technical Grade    | cyclohexanone-technical-grade  |
| GRADE                            | CONCENTRATION                  |
| Technical Grade                  | —                              |
| CAS NUMBER                       | FORMULA                        |
| 108-94-1 <a href="#">PubChem</a> | C6H10O <a href="#">PubChem</a> |
| MOLECULAR WEIGHT                 | PRODUCT TYPE                   |
| 98.14 <a href="#">PubChem</a>    | pure_substance                 |

SPECIFICATIONS

| TEST                                    | SPECIFICATION       | TYPICAL | METHOD      | SOURCE                                 |
|-----------------------------------------|---------------------|---------|-------------|----------------------------------------|
| Purity                                  | Not less than 99.50 | 99.85   | GC          | <a href="#">Supplier specification</a> |
| Acidity (as Acetic Acid)                | 0.0100 max          | 0.0030  | ASTM D 1613 | <a href="#">Supplier specification</a> |
| Distillate temperature interval (95 mL) | ≤ 1.5 °C            | 0.6 °C  | —           | <a href="#">Supplier specification</a> |

| TEST         | SPECIFICATION | TYPICAL   | METHOD | SOURCE                 |
|--------------|---------------|-----------|--------|------------------------|
| Water        | ≤ 0.08 wt %   | 0.03 wt % | —      | Supplier specification |
| Cyclohexanol | 0.50% max     | 0.08%     | GC-FID | Interpreted            |

Specification values are guaranteed limits. Typical values are representative of production lots and are not guaranteed. Lot-specific certificates of analysis ship with every order.

**AVAILABLE GRADES** SAME CAS, ALTERNATE GRADES AND CONCENTRATIONS

| GRADE                      | CONCENTRATION | TYPICAL ASSAY | SKU                     |
|----------------------------|---------------|---------------|-------------------------|
| THIS GRADE Technical Grade | —             | —             | current                 |
| ACS Grade                  | —             | —             | cyclohexanone-acs-grade |

Typical assay shown is the rolling-window mean from the sibling product's most recent lots. Grade selection drives downstream end-use — verify the sibling grade matches your specification before substitution.

## PHYSICAL & CHEMICAL PROPERTIES

One or more physical-property values are temporarily suppressed pending verification against vendor COA data. For complete properties refer to the Safety Data Sheet (SDS) or contact [sales@alliancechemical.com](mailto:sales@alliancechemical.com).

| PROPERTY           | VALUE                                                  | SOURCE                 |
|--------------------|--------------------------------------------------------|------------------------|
| Form               | Liquid                                                 | Published reference    |
| Color              | 15 max                                                 | Supplier specification |
| Odor               | ODOR REMINISCENT OF PEPPERMINT & ACETONE               | Published reference    |
| Density            | 0.9450 – 0.9500 g/cm <sup>3</sup> (20 °C, ASTM D 4052) | Supplier specification |
| Boiling Point      | 153.0 – 157.0 °C                                       | Supplier specification |
| Melting Point      | 3 °F (NTP, 1992)                                       | Published reference    |
| Flash Point        | 111 °F (NTP, 1992)                                     | Published reference    |
| Vapor Pressure     | 5.2 mmHg at 77 °F ; 10 mmHg at 101.7 °F (NTP, 1992)    | Published reference    |
| Solubility (water) | 50 to 100 mg/mL at 64 °F (NTP, 1992)                   | Published reference    |

## REGULATORY & TRANSPORT

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### DOT / 49 CFR

UN NUMBER

UN1915 [49 CFR 172.101](#)

PACKING GROUP

III [Adjudicated](#)

HAZARD CLASS

3 [Adjudicated](#)

PROPER SHIPPING NAME

Cyclohexanone [Adjudicated](#)

### GHS / OSHA HAZCOM 2012

SIGNAL WORD

Danger [Adjudicated](#)

H-CODES (HAZARD STATEMENTS)

H226, H302, H312, H315, H318, H332, H335

[Adjudicated](#)

P-CODES (PRECAUTIONARY STATEMENTS)

P210, P233, P240, P241, P242, P243, P261,  
P271, P280, P303+P361+P353, P304+P340,  
P313, P370+P378, P403+P235, P501

[Adjudicated](#)

### OCCUPATIONAL EXPOSURE LIMITS

OSHA PEL (29 CFR 1910.1000)

— [no canonical](#)

ACGIH TLV

— [no canonical](#)

NIOSH REL

— [no canonical](#)

NIOSH IDLH

— [no canonical](#)

Transport descriptions reflect 49 CFR 172.101 lookup at time of publication. Sourced data: ECHA CLP Annex VI for harmonised classifications, NIOSH Pocket Guide for REL/IDLH, OSHA Z-Tables for PEL. Always verify against the latest regulatory text before shipment-critical decisions.

## APPLICATIONS

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Intermediate for nylon production and solvent for paints, inks, and electronic materials

[highchem.co.jp](https://highchem.co.jp)

High-performance solvent in coatings, adhesives, and printing inks, and chemical intermediate for Nylon 6 via caprolactam

[gneechemical.com](https://gneechemical.com)

Solvent specified in alkyd and epoxy coating systems, gravure and packaging inks, solvent-based adhesives, and photosensitive resin formulations

[gneechemical.com](https://gneechemical.com)

Used in coatings, adhesives, inks, resins, rubber processing, and Nylon 6 production

Applications are drawn from published manufacturer and supplier documentation; each is sourced. Suitability for a specific use is the buyer's to confirm.

## STORAGE & HANDLING

### RECOMMENDED STORAGE

Store in cool, dry, well-ventilated place, away from heat and oxidizing agents

gneechemical.com

### HANDLING PRECAUTIONS

Use standard chemical PPE — splash goggles, gloves, lab coat. Refer to SDS for hazard-specific PPE requirements.

Class-level guidance — not product-specific; the SDS controls.

### INCOMPATIBILITIES

oxidizing agents gneechemical.com

### SHELF LIFE

12 months gneechemical.com

Store in cool, dry, well-ventilated place, away from heat and oxidizing agents

For full hazard, PPE, and emergency response guidance, refer to the Safety Data Sheet (SDS) for this product. The SDS controls in all cases where guidance differs.

## PACKAGING & LOGISTICS

### SHIPPING DESCRIPTION (US DOT)

UN1915, Cyclohexanone, 3, PG III

Sourced from 49 CFR 172.101. Confirm against shipping documents and carrier requirements before tender.

NMFC CLASS  
77.5

PLACARD  
Flammable Liquid

PACKING GROUP  
PG III

## REVISION HISTORY

Last reviewed 2026-07-17 by Andre Taki, DOT Hazmat Specialist.

| VERSION | DATE       | CHANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | TRIGGER          |
|---------|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| 1.3     | 2026-08-05 | Canonical data updated: 3 fields changed via the provenance/adjudication pipeline. <ul style="list-style-type: none"> <li>hazardClass · canonical change (coa.data_provenance / adjudication)</li> <li>packingGroup · canonical change (coa.data_provenance / adjudication)</li> <li>unNumber · canonical change (coa.data_provenance / adjudication)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | canonical_change |
| 1.2     | 2026-07-22 | Canonical data updated: 1 field changed via the provenance/adjudication pipeline. <ul style="list-style-type: none"> <li>dotSubsidiaryHazardClass · canonical change (coa.data_provenance / adjudication)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | canonical_change |
| 1.1     | 2026-07-17 | Canonical data re-verified: 7 fields updated against independent vendor SDSs, CLP Annex VI, 49 CFR, and OSHA HazCom 2024 (GHS classification, hazard/precautionary codes, signal word, physical properties as applicable). <ul style="list-style-type: none"> <li>bulkThresholdGallons · canonical adjudication / reground (coa.data_provenance)</li> <li>countryOfOrigin · canonical adjudication / reground (coa.data_provenance)</li> <li>ghsClassification · canonical adjudication / reground (coa.data_provenance)</li> <li>hazard_h_codes · canonical adjudication / reground (coa.data_provenance)</li> <li>hazard_p_codes · canonical adjudication / reground (coa.data_provenance)</li> <li>hsCode · canonical adjudication / reground (coa.data_provenance)</li> <li>regulationRule · canonical adjudication / reground (coa.data_provenance)</li> </ul> | canonical_change |
| 1.0     | 2026-05-20 | Initial URL-first TDS published from canonical chemistry registry.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | initial          |

This Technical Data Sheet is provided for technical reference. The Safety Data Sheet (SDS) controls in all cases where guidance differs. Values reflect Alliance Chemical canonical data at time of generation; subsequent revisions are recorded in the Revision History above.