Technical Data Sheet

Sodium Chloride Technical Grade

Technical

Alliance Code	Revised	Revision
SHOPIFY-7992479711274	2026-10-13	1.4

CAS number

7647-14-5

Structure · PubChem

Grade

Technical

Signal word

Not Classified

IDENTITY & COMPOSITION

PRODUCT NAME

Sodium Chloride Technical Grade

ALLIANCE CODE

SHOPIFY-7992479711274

GRADE

Technical

CONCENTRATION

—

CAS NUMBER

7647-14-5 Adjudicated

FORMULA

NaCl Adjudicated

MOLECULAR WEIGHT

58.44 Adjudicated

PRODUCT TYPE

—

SPECIFICATIONS

TEST	SPECIFICATION	TYPICAL	METHOD	SOURCE
Assay (NaCl, dry basis)	99.5% Min	—	—	Interpreted
Anti-Caking Agent	No	—	—	Interpreted
Insolubles	Max 0.03 %	—	—	Interpreted

TEST	SPECIFICATION	TYPICAL	METHOD	SOURCE
Yellow prussiate of soda (sodium ferrocyanide anticaking agent)	13PPM Max	—	—	Interpreted
Sulfate (as SO4)	0.08% Max	—	—	Interpreted
Calcium (Ca)	0.15% Max	—	—	Interpreted
Magnesium (Mg)	0.15% Max	—	—	Interpreted
Surface moisture	0.2% Max	—	—	Interpreted
Iron (Fe)	Max 10 ppm	—	ICP-OES / AAS after aqueous dissolution	Interpreted
Granulation - through USS No. 20 sieve (850 um)	Min 95 %	—	Dry sieve, ASTM E11 screens (ASTM D632 procedure)	Interpreted
loss on ignition	40 - 52 %	—	—	Interpreted
sieve - retained on pan	0 - 5 %	—	—	Interpreted
sieve - uss 4mesh retained	95 - 100 %	—	—	Interpreted

Values are reproduced from the current product reference. Source labels do not by themselves establish a supplier guarantee or a test result for your lot. Confirm applicable acceptance limits and request lot-specific documentation.

PHYSICAL & CHEMICAL PROPERTIES

PROPERTY	VALUE	SOURCE
Appearance	White crystalline solid, free-flowing and odorless	Adjudicated
pH	6.0 - 9.0	Interpreted
Density	70 - 80 lb/ft3	Interpreted
Boiling Point	1413 °C	Adjudicated
Melting Point	801 °C	Adjudicated

MATERIALS OF CONSTRUCTION

MATERIAL	RATING	MAX T (°C)	NOTES	SOURCE
Buna-N (NBR) Elastomer	Good	60	Acceptable	Cole-Parmer Chemical Compatibility
EPDM Elastomer	Excellent	100	Standard for brine gaskets.	Parker O-ring Chemical Compatibility
Viton (FKM) Elastomer	Excellent	100	Preferred elastomer	Cole-Parmer Chemical Compatibility
Borosilicate Glass Glass Ceramic	Excellent	100	Universally inert to salt solutions.	Cole-Parmer Chemical Compatibility
Concrete (sealed) Glass Ceramic	Good	—	Acceptable with epoxy coating	Cole-Parmer Chemical Compatibility
304 stainless steel Metal	Fair	25	Pitting in chloride-rich service	Cole-Parmer Chemical Compatibility
316L Stainless Steel Metal	Good	60	Watch for chloride pitting above 60 °C in chloride salts.	NACE Chloride Pitting Guidelines

MATERIAL	RATING	MAX T (°C)	NOTES	SOURCE
Aluminium Metal	Poor	—	Pitting; not recommended for brine	Cole-Parmer Chemical Compatibility
Carbon steel Metal	Poor	—	Rapid rust in brine	Cole-Parmer Chemical Compatibility
FRP Thermoplastic	Excellent	60	Common bulk-storage	Cole-Parmer Chemical Compatibility
HDPE Thermoplastic	Excellent	60	Universal salt brine compatibility.	Cole-Parmer Chemical Compatibility
PP Thermoplastic	Excellent	80	Acceptable for hot brine	Cole-Parmer Chemical Compatibility
PVC Thermoplastic	Excellent	60	Standard for brine piping.	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

Not regulated Adjudicated

HAZARD CLASS

Not regulated Adjudicated

PACKING GROUP

Not regulated Adjudicated

PROPER SHIPPING NAME

Not regulated Adjudicated

GHS / OSHA HCS 2024

SIGNAL WORD

Not Classified Adjudicated

H-CODES (HAZARD STATEMENTS)

— no canonical

P-CODES (PRECAUTIONARY STATEMENTS)

— no canonical

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: NIOSH Pocket Guide for REL/IDLH, OSHA Z-Tables for PEL. Always verify against the latest regulatory text before shipment-critical decisions.

APPLICATIONS

Industrial-grade sodium chloride used for water softening icl-industrialproducts.com

Used in swimming pools icl-industrialproducts.com

Used in dishwashers icl-industrialproducts.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

Keep containers tightly closed in a dry, cool, well-ventilated place away from incompatible materials. Hygroscopic; protect from moisture.

Adjudicated

HANDLING PRECAUTIONS

Standard chemical PPE — dust mask and goggles for handling of fine grades. Avoid generating airborne dust.

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

INCOMPATIBILITIES

Strong oxidizing agents; strong acids; metals.

Adjudicated

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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Not regulated for transport.
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Confirm against shipping documents and carrier requirements before tender.

NMFC CLASS

70

REVISION HISTORY

Last reviewed 2026-10-13 by Andre Taki, Chief Commercial Officer, DOT Hazmat–certified (49 CFR 172.704).

VERSION	DATE	CHANGE	TRIGGER
1.4	2026-10-13	Canonical data updated: 4 fields changed via the provenance/adjudication pipeline. • `storage_precautions` · canonical change (coa.data_provenance / adjudication) • `incompatible_materials` · canonical change (coa.data_provenance / adjudication) • `conditions_to_avoid` · canonical change (coa.data_provenance / adjudication) • `hazardous_decomposition_products` · canonical change (coa.data_provenance / adjudication)	`canonical_change`

VERSION	DATE	CHANGE	TRIGGER
1.3	2026-09-30	Canonical data updated: 3 fields changed via the provenance/adjudication pipeline. • boilingPoint · canonical change (coa.data_provenance / adjudication) • meltingPoint · canonical change (coa.data_provenance / adjudication) • appearance · canonical change (coa.data_provenance / adjudication)	canonical_change
1.2	2026-09-14	Canonical data updated: 9 fields changed via the provenance/adjudication pipeline. • casNumber · canonical change (coa.data_provenance / adjudication) • formula · canonical change (coa.data_provenance / adjudication) • molecularWeight · canonical change (coa.data_provenance / adjudication) • ghsClassification · canonical change (coa.data_provenance / adjudication) • signalWord · canonical change (coa.data_provenance / adjudication) • unNumber · canonical change (coa.data_provenance / adjudication) • hazardClass · canonical change (coa.data_provenance / adjudication) • packingGroup · canonical change (coa.data_provenance / adjudication) • dotProperShippingName · canonical change (coa.data_provenance / adjudication)	canonical_change
1.1	2026-08-25	Canonical data updated: 5 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) • dotProperShippingName · canonical change (coa.data_provenance / adjudication) • signalWord · 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.