

## 1. Product and company identification

### Product identifier

Trade name: 636N1 - Abrasive Grain Glue

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

General use: Adhesive for orthopedic procedures

### 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](http://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](mailto: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: Form: liquid  
Color: colorless, clear

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

Base

see section 11: Toxicological information

### 3. Composition / Information on ingredients

Chemical characterization: Sodium waterglass: < 40% (aqueous solution)

CAS-Number: 1344-09-8

### 4. First aid measures

In case of inhalation: In case of inhalation of aerosols/spray mist/splash spots: Seek medical attention.

Following skin contact: Thoroughly wash skin with soap and water.  
Change contaminated clothing.

After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Apply bandage with sterile gauze. Subsequently consult an ophthalmologist.

After swallowing: Rinse mouth and drink 2-4 cupfuls of water.  
Consult physician.

#### Most important symptoms/effects, acute and delayed

After contact with skin: Not an irritant (OECD 404)

After eye contact: Not an irritant (Draize Test)

#### Information to physician

Treat symptomatically.

### 5. Fire fighting measures

Flash point/flash point range:

No data available

Auto-ignition temperature: No data available

Suitable extinguishing media:

Co-ordinate fire-fighting measures to the fire surroundings.

#### Specific hazards arising from the chemical

The product itself does not burn.

### 6. Accidental release measures

Personal precautions: Avoid contact with skin and eyes.

Environmental precautions:

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

Methods for clean-up: Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents) and place in closed containers for disposal.  
Wash spill area with plenty of water.

Additional information: Special danger of slipping by leaking/spilling product.

### 7. Handling and storage

#### Handling

Advices on safe handling: Avoid contact with skin and eyes.

Avoid the formation of aerosol.

Specific use(s) Adhesive for orthopedic procedures

### Storage

Requirements for storerooms and containers:

Keep container tightly closed.  
Protect from frost.  
Protect from heat and direct sunlight.  
Provide for alkali-resistant floor.

Hints on joint storage: Do not store together with acids or oxidizing agents.

## 8. Exposure controls / personal protection

### Engineering controls

Provide adequate ventilation, and local exhaust as needed.  
See also information in chapter 7, section storage.

### Personal protection equipment (PPE)

Eye/face protection: Tightly sealed safety glasses according to OSHA Standard - 29 CFR: 1910.133 or ANSI Z87.1-2003.

Skin protection: Suitable protective clothing.  
Protective gloves according to OSHA Standard - 29 CFR: 1910.138.  
Glove material: rubber or chloroprene rubber-  
Layer thickness >0,5 mm - Breakthrough time: > 480 min.  
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Respiratory protection: Avoid the formation of aerosol.

General hygiene considerations:  
Avoid contact with skin and eyes.  
Change contaminated clothing.  
Wash hands before breaks and after work.

### Environmental exposure controls

Refer to 6.: Section "Environmental precautions".

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

Appearance: Form: liquid  
Color: colorless, clear

Odor: odorless

Odor threshold: No data available

pH: at 68 °F: 12 g/mL

Melting point/freezing point: No data available

Initial boiling point and boiling range: No data available

Flash point/flash point range: No data available

Evaporation rate: No data available

Flammability: No data available

Explosion limits: No data available

Vapor pressure: No data available

Vapor density:	No data available
Density:	at 68 °F: 1.35 - 1.37 g/mL
Water solubility:	at 68 °F: miscible
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Thermal decomposition:	No data available
Explosive properties:	Product is not explosive.
Additional information:	mole ratio: >3,2

## 10. Stability and reactivity

Reactivity:	refer to section 10.3
Chemical stability:	Not combustible. Product is stable under normal storage conditions.
Possibility of hazardous reactions:	No dangerous reactions are known.
Conditions to avoid:	Protect from frost.
Incompatible materials:	Reaction with acids: generation of heat. Reactions with base metals under hydrogen development
Hazardous decomposition products:	The product itself does not burn.
Thermal decomposition:	No data available

## 11. Toxicological information

### Toxicological tests

Acute toxicity:	LD50 oral: > 2,000
Toxicological effects:	Acute toxicity (oral): Lack of data. Acute toxicity (dermal): Lack of data. Acute toxicity (inhalative): Lack of data. Skin corrosion/irritation: Lack of data. Serious eye damage/irritation: Lack of data. Sensitisation to the respiratory tract: Lack of data. Skin sensitisation: Lack of data. Germ cell mutagenicity/Genotoxicity: Lack of data. Carcinogenicity: Lack of data. 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): Lack of data. Aspiration hazard: Lack of data.
Other information:	Not known to cause sensitization.

### Symptoms

After contact with skin: Not an irritant (OECD 404)

After eye contact: Not an irritant (Draize Test)

## 12. Ecological information

### Ecotoxicity

Aquatic toxicity: Bacterial toxicity: LC50 > 100mg product/l (OECD 209)  
Daphnia toxicity: EC50 > 100mg product/l (OECD 202)  
Fish toxicity: EC50 > 100mg product/l (ISO 7346/2)

### Mobility in soil

No data available

### Persistence and degradability

Further details: Product is not biodegradable.

### Additional ecological information

Volatile organic compounds (VOC):

0 % by weight

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

TSCA Inventory: listed

### National regulations - U.S. State Regulations

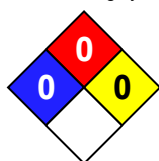
No data available

### National regulations - Great Britain

Hazchem-Code: -

## 16. Other information

Hazard rating systems:



NFPA Hazard Rating:

Health: 0 (Minimal)

Fire: 0 (Minimal)

Reactivity: 0 (Minimal)

HMIS Version III Rating:

Health: 0 (Minimal)

Flammability: 0 (Minimal)

Physical Hazard: 0 (Minimal)

Personal Protection: B

HEALTH	0
FLAMMABILITY	0
PHYSICAL HAZARD	0
B	

### 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  
 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  
 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%  
 MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships  
 MFSU: Manufacture, formulation, supply and use  
 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  
 TRGS: Technical Rules for Hazardous Substances  
 vPvB: Very persistent and very bioaccumulative

Reason of change: General revision

Date of first version: 9/11/2008

### 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.