

TECHNICAL DATA SHEET

Hydrogen Peroxide 35%

35%

CAS NUMBER

7722-84-1

ALLIANCE CODE

SHOPIFY-8019789545514

GENERATED

2026-09-09

REVISION

1.1

REVIEWED

2026-09-09

IDENTITY & COMPOSITION

PRODUCT NAME

Hydrogen Peroxide 35%

ALLIANCE CODE

SHOPIFY-8019789545514

GRADE

—

CONCENTRATION

35%

CAS NUMBER

7722-84-1 **Adjudicated**

FORMULA

H2O2 **Adjudicated**

MOLECULAR WEIGHT

34.015 **Adjudicated**

PRODUCT TYPE

solution

SPECIFICATIONS

Not yet characterized — Specification limits for this product have not been published yet. Contact Technical Services for the current specification; lot-specific certificates ship with every order.

AVAILABLE GRADES SAME CAS, ALTERNATE GRADES AND CONCENTRATIONS

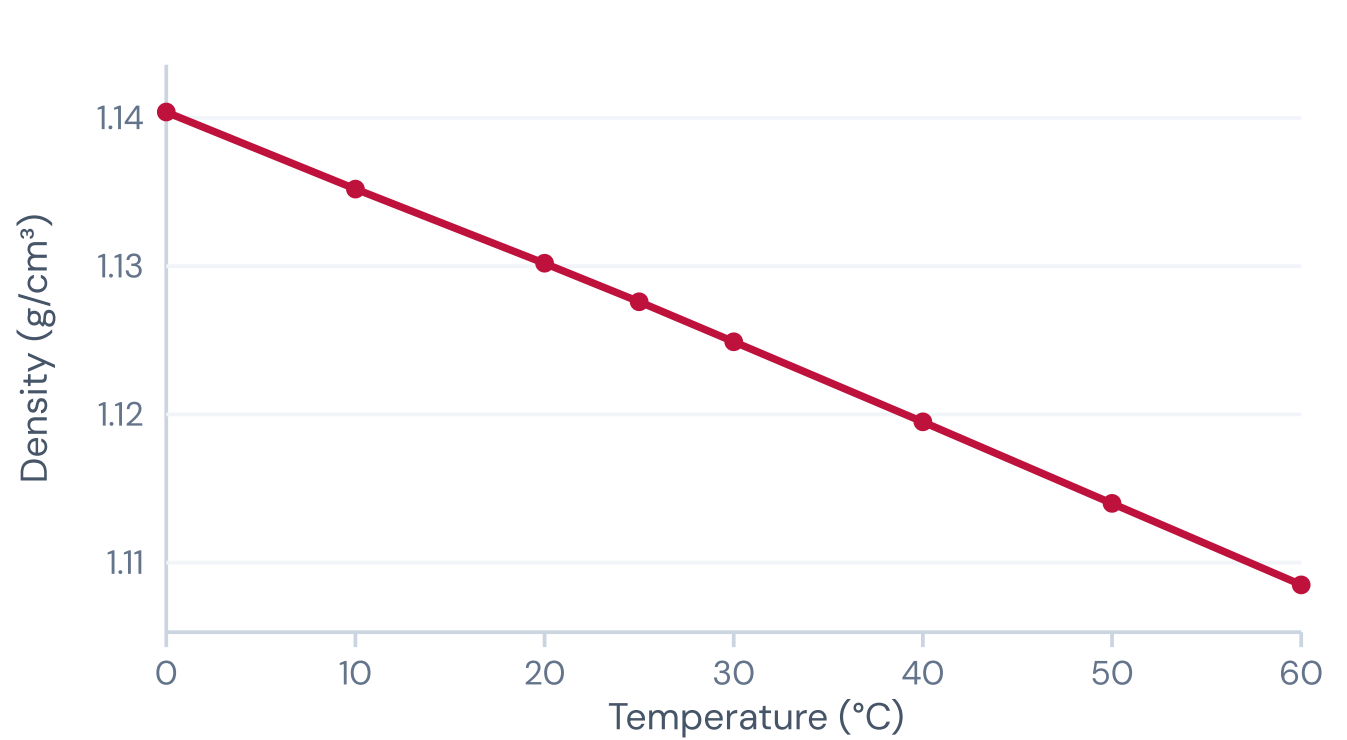
GRADE	CONCENTRATION	TYPICAL ASSAY	SKU
THIS GRADE —	35%	—	current
ACS Grade	30%	—	hydrogen-peroxide-30-acs-grade

GRADE	CONCENTRATION	TYPICAL ASSAY	SKU
Technical	30%	—	hydrogen-peroxide-30-technical
Technical Grade	25%	—	hydrogen-peroxide-25-technical- grade
ACS Grade	15%	—	hydrogen-peroxide-15-acs-grade
Technical Grade	15%	—	hydrogen-peroxide-15-technical- grade
ACS Grade	12%	—	hydrogen-peroxide-12-acs-grade
Technical Grade	10%	—	hydrogen-peroxide-10-technical- grade
ACS Grade	6%	—	hydrogen-peroxide-6-acs-grade
Technical Grade	6%	—	hydrogen-peroxide-6-technical- grade
ACS Grade	5%	—	hydrogen-peroxide-5-acs-grade
Technical Grade	5%	—	hydrogen-peroxide-5-technical- grade
Technical Grade	3%	—	hydrogen-peroxide-3-technical- 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.

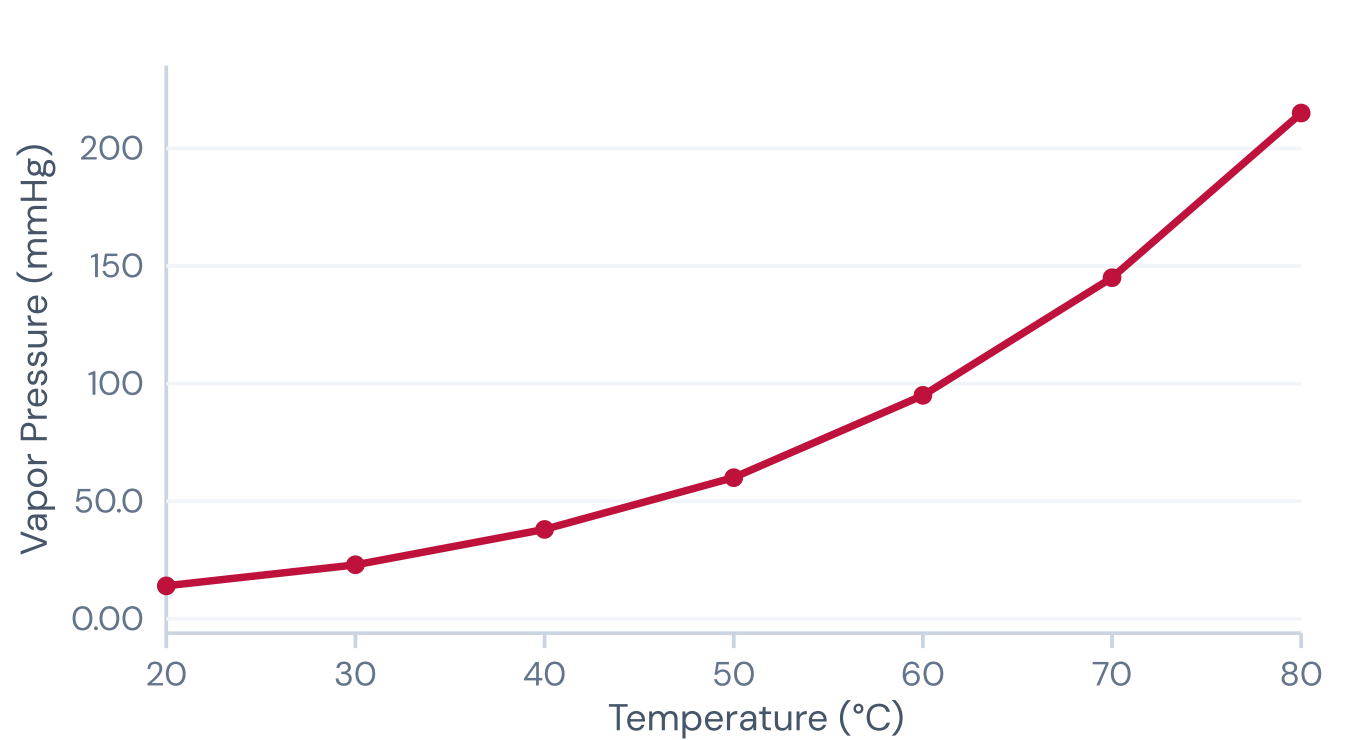
PROPERTY CURVES

Density vs. Temperature (35%)



Source: [Solvay H2O2 Properties \(35% reference\)](#)

Vapor Pressure vs. Temperature (35%)



Source: [Solvay H2O2 Properties \(35% reference\)](#)

Reference curves drawn from public engineering data. For engineering use, consult the cited source for the underlying tabulated values.

MATERIALS OF CONSTRUCTION SERVICE ENVELOPE ≈ 35%

MATERIAL	RATING	MAX T (°C)	NOTES	SOURCE
Buna-N (NBR) Elastomer	Not recommended	—	Rapid degradation; never use with oxidizers.	Parker O-ring Chemical Compatibility
EPDM Elastomer	Fair	60	Service below 35 %; swelling and embrittlement above.	Parker O-ring Chemical Compatibility
Viton (FKM) Elastomer	Poor	—	Use EPDM or PTFE for sealing	Solvay H2O2 Safety & Handling
PTFE Fluoropolymer	Excellent	200	Universal compatibility; preferred lining material.	Cole-Parmer Chemical Compatibility
PVDF (Kynar) Fluoropolymer	Excellent	100	Standard for high-purity peroxide service.	Solvay H2O2 Materials of Construction
Borosilicate Glass Glass Ceramic	Excellent	100	Inert to all oxidizers within normal service temperatures.	Cole-Parmer Chemical Compatibility
Concrete (untreated) Glass Ceramic	Not recommended	—	Reactive; line with HDPE/FRP	Solvay H2O2 Safety & Handling
304 Stainless Steel Metal	Fair	40	Surface oxidation at higher concentrations; passivate before service.	Cole-Parmer Chemical Compatibility
316L Stainless Steel Metal	Good	60	Passive layer stable; avoid prolonged service above 60 °C.	Solvay H2O2 Materials of Construction
Aluminium 1100/3003 Metal	Good	40	Limit to dilute service	Solvay H2O2 Safety & Handling

MATERIAL	RATING	MAX T (°C)	NOTES	SOURCE
Brass Metal	Not recommen ded	—	Copper-induced decomposition	Solvay H2O2 Safety & Handling
Carbon Steel Metal	Not recommen ded	—	Rapid corrosion; never use with oxidizers.	Cole-Parmer Chemical Compatibility
Copper Metal	Not recommen ded	—	Catalytic decomposition; severe	Solvay H2O2 Safety & Handling
CPVC Thermoplastic	Good	60	Acceptable to 60 °C	Solvay H2O2 Safety & Handling
HDPE Thermoplastic	Good	25	Good below 25 °C; reaction with peroxides accelerates at higher T.	Cole-Parmer Chemical Compatibility
Polypropylene Thermoplastic	Good	25	Service below 35 °C at ambient; avoid above 25 °C.	Cole-Parmer Chemical Compatibility
PVC Thermoplastic	Fair	40	Embrittlement risk above 40 °C	Solvay H2O2 Safety & Handling

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

UN2014 **Adjudicated**

PACKING GROUP

II **Adjudicated**

HAZARD CLASS

5.1 **Adjudicated**

PROPER SHIPPING NAME

Hydrogen peroxide, aqueous solutions with not less than 20 percent but not more than 40 percent hydrogen peroxide (stabilized as necessary)

Adjudicated

GHS / OSHA HAZCOM 2012

SIGNAL WORD

Danger **Adjudicated**

H-CODES (HAZARD STATEMENTS)

H272, H302, H314, H332, H335 **Adjudicated**

P-CODES (PRECAUTIONARY STATEMENTS)

P210, P220, P260, P261, P264, P270, P271, P280, P301+P312, P301+P330+P331, P303+P361+P353, P304+P340, P305+P351+P338, P310, P312, P321, P330, P363, P370+P378, P403+P233, 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.

APPLICATION GUIDANCE

Hydrogen Peroxide 35% is supplied for applications where controlled, selective oxidation is required. Grade selection drives the choice between bulk industrial oxidation, electronics/semiconductor cleaning, and pharmaceutical-grade disinfection.

- Pulp and textile bleaching
- Wastewater treatment and odor control
- Etching and surface cleaning (electronics-grade only)
- Disinfection and sterilization (food/pharma-grade only)
- Chemical synthesis and polymerization initiation

Materials of construction must be rated for the concentration and temperature in service. Avoid contact with reducing agents, transition metals, and organic combustibles.

STORAGE & HANDLING

RECOMMENDED STORAGE

Cool, well-ventilated area, away from heat, sunlight, and combustibles. Vented containers only — pressure may develop from slow decomposition. Original sealed containers; segregate from organics, metals (especially copper, iron, manganese), and reducing agents.

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

INCOMPATIBILITIES

Combustible materials, organic compounds, reducing agents, transition metal salts (catalytic decomposition), strong bases.

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

HANDLING PRECAUTIONS

Use PPE including face shield, chemical-resistant gloves, and apron. Avoid contamination — never return unused material to the original container. Ground all transfer equipment.

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)

UN2014, Hydrogen peroxide, aqueous solutions with not less than 20 percent but not more than 40 percent hydrogen peroxide (stabilized as necessary), 5.1, PG II

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

NMFC CLASS 65	PLACARD Oxidizer	PACKING GROUP PG II
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REVISION HISTORY

VERSION	DATE	CHANGE	TRIGGER
1.1	2026-09-09	Canonical data updated: 14 fields changed via the provenance/adjudication pipeline. - unNumber · canonical change (coa.data_provenance / adjudication) - hazardClass · canonical change (coa.data_provenance / adjudication) - packingGroup · canonical change (coa.data_provenance / adjudication) - dotSubsidiaryHazardClass · canonical change (coa.data_provenance / adjudication) - dotProperShippingName · canonical change (coa.data_provenance / adjudication) - signalWord · canonical change (coa.data_provenance / adjudication) - ghsClassification · canonical change (coa.data_provenance / adjudication) - hazard_h_codes · canonical change (coa.data_provenance / adjudication) - hazard_p_codes · canonical change (coa.data_provenance / adjudication) - casNumber · canonical change (coa.data_provenance / adjudication) - formula · canonical change (coa.data_provenance / adjudication) - molecularWeight · canonical change (coa.data_provenance / adjudication) - hsCode · canonical change (coa.data_provenance / adjudication) - countryOfOrigin · canonical change (coa.data_provenance / adjudication)	canonical_change

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.