Technical Data Sheet

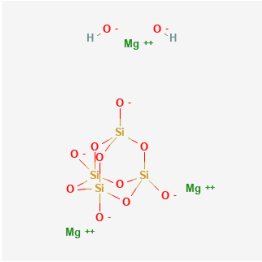
Talc Powder ACS

ACS

Alliance Code	Revised	Revision
talc-powder-acs	2026-10-13	1.6

CAS number

14807-96-6



Structure · PubChem

Grade

ACS

Signal word

Danger

Hazards

Health hazard H350

IDENTITY & COMPOSITION

PRODUCT NAME

Talc Powder ACS

ALLIANCE CODE

talc-powder-acs

GRADE

ACS

CONCENTRATION

—

CAS NUMBER

14807-96-6 PubChem

FORMULA

Mg3Si4O10(OH)2 Adjudicated

MOLECULAR WEIGHT

379.27 g/mol Adjudicated

PRODUCT TYPE

Pure substance

SPECIFICATIONS

TEST	SPECIFICATION	TYPICAL	METHOD	SOURCE
Content of magnesium	17.0 % to 19.5 %	—	Atomic absorption spectrophotometry, magnesium emission line 285.2 nm, air-acetylene flame	Interpreted

TEST	SPECIFICATION	TYPICAL	METHOD	SOURCE
Absence of asbestos	Absence of asbestos; certificate of analysis states the absence of asbestos and the method used	—	IR absorption (test A) or X-ray diffraction (test B); if either is positive, optical microscopy per USP <776> (test C)	Interpreted
Acid-soluble substances (as SO4)	2.5 % max	—	—	Interpreted
Acidity and alkalinity	Not more than 0.4 mL of 0.01 N hydrochloric acid; not more than 0.3 mL of 0.01 N sodium hydroxide	—	Boil 2.5 g with 50 mL carbon dioxide-free water under reflux; titrate filtrate with bromothymol blue TS and with phenolphthalein TS	Interpreted
Free alkali (as NaOH)	1 % max	—	—	Interpreted
Arsenic	3 mg/kg max	—	—	Interpreted
Limit of calcium	0.9 % max	—	Atomic absorption spectrophotometry, calcium emission line 422.7 nm, nitrous oxide-acetylene flame	Interpreted
Heavy metals	0.004 % max	—	—	Interpreted
Identification A (infrared absorption)	Maxima at 3677 +/- 2 cm-1, 1018 +/- 2 cm-1 and 669 +/- 2 cm-1	—	IR spectrum of a potassium bromide dispersion	Interpreted
Limit of iron	0.25 % max	—	Atomic absorption spectrophotometry, iron emission line 248.3 nm, air-acetylene flame	Interpreted

TEST	SPECIFICATION	TYPICAL	METHOD	SOURCE
Limit of lead	0.001 % max	—	Atomic absorption spectrophotometry, lead emission line 217.0 nm, air-acetylene flame	Interpreted
Limit of aluminum	2.0 % max	—	Atomic absorption spectrophotometry, aluminum emission line 309.3 nm, nitrous oxide-acetylene flame	Interpreted
Loss on drying	0.5 % max	—	—	Interpreted
Loss on ignition	7.0 % max	—	USP <733>; ignite about 1 g at 1075 +/-25 C to constant weight	Interpreted
Soluble salts	0.2 % max	—	—	Interpreted
Water-soluble substances	5 mg (0.1 %) max	—	Reflux 10.0 g with 50 mL carbon dioxide-free water 30 min; evaporate 25.0 mL of filtrate, dry at 105 C for 1 hour	Interpreted
Identification B (X-ray diffraction)	Diffraction pattern corresponds to that of the talc reference standard	—	XRD, Cu K-alpha, compared to talc reference standard	Interpreted
Fineness (residue on 75-um / No. 200 sieve)	99.0 % min passing	—	Dry sieve analysis, 75-um woven-wire sieve	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 to grayish-white fine powder	Adjudicated
Form	Powder	Published reference
Odor	Odorless.	Published reference
Density	2.7 g/cm^3 to 2.8 (NTP, 1992)	Published reference
Boiling Point	Not applicable	Adjudicated
Melting Point	1700 to 1800 °F (NTP, 1992)	Published reference
Flash Point	Not applicable	Published reference
Vapor Pressure	0 mmHg at 68 °F Essentially (NTP, 1992)	Published reference
Solubility (water)	less than 1 mg/mL at 70 °F (NTP, 1992)	Published reference

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

Danger Adjudicated

H-CODES (HAZARD STATEMENTS)

H350 Adjudicated

P-CODES (PRECAUTIONARY STATEMENTS)

P201, P202, P280, P308+P313, P405, P501

Adjudicated

OCCUPATIONAL EXPOSURE LIMITS

OSHA PEL (29 CFR 1910.1000)

20 mppcf TWA OSHA 29 CFR 1910.1000

ACGIH TLV

— no canonical

NIOSH REL

2 mg/m^3 TWA (respirable) NIOSH Pocket Guide

NIOSH IDLH

1000 mg/m^3 NIOSH Pocket Guide

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

Laboratory and analytical reagent use. fishersci.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. Non-combustible solid; minimize dust formation and accumulation.

Adjudicated

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

Strong oxidizing agents. 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
1.6	2026-10-13	Canonical data updated: 1 field changed via the provenance/adjudication pipeline. • storage_precautions · canonical change (coa.data_provenance / adjudication)	canonical_change
1.5	2026-10-12	Canonical data updated: 6 fields changed via the provenance/adjudication pipeline. • formula · canonical change (coa.data_provenance / adjudication) • molecularWeight · canonical change (coa.data_provenance / adjudication) • boilingPoint · 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
1.4	2026-10-06	Canonical data updated: 1 field changed via the provenance/adjudication pipeline. • appearance · canonical change (coa.data_provenance / adjudication)	canonical_change
1.3	2026-10-05	Canonical data updated: 3 fields changed via the provenance/adjudication pipeline. • oel_niosh_rel · canonical change (coa.data_provenance / adjudication) • oel_idlh · canonical change (coa.data_provenance / adjudication) • oel_osha_pel · canonical change (coa.data_provenance / adjudication)	canonical_change

VERSION	DATE	CHANGE	TRIGGER
1.2	2026-10-02	Canonical data updated: 4 fields changed via the provenance/adjudication pipeline. • 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)	canonical_change
1.1	2026-06-17	Canonical data re-verified: 3 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) • dotSubsidiaryHazardClass · 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.