

1. Product and company identification

Product identifier

Trade name: 639A1 - Talcum Powder

Chemical name: Talc ($\text{Mg}_3\text{H}_2(\text{SiO}_3)_4$)

Synonym(s): Talcum

Relevant identified uses of the substance or mixture and uses advised against

General use: Filler, pigment for orthopedic procedures.
Reserved for industrial and professional use.

Details of the supplier of the safety data sheet

Company name: Otto Bock Health Care

Street/POB-No.: 3820 W. Great Lakes Drive

Postal Code, city: Salt Lake City, UT 84120
USA

WWW: www.ottobockus.com

Telephone: +1 (801) 956-2400

Telefax: +1 (801) 956-2401

Department responsible for information:
Quality Department,
Telephone: +1 (801) 954-2304 (7 AM – 3 PM, Mountain Time),
Email: USRegulatory@ottobock.com

Additional information: Corporate headquarters:
Ottobock SE & Co. KGaA
Max-Näder-Straße 15
Duderstadt
Germany

Emergency phone number

CHEMTREC, Telephone: +1 (800) 424-9300

Transport:
CONSULTANK Lutz Harder GmbH (Contract QUALI003)
Telephone: +49 (0)178-4337434 (from USA: 01149 178 4337434)

2. Hazards identification

Emergency overview

Appearance: Physical state at 68 °F and 101.3 kPa: solid
Form: Powder
Color: white, cream to light gray

Odor: Odorless

Classification: This substance is classified as not hazardous.

Regulatory status

This material is not considered hazardous by the U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200).

Hazards not otherwise classified

Depending on handling and use (e.g. grinding, drying) formation of air-borne, respirable crystalline silicon dioxide is possible.

A repeated, excessive dust exposure can cause pneumoconiosis. May cause skin and eye irritation.

see section 11: Toxicological information

3. Composition / Information on ingredients

Chemical characterization: Talc ($\text{Mg}_3\text{H}_2(\text{SiO}_3)_4$)

UVCB substance

Purity: > 70%

CAS-Number: 14807-96-6

RTECS-Number: WW2710000

Additional information: Contains:

Chlorite-group minerals (CAS 1318-59-8): < 25%

Dolomite (CAS 16389-88-1): < 5%

Magnesium carbonate (CAS 546-93-0): < 2%

Quartz (SiO_2) (CAS 14808-60-7): < 1.1% (respirable fraction < 1%)

The maximum workplace exposure limits are, where necessary, listed in section 8.

4. First aid measures

In case of inhalation: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical attention if problems persist.

Following skin contact: Remove residues with soap and water. Take off contaminated clothing and wash it before reuse. In case of skin reactions, consult a physician.

After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. In case of eye irritation consult an ophthalmologist.

After swallowing: Rinse mouth immediately and drink plenty of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention.

Most important symptoms/effects, acute and delayed

Depending on handling and use (e.g. grinding, drying) formation of air-borne, respirable crystalline silicon dioxide is possible. May cause skin and eye irritation.

Information to physician

Treat symptomatically.

5. Fire fighting measures

Flash point/flash point range:

Not applicable

Auto-ignition temperature: Not self-igniting

Suitable extinguishing media:

Product is non-combustible. Extinguishing materials should therefore be selected according to surroundings.

Extinguishing media which must not be used for safety reasons:

Full water jet

Specific hazards arising from the chemical

Fires in the immediate vicinity may cause the development of dangerous vapors.
Furthermore, there may develop: Metal oxide smoke.

Protective equipment and precautions for firefighters:

Wear self-contained breathing apparatus.

Additional information:

Do not breathe fumes. Do not allow fire water to penetrate into surface or ground water.

6. Accidental release measures

Personal precautions:

Avoid generation of dust. Do not breathe dust. Do not get in eyes, on skin, or on clothing.
If possible, eliminate leakage. Provide adequate ventilation. Wear appropriate protective equipment. Take off contaminated clothing and wash it before reuse.

Environmental precautions:

Do not release large quantities into the surface water or into drains.

Methods for clean-up:

Take up mechanically, placing in appropriate containers for disposal. Never return spills in original containers for re-use.

7. Handling and storage

Handling

Advices on safe handling:

Provide adequate ventilation, and local exhaust as needed. Avoid generation of dust. Do not breathe dust. Do not get in eyes, on skin, or on clothing.
Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Wear appropriate protective equipment.
Take off contaminated clothing and wash it before reuse. Have eye wash bottle or eye rinse ready at work place.

Storage

Requirements for storerooms and containers:

Keep container tightly closed and in a well-ventilated place. Keep container dry. Keep only in original container. Store containers in upright position.

Hints on joint storage:

Keep away from food, drink and animal feedingstuffs.

8. Exposure controls / personal protection

Exposure guidelines

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
14807-96-6	639A1 - Talcum Powder	USA: ACGIH: TWA	10 mg/m ³ (Dust limit value, inhalable fraction)
		USA: ACGIH: TWA	2 mg/m ³ (respirable fraction)
		USA: ACGIH: TWA	3 mg/m ³ (Dust limit value, respirable fraction)
		USA: NIOSH: TWA	2 mg/m ³
		USA: OSHA: TWA	15 mg/m ³ (Dust limit value, total dust)
		USA: OSHA: TWA	20 mppcf Containing less than 1% quartz
		USA: OSHA: TWA	5 mg/m ³ (Dust limit value, respirable fraction)
546-93-0	Magnesium carbonate	USA: NIOSH: TWA	10 mg/m ³ (inhalable fraction)
		USA: NIOSH: TWA	5 mg/m ³ (respirable fraction)
		USA: OSHA: TWA	15 mg/m ³ (total dust)
		USA: OSHA: TWA	5 mg/m ³ (respirable fraction)
14808-60-7	Silicon dioxide (Quartz (SiO ₂))	USA: ACGIH: TWA	0.025 mg/m ³ (respirable fraction)
		USA: IDLH: TWA	25 mg/m ³ (respirable fraction, cristobalite/tridymite)
		USA: IDLH: TWA	50 mg/m ³ (respirable fraction, quartz/tripoli)
		USA: NIOSH: TWA	0.05 mg/m ³ (respirable fraction)
		USA: OSHA: TWA	10 mg/m ³ / % SiO ₂ + 2 (respirable fraction)
		USA: OSHA: TWA	250 mppcf/ % SiO ₂ +5 (fine dust)
		USA: OSHA: TWA	30 mg/m ³ / % SiO ₂ + 2 (inhalable fraction)

Engineering controls

Provide good ventilation and/or an exhaust system in the work area. In the case of the formation of dust: Dust should be exhausted directly at the point of origin.

See also information in chapter 7, section storage.

Personal protection equipment (PPE)

Eye/face protection: Tightly sealed goggles according to OSHA Standard - 29 CFR: 1910.133 or ANSI Z87.1-2010.

Skin protection: Wear suitable protective clothing.

Protective gloves according to OSHA Standard - 29 CFR: 1910.138.

Observe glove manufacturer's instructions concerning penetrability and breakthrough time. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Respiratory protection: Respiratory protection must be worn whenever the TLV (WEL) levels have been exceeded. In case of inadequate ventilation wear respiratory protection.
Recommendation: Particulates filter P2 according to OSHA Standard - 29 CFR: 1910.134 or ANSI Z88.2.
The filter class must be suitable for the maximum contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product.

General hygiene considerations:
Avoid generation of dust. Do not breathe dust. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product.
Wash hands thoroughly after handling. Take off contaminated clothing and wash it before reuse. Have eye wash bottle or eye rinse ready at work place.

Environmental exposure controls

Refer to 6.: Section "Environmental precautions".

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance: Physical state at 68 °F and 101.3 kPa: solid
Form: Powder
Color: white, cream to light gray

Odor: Odorless

Odor threshold: No data available

pH: at 10%: 9.0 - 9.5

Melting point/freezing point: > 2372 °F

Initial boiling point and boiling range: Not determined

Flash point/flash point range: Not applicable

Evaporation rate: No data available

Flammability: Product is non-combustible.

Explosion limits: LEL (Lower Explosion Limit): Not applicable
UEL (Upper Explosive Limit): Not applicable

Vapor pressure: No data available

Vapor density: No data available

Density: 2.58 - 2.83 g/cm³

Water solubility: Practically insoluble

Partition coefficient: n-octanol/water: No data available

Auto-ignition temperature: Not self-igniting

Thermal decomposition: > 1832 °F (Release of water of crystalization)

Explosive properties: Product is not explosive.

Oxidizing characteristics: Not oxidising

Ignition temperature: Not applicable

10. Stability and reactivity

Reactivity: Refer to subsection "Possibility of hazardous reactions".

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions:

No hazardous reaction when handled and stored according to provisions.

Conditions to avoid:

Protect from moisture contamination.

Incompatible materials:

No data available

Hazardous decomposition products:

No hazardous decomposition products when regulations for storage and handling are observed.

Thermal decomposition:

> 1832 °F (Release of water of crystalization)

11. Toxicological information

Toxicological tests

Acute toxicity:

LD50 Rat, oral: > 5,000 mg/kg

Toxicological effects:

Acute toxicity (oral): Based on available data, the classification criteria are not met.

Acute toxicity (dermal): Based on available data, the classification criteria are not met.

Acute toxicity (inhalative): Based on available data, the classification criteria are not met.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Specific symptoms in animal studies, Rabbit: Not an irritant (OECD 404)

Serious eye damage/irritation: Lack of data.

Sensitisation to the respiratory tract: Lack of data.

Skin sensitisation: Lack of data.

Germ cell mutagenicity/Genotoxicity: Based on available data, the classification criteria are not met.

(OECD 471)

Carcinogenicity: Based on available data, the classification criteria are not met.

Product is free of Asbestos.

Carcinogenic effect:

IARC Rating: Group 3

OSHA Carcinogen: not listed

NTP Rating: not listed

Reproductive toxicity: Lack of data.

Effects on or via lactation: Lack of data.

Specific target organ toxicity (single exposure): Lack of data.

Specific target organ toxicity (repeated exposure): Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

Other information:

Carcinogenic effect, quartz (CAS 14808-60-7):

IARC Rating: Group 1

OSHA Carcinogen: not listed

NTP Rating: listed

Symptoms

A repeated, excessive dust exposure can cause pneumoconiosis.

12. Ecological information

Ecotoxicity

Aquatic toxicity: No harmful effect in the area of water solubility.

Mobility in soil

No data available

Persistence and degradability

Further details: The methods for determining the biological degradability are not applicable to inorganic substances.

Additional ecological information

Volatile organic compounds (VOC):

0 % by weight

General information: Do not release large quantities into the surface water or into drains.

13. Disposal considerations

Product

Recommendation: Dispose of waste according to applicable legislation. Do not allow to enter drains.

Package

Recommendation: Dispose of waste according to applicable legislation. Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

14. Transport information

UN number

ADR/RID, IMDG, IATA-DGR:

not applicable

UN proper shipping name

ADR/RID, IMDG, IATA-DGR:

Not restricted

Transport hazard class(es)

ADR/RID, IMDG, IATA-DGR:

not applicable

Packing group

ADR/RID, IMDG, IATA-DGR:

not applicable

Environmental hazards

Marine pollutant:

no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available

USA: Department of Transportation (DOT)

Proper shipping name: Not restricted

Sea transport (IMDG)

Proper shipping name:: Not restricted

Marine pollutant: no

Air transport (IATA)

Proper shipping name:: Not restricted

Further information

No dangerous good in sense of these transport regulations.

15. Regulatory information

National regulations - U.S. Federal Regulations

Product: TSCA Inventory: listed
 Carcinogen Status:
 IARC Rating: Group 3
 OSHA Carcinogen: not listed
 NTP Rating: not listed
 NIOSH Recommendations:
 Occupational Health Guideline: 0584

Dolomite: TSCA Inventory: listed

Magnesium carbonate: TSCA Inventory: listed
 NIOSH Recommendations:
 Occupational Health Guideline: 0373

Silicon dioxide (Quartz (SiO₂)): TSCA Inventory: listed
 Carcinogen Status:
 IARC Rating: Group 1
 OSHA Carcinogen: not listed
 NTP Rating: listed
 NIOSH Recommendations:
 Occupational Health Guideline: 0553

National regulations - U.S. State Regulations

Silicon dioxide (Quartz (SiO₂)): California Proposition 65: cancer

16. Other information

Hazard rating systems:



NFPA Hazard Rating:

Health: 1 (Slight)

Fire: 0 (Minimal)

Reactivity: 0 (Minimal)

HMIS Version III Rating:

Health: 1 (Slight)

Flammability: 0 (Minimal)

Physical Hazard: 0 (Minimal)

Personal Protection: X = Consult your supervisor

HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	0
	X

Abbreviations and acronyms:

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
 AS/NZS: Australian Standards/New Zealand Standards
 CAS: Chemical Abstracts Service
 CFR: Code of Federal Regulations
 CLP: Classification, Labelling and Packaging
 DMEL: Derived minimal effect level
 DNEL: Derived no-effect level
 EC: European Community
 EmS: Emergency Response Procedures for Ships Carrying Dangerous Goods
 EN: European Standard
 EQ: Excepted quantities
 IATA: International Air Transport Association
 IATA-DGR: International Air Transport Association – Dangerous Goods Regulations
 IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
 IMDG Code: International Maritime Dangerous Goods Code
 IMO: International Maritime Organization
 LD50: Lethal dose 50%
 LEL: Lower Explosion Limit
 MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
 MFSU: Manufacture, formulation, supply and use
 OECD: Organisation for Economic Co-operation and Development
 OEL: Occupational Exposure Limit Value
 OSHA: Occupational Safety and Health Administration
 PBT: Persistent, bioaccumulative and toxic
 PNEC: Predicted no-effect concentration
 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
 RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
 TLV: Threshold Limit Value
 TRGS: Technical Rules for Hazardous Substances
 UVCB: Substance of unknown or variable composition, complex reaction products or biological materials
 vPvB: Very persistent and very bioaccumulative
 WEL: Workplace Exposure Limit

Reason of change:

Changes in section 1: Product identifiers
 Changes in section 3: Composition/information on ingredients
 Changes in section 9: Physical and chemical properties
 General revision

Date of first version:

10/29/2008

Department issuing data sheet

Contact person:

see section 1: Department responsible for information

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.