

TECHNICAL DATA SHEET

Sodium Bisulfite 10% ACS Grade

ACS · 10%

CAS NUMBER	ALLIANCE CODE	GENERATED
7631-90-5	sodium-bisulfite-10-ac-s-grade	2026-08-31
REVISION	REVIEWED	
1.4	2026-07-17 · Andre Taki	

IDENTITY & COMPOSITION

PRODUCT NAME	ALLIANCE CODE
Sodium Bisulfite 10% ACS Grade	sodium-bisulfite-10-ac-s-grade
GRADE	CONCENTRATION
ACS	10%
CAS NUMBER	FORMULA
7631-90-5 PubChem	HNaO3S PubChem
MOLECULAR WEIGHT	PRODUCT TYPE
104.06 PubChem	solution

SPECIFICATIONS

TEST	SPECIFICATION	TYPICAL	METHOD	SOURCE
Assay (NaHSO3)	9.5 – 10.5 % by wt	10.0 %	—	Commercial practice
Chloride (Cl)	≤ 0.002 %	0.00013 %	—	Derived by dilution
Heavy metals (as Pb)	≤ 0.0001 %	0.000025 %	—	Derived by dilution

TEST	SPECIFICATION	TYPICAL	METHOD	SOURCE
Insoluble matter	$\leq 0.0005\%$	0.0001 %	—	Derived by dilution
Iron (Fe)	$\leq 0.0002\%$	0.00003 %	—	Derived by dilution
Sulfur dioxide (SO ₂), available	5.9 – 6.5 % by wt	6.2 %	Iodometric titration (I ₂ / Na ₂ S ₂ O ₃ back-titration)	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 ACS	10%	—	current
ACS Grade	40%	—	sodium-bisulfite-40-acs-grade
Technical	40%	—	sodium-bisulfite-40
ACS	25%	—	sodium-bisulfite-25-acs-grade
Technical	25%	—	sodium-bisulfite-25
Technical	15%	—	sodium-bisulfite-15-technical-grade
Technical	10%	—	sodium-bisulfite-10-technical-grade
ACS	—	—	sodium-bisulfite-15-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
pH	4.0 – 5.5	Interpreted
Specific Gravity (20 °C)	1.070 – 1.090	Interpreted

REGULATORY & TRANSPORT

DOT / 49 CFR

UN NUMBER

UN2693 **Adjudicated**

HAZARD CLASS

8 **Adjudicated**

PACKING GROUP

III **Adjudicated**

PROPER SHIPPING NAME

Bisulfites, aqueous solutions, n.o.s.

Adjudicated

GHS / OSHA HAZCOM 2012

SIGNAL WORD

Danger **Adjudicated**

H-CODES (HAZARD STATEMENTS)

EUH031, H302, H318 **Adjudicated**

P-CODES (PRECAUTIONARY STATEMENTS)

P264, P270, P301+P312, P330, 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

Dechlorination in municipal wastewater, pulp & paper, power, and textile water treatment plants

ineos.com

Oxygen scavenger and boiler water treatment

ineos.com

Preservative in the photo developer process ineos.com

Flue gas desulfurization ineos.com

Food additive (source is a sodium bisulfite solution stated to meet FCC, ACS and/or USP specifications; grade-scoped to ACS handles)

ineos.com

Laboratory, research, or manufacturing use (ACS reagent grade material)

digitalassets.avantorsciences.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, dry, well-ventilated area in original sealed containers. Refer to product SDS for material-specific guidance.

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

INCOMPATIBILITIES

Consult the SDS for material-specific incompatibilities.

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

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.

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)

UN2693, Bisulfites, aqueous solutions, n.o.s., 8, PG III

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

NMFC CLASS
65

PLACARD
Corrosive

PACKING GROUP
PG III

REVISION HISTORY

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

VERSION	DATE	CHANGE	TRIGGER
1.4	2026-08-19	Canonical data updated: 1 field changed via the provenance/adjudication pipeline. unNumber · canonical change (coa.data_provenance / adjudication)	canonical_change
1.3	2026-08-05	Canonical data updated: 3 fields changed via the provenance/adjudication pipeline. - hazardClass · canonical change (coa.data_provenance / adjudication) - packingGroup · canonical change (coa.data_provenance / adjudication) - unNumber · canonical change (coa.data_provenance / adjudication)	canonical_change
1.2	2026-07-22	Canonical data updated: 2 fields changed via the provenance/adjudication pipeline. - dotSubsidiaryHazardClass · canonical change (coa.data_provenance / adjudication) - dotProperShippingName · canonical change (coa.data_provenance / adjudication)	canonical_change
1.1	2026-07-17	Canonical data re-verified: 5 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). - 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
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.