

1. Product and company identification

Product identifier

Trade name: 87A1 - Alginat

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

General use: For casts and for scar treatment 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: pink
Odor: Pleasant odor
Classification: This material 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

Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.
see section 11: Toxicological information

3. Composition / Information on ingredients

Chemical characterization: Mixture of the substances listed below with non-hazardous additions.

Relevant ingredients:

CAS No.	Designation	Concentration	Classification
CAS 16919-27-0	Dipotassium hexafluorotitanate	1 - 2.5 %	Acute Toxicity - oral - Category 4. Eye Damage - Category 1. Specific Target Organ Toxicity (Single Exposure) - Category 3.

Additional information: Contains Diatomaceous earth, soda ash flux-calcined, Talcum and Magnesium oxide. 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 troubles or persistent symptoms, consult an ophthalmologist.

After swallowing: Rinse mouth. Never give anything by mouth to an unconscious person. Seek medical attention.

Most important symptoms/effects, acute and delayed

Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.

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: Sodium compounds, metallic oxides, hydrogen fluoride.

Protective equipment and precautions for firefighters:

Wear self-contained breathing apparatus and protective clothing to protect skin and eyes.

Additional information:

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

6. Accidental release measures

Personal precautions:	Provide adequate ventilation. Avoid generation of dust. In case of dust formation: Do not breathe dust. Wear appropriate protective equipment. Take off contaminated clothing and wash it before reuse.
Environmental precautions:	Do not allow to penetrate into soil, waterbodies or drains. If necessary, notify appropriate authorities.
Methods for clean-up:	Keep wet with water. Take up dust-free and set down dust-free. Large amounts: Withdraw by suction. (High efficiency particulate air filter (HEPA filter)) Place in appropriate containers for disposal. Final cleaning.

7. Handling and storage

Handling

Advices on safe handling:	Provide adequate ventilation, and local exhaust as needed. Avoid generation of dust. In case of dust formation: Do not breathe dust. Do not get in eyes, on skin, or on clothing. Wear appropriate protective equipment. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Take off contaminated clothing and wash it before reuse.
Precautions against fire and explosion:	Take standard precautions to prevent fire.

Storage

Requirements for storerooms and containers:	Keep container tightly closed and in a well-ventilated place. Keep container dry. Keep only in the original container. Protect from heat and direct sunlight.
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
	87A1 - Alginat	USA: ACGIH: TWA	10 mg/m ³ (Dust limit value, inhalable fraction)
		USA: ACGIH: TWA	3 mg/m ³ (Dust limit value, respirable fraction)
		USA: OSHA: TWA	15 mg/m ³ (Dust limit value, total dust)
		USA: OSHA: TWA	5 mg/m ³ (Dust limit value, respirable fraction)
14807-96-6	Talcum	USA: ACGIH: TWA	2 mg/m ³ (respirable fraction)
		USA: NIOSH: TWA	2 mg/m ³
		USA: OSHA: TWA	20 mppcf Containing less than 1% quartz
1309-48-4	Magnesium oxide	USA: ACGIH: TWA	10 mg/m ³ (inhalable fraction)
		USA: IDLH: TWA	750 mg/m ³ (Smoke)
		USA: OSHA: TWA	15 mg/m ³ (Total particles)

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.

Respiratory protection: Respiratory protection must be worn whenever the TLV (WEL) levels have been exceeded. In case of dust formation: 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.

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: pink
Odor:	Pleasant odor
Odor threshold:	No data available
pH:	Not applicable
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	No data available
Flash point/flash point range:	Not applicable
Evaporation rate:	Not applicable
Flammability:	No data available
Explosion limits:	No data available
Vapor pressure:	Not applicable
Vapor density:	Not applicable
Density:	No data available
Water solubility:	Insoluble
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	Not self-igniting
Thermal decomposition:	No data available
Viscosity, dynamic:	Not applicable
Viscosity, kinematic:	Not applicable
Explosive properties:	Not explosive
Solid content:	100 %

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 heat and direct sunlight. 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:	No data available

11. Toxicological information

Toxicological tests

Toxicological effects:

- Acute toxicity (oral): Based on available data, the classification criteria are not met.
- ATEmix (calculated): ATE > 2,000 mg/kg
- Acute toxicity (dermal): Based on available data, the classification criteria are not met.
- ATEmix (calculated): ATE > 2,000 mg/kg
- Acute toxicity (inhalative): Based on available data, the classification criteria are not met.
- ATEmix (calculated): ATE (dusts/mist) > 5 mg/L/4h
- Skin corrosion/irritation: Based on available data, the classification criteria are not met.
- Serious eye damage/irritation: Based on available data, the classification criteria are not met.
- Expert judgement and weight of evidence determination (neutralization).
- Sensitisation to the respiratory tract: Based on available data, the classification criteria are not met.
- Skin sensitisation: Based on available data, the classification criteria are not met.
- Germ cell mutagenicity/Genotoxicity: Based on available data, the classification criteria are not met.
- Carcinogenicity: Based on available data, the classification criteria are not met.
- Reproductive toxicity: Based on available data, the classification criteria are not met.
- Effects on or via lactation: Lack of data.
- Specific target organ toxicity (single exposure): Based on available data, the classification criteria are not met.
- 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:

- Information about Dipotassium hexafluorotitanate:
- LD50 Rat, oral: 324 mg/kg (OECD 401)
- Carcinogenic effect:
- Information about Talcum:
- IARC Rating: Group 3
- OSHA Carcinogen: not listed
- NTP Rating: not listed

Symptoms

Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.

12. Ecological information

Ecotoxicity

Further details: No data available

Mobility in soil

No data available

Persistence and degradability

Further details: No data available

Additional ecological information

General information: Do not allow to penetrate into soil, waterbodies or drains.

13. Disposal considerations

Product

Recommendation: Dispose of waste according to applicable legislation.

Package

Recommendation: Dispose of waste according to applicable legislation.
Non-contaminated packages may be recycled.

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

Diatomaceous earth, soda ash flux-calcined: TSCA Inventory: listed; UVCB

Talcum: TSCA Inventory: listed

Carcinogen Status:

IARC Rating: Group 3

OSHA Carcinogen: not listed

NTP Rating: not listed

NIOSH Recommendations:

Occupational Health Guideline: 0584

Dipotassium hexafluorotitanate: TSCA Inventory: listed

Magnesium oxide: TSCA Inventory: listed

NIOSH Recommendations:

Occupational Health Guideline: 0374

National regulations - U.S. State Regulations

Talcum: California Proposition 65 code: not listed

Massachusetts Haz. Substance codes: 2,4 F5

Minnesota Haz. Substance:

Codes: AO - Ratings: --

Pennsylvania Haz. Substance code: -

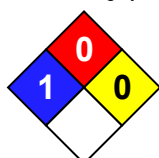
Washington Air Contaminant:

TWA: 2mg

Wisconsin Hazardous Air Contaminant List (Appears on Table): A

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:

Acute Toxicity: Acute toxicity
 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
 ATE: Acute toxicity estimate
 ATEmix: Acute Toxicity Estimate of mixture
 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
 Eye Damage: Eye damage
 HEPA filter: High efficiency particulate air filter
 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%
 MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
 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
 RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
 STOT SE: Specific target organ toxicity - single exposure
 TLV: Threshold Limit Value
 TRGS: Technical Rules for Hazardous Substances
 vPvB: Very persistent and very bioaccumulative
 WEL: Workplace Exposure Limit

Reason of change:

Changes in section 2: Classification, labeling
 Changes in section 3: Composition / Information on ingredients
 Changes in section 8: Occupational exposure limit values
 Changes in section 9: Physical and chemical properties
 Changes in section 11: Toxicological information
 Changes in section 16: Hazard rating systems
 General revision

Date of first version:

8/21/2008

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.