TECHNICAL DATA SHEET

Isopropyl Acetate 99.98% Technical Grade

Technical · 99.98%

CAS NUMBER	ALLIANCE CODE	GENERATED
108-21-4	isopropyl-acetate-99-98	2026-08-31

REVISION	REVIEWED
1.3	2026-07-17 · Andre Taki

IDENTITY & COMPOSITION

PRODUCT NAME
Isopropyl Acetate 99.98% Technical Grade

ALLIANCE CODE
isopropyl-acetate-99-98

GRADE
Technical

CONCENTRATION
99.98%

CAS NUMBER
108-21-4 PubChem

FORMULA
C5H10O2 PubChem

MOLECULAR WEIGHT
102.13 PubChem

PRODUCT TYPE
solution

SPECIFICATIONS

TEST	SPECIFICATION	TYPICAL	METHOD	SOURCE
Assay (isopropyl acetate)	99.5 wt% min	100.0 wt%	GC	Supplier specification
Acidity as Acetic Acid	0.005 wt% max	0.0015 wt%	ASTM D1613	Supplier specification
Isopropanol	0.10 wt% max	0.02 wt%	GC	Supplier specification

TEST	SPECIFICATION	TYPICAL	METHOD	SOURCE
Non Volatile Matter	0.002 wt% max	0.0005 wt%	ASTM D1353	Supplier specification
Water	0.05 % max	0.03 %	ASTM E1064	Supplier specification
residue	0.002 % max	0.0005 %	—	Supplier specification

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	99.98%	—	current
ACS Grade	99.98%	—	isopropyl-acetate-99-98-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

PROPERTY	VALUE	SOURCE
Appearance	Clear & Free of Matter	Supplier specification
Form	Liquid	Published reference
Color	10 APHA max	Supplier specification
Odor	Aromatic	Published reference
Specific Gravity (20 °C)	0.871 – 0.874 @ 20/20 °C	Supplier specification
Density	0.874 at 68 °F (USCG, 1999) - Less dense than water; will float	Published reference
Boiling Point	85-90°C (185-196°F)	Supplier specification
Melting Point	-100.1 °F (NTP, 1992)	Published reference
Flash Point	36 °F (NTP, 1992)	Published reference
Vapor Pressure	1 mmHg at -36.9 °F ; 100 mmHg at 96.3 °F; 760 mmHg at 192.2 °F (NTP, 1992)	Published reference
Solubility (water)	1 to 10 mg/mL at 68 °F (NTP, 1992)	Published reference

Polar solvent — purity vs. intended end-use (electronics, pharma, general industrial) is the dominant grade consideration. See application guidance for grade selection.

MATERIALS OF CONSTRUCTION SERVICE ENVELOPE ≈ 99.98%

MATERIAL	RATING	MAX T (°C)	NOTES	SOURCE
Buna-N (NBR) Elastomer	Fair	60	Acceptable for alcohols; poor for ketones.	Parker O-ring Chemical Compatibility
EPDM Elastomer	Fair	—	Good for alcohols, poor for esters	Cole-Parmer Chemical Compatibility
Viton (FKM) Elastomer	Fair	80	Swells in acetone and esters; avoid for those.	Parker O-ring Chemical Compatibility
FFKM (Kalrez) Fluoropolymer	Excellent	200	Premium ester / ketone sealing	Cole-Parmer Chemical Compatibility
PTFE Fluoropolymer	Excellent	200	Universal solvent compatibility.	Cole-Parmer Chemical Compatibility
Borosilicate Glass Glass Ceramic	Excellent	100	Universally inert.	Cole-Parmer Chemical Compatibility
Glass (borosilicate) Glass Ceramic	Excellent	100	Inert	Cole-Parmer Chemical Compatibility
316L Stainless Steel Metal	Excellent	80	Inert; preferred for high-purity solvent service.	Cole-Parmer Chemical Compatibility
Aluminium Metal	Good	40	Acceptable; avoid prolonged wet contact	Cole-Parmer Chemical Compatibility
Carbon Steel Metal	Fair	50	Trace moisture causes rust; flash-rust prevention required.	Cole-Parmer Chemical Compatibility
HDPE Thermoplastic	Fair	40	Swells with many polar solvents; verify per solvent.	Cole-Parmer Chemical Compatibility

MATERIAL	RATING	MAX T (°C)	NOTES	SOURCE
PP Thermoplastic	Good	50	Acceptable but watch swelling with esters	Cole-Parmer Chemical Compatibility
PVC Thermoplastic	Fair	25	Esters soften PVC; avoid for esters	Cole-Parmer Chemical Compatibility

Ratings reflect the service envelope (concentration × temperature) shown. Always confirm against your specific duty cycle and contact-time before equipment selection. The most cautious rating across overlapping references is shown.

REGULATORY & TRANSPORT

DOT / 49 CFR

UN NUMBER
UN1220 49 CFR 172.101

HAZARD CLASS
3 Adjudicated

PACKING GROUP
II Adjudicated

PROPER SHIPPING NAME
Isopropyl acetate Adjudicated

GHS / OSHA HAZCOM 2012

SIGNAL WORD
Danger Adjudicated

H-CODES (HAZARD STATEMENTS)
H225, H319, H336 Adjudicated

P-CODES (PRECAUTIONARY STATEMENTS)
P210, P233, P240, P241, P242, P243, P261, P264, P271, P280, P303+P361+P353, P304+P340, P305+P351+P338, P314, P337+P313, P370+P378, P403+P233, P403+P235, P405, 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

General-purpose fast-evaporating solvent, miscible with most common organic solvents, with properties between ethyl and butyl acetate

stobec.com

Active solvent for synthetic resins including cellulose acetate butyrate, nitrocellulose, vinyl copolymers, polyesters, polyamides, acrylics and alkyds

stobec.com

Solvent in coatings: automotive OEM and refinish, can and coil, general industrial, industrial maintenance and marine, industrial wood, transportation

stobec.com

Fragrance carrier in cosmetics and personal care, and solvent in flexographic and gravure printing inks

stobec.com

Solvent for cellulose, plastics, oils and fats; component of some printing inks and perfumes

corecheminc.com

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

Cool, well-ventilated flammable-liquid storage area. Tightly sealed original containers. Segregate from oxidizers and acids. Bond and ground bulk storage.

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

HANDLING PRECAUTIONS

Use chemical-resistant gloves and splash goggles. Bond and ground during transfer to prevent static accumulation. Eliminate ignition sources within vapor envelope.

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

INCOMPATIBILITIES

Strong oxidizers, strong acids, isocyanates, anhydrides. Hygroscopic — protect from atmospheric moisture for water-sensitive end uses.

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

SHELF LIFE

Consult Technical Services for product-specific shelf life

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)

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UN1220, Isopropyl acetate, 3, PG II
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Sourced from 49 CFR 172.101. Confirm against shipping documents and carrier requirements before tender.

NMFC CLASS	PLACARD	PACKING GROUP
70	Flammable Liquid	PG II

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: 4 fields changed via the provenance/adjudication pipeline. • `hazardClass` · canonical change (coa.data_provenance / adjudication) • `packingGroup` · canonical change (coa.data_provenance / adjudication) • `signalWord` · canonical change (coa.data_provenance / adjudication) • `unNumber` · canonical change (coa.data_provenance / adjudication)	canonical_change
1.2	2026-07-22	Canonical data updated: 1 field changed via the provenance/adjudication pipeline. • `dotSubsidiaryHazardClass` · canonical change (coa.data_provenance / adjudication)	canonical_change
1.1	2026-07-17	Canonical data re-verified: 6 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). • `color` · canonical adjudication / reground (coa.data_provenance) • `countryOfOrigin` · canonical adjudication / reground (coa.data_provenance) • `ghsClassification` · canonical adjudication / reground (coa.data_provenance) • `hazard_h_codes` · canonical adjudication / reground (coa.data_provenance) • `hazard_p_codes` · canonical adjudication / reground (coa.data_provenance) • `hsCode` · canonical adjudication / reground (coa.data_provenance)	canonical_change

VERSION	DATE	CHANGE	TRIGGER
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.