

## 1. Identification

### Product identifier

Trade name: 633F16 - Sliding Paste, White

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

General use: Lubricant  
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  
Zip 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 telephone 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. Hazard identification

### Classification of the substance or mixture

Reproductive toxicant - Category 2 Suspected of damaging fertility.  
Aquatic toxicity - acute - Category 2 Toxic to aquatic life.  
Aquatic toxicity - chronic - Category 2 Toxic to aquatic life with long lasting effects.

### Label elements

Symbols:



Signal word:

**Warning**

Hazard statements:

Suspected of damaging fertility.  
Toxic to aquatic life.  
Toxic to aquatic life with long lasting effects.

### Precautionary statements:

Obtain special instructions before use.  
 Avoid release to the environment.  
 Wear protective gloves/protective clothing/eye protection.  
 IF exposed or concerned: Get medical advice/attention.  
 Collect spillage.  
 Store locked up.  
 Dispose of contents/container to hazardous or special waste collection point.

### Other hazards

Special danger of slipping by leaking/spilling product.

## 3. Composition/information on ingredients

### Mixtures

Chemical characterization: Base oil

Relevant ingredients:

CAS No.	Designation	Concentration	Classification
CAS 1305-62-0	Calcium hydroxide	20 - 50 %	Skin Irritation - Category 2. Eye Damage - Category 1. Specific Target Organ Toxicity (Single Exposure) - Category 3.
CAS 7446-26-6	Dizinc pyrophosphate	2.5 - 5 %	Aquatic toxicity - acute - Category 1 (M-factor = 1). Aquatic toxicity - chronic - Category 1 (M-factor = 1).
CAS 68411-46-1	Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	< 1 %	Reproductive toxicant - Category 2. Aquatic toxicity - chronic - Category 3.
CAS 1314-13-2	Zinc oxide	< 0.25 %	Aquatic toxicity - acute - Category 1 (M-factor = 1). Aquatic toxicity - chronic - Category 1 (M-factor = 1).

The actual concentration or concentration range is withheld as a trade secret.

Additional information: Information about base oil: Here applies the note L.  
 DMSO-extract <3% (IP 346)

## 4. First aid measures

General information: If medical advice is needed, have product container or label at hand. Take off contaminated clothing and wash it before reuse.

In case of inhalation: Move victim to fresh air. Seek medical treatment in case of troubles.

Following skin contact: Remove residues with soap and water. 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 with water. Never give anything by mouth to an unconscious person. Seek medical treatment in case of troubles.

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

No data available

### Information to physician

Treat symptomatically.

## 5. Fire-fighting measures

### Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:

Water spray jet, dry chemical powder, carbon dioxide.

In case of major fire and large quantities: Water with tenside additive, alcohol resistant foam

Extinguishing media which must not be used for safety reasons:

Full water jet

### Specific hazards arising from the chemical

May form dangerous gases and vapors in case of fire.

Furthermore, there may develop: metal oxide smoke, carbon monoxide and carbon dioxide

### Protective equipment and precautions for firefighters

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

Additional information:

You have to dispose of contaminated extinguishing water according to the regulations of the authorities.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Avoid exposure. Provide adequate ventilation.

Avoid breathing dust/fume/gas/mist/vapors/spray. Wear appropriate protective equipment.

Avoid contact with skin and eyes.

Take off contaminated clothing and wash it before reuse.

Environmental precautions:

Do not allow to enter into ground-water, surface water or drains.

If necessary, notify appropriate authorities.

### Methods and material for containment and cleaning up

Methods for clean-up:

Prevent spread over a wide area (e.g. by containment or oil barriers).

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents) and place in closed containers for disposal.

Additional information:

Special danger of slipping by leaking/spilling product.

## 7. Handling and storage

### Precautions for safe handling

Advices on safe handling: Obtain special instructions before use. Provide adequate ventilation, and local exhaust as needed.  
 Avoid breathing dust/fume/gas/mist/vapors/spray. Wear appropriate protective equipment.  
 Avoid contact with skin and eyes.  
 Take off contaminated clothing and wash it before reuse.  
 When using do not eat, drink or smoke. Wash hands before breaks and after work.  
 Do not put any product-impregnated cleaning rags into your trouser pockets.

Precautions against fire and explosion:

Keep away from sources of ignition - No smoking.

### Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Keep container tightly closed in a cool, well-ventilated place.

Protect from heat and direct sunlight.

Hints on joint storage:

Keep away from food, drink and animal feedingstuffs. Do not store together with acids/alkalies and oxidation agents.

## 8. Exposure controls/personal protection

### Control parameters

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
	633F16 - Sliding Paste, White	USA: ACGIH: TWA	5 mg/m <sup>3</sup>
			(Oil mist mineral, inhalable fraction)
		USA: IDLH: TWA	2,500 mg/m <sup>3</sup>
		USA: NIOSH: STEL	10 mg/m <sup>3</sup> (Oil mist mineral)
		USA: NIOSH: TWA	5 mg/m <sup>3</sup> (Oil mist mineral)
1305-62-0	Calcium hydroxide	USA: OSHA: TWA	5 mg/m <sup>3</sup> (Oil mist mineral)
		USA: ACGIH: TWA	5 mg/m <sup>3</sup>
		USA: NIOSH: TWA	5 mg/m <sup>3</sup>
		USA: OSHA: TWA	15 mg/m <sup>3</sup> (total dust)
		USA: OSHA: TWA	5 mg/m <sup>3</sup> (respirable fraction)
1314-13-2	Zinc oxide	USA: ACGIH: STEL	10 mg/m <sup>3</sup> (respirable fraction)
		USA: ACGIH: TWA	2 mg/m <sup>3</sup> (respirable fraction)
		USA: IDLH: TWA	500 mg/m <sup>3</sup>
		USA: NIOSH: Ceiling	15 mg/m <sup>3</sup> (Dusts)
		USA: NIOSH: STEL	10 mg/m <sup>3</sup> (Smoke)
		USA: NIOSH: TWA	5 mg/m <sup>3</sup> (Dusts)
		USA: NIOSH: TWA	5 mg/m <sup>3</sup> (Smoke)
		USA: OSHA: TWA	15 mg/m <sup>3</sup> (total dust)
		USA: OSHA: TWA	5 mg/m <sup>3</sup>
			(respirable fraction or Smoke)

### Appropriate engineering controls

Provide adequate ventilation, and local exhaust as needed.

### Personal protection equipment (PPE)

Respiratory protection:	Respiratory protection must be worn whenever the TLV (WEL) levels have been exceeded. The filter class must be suitable for the maximum contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product.
Hand protection:	Protective gloves according to OSHA Standard - 29 CFR: 1910.138. Glove material: Nitrile rubber Layer thickness: $\geq 0.38$ mm Breakthrough time: $> 480$ min Observe glove manufacturer's instructions concerning penetrability and breakthrough time.
Eye protection:	Tightly sealed goggles according to OSHA Standard - 29 CFR: 1910.133 or ANSI Z87.1-2010.
Body protection:	Wear suitable protective clothing.
General hygiene considerations:	Obtain special instructions before use. Avoid breathing dust/fume/gas/mist/vapors/spray. Wear appropriate protective equipment. Avoid contact with skin and eyes. Take off contaminated clothing and wash it before reuse. When using do not eat, drink or smoke. Wash hands before breaks and after work. Do not put any product-impregnated cleaning rags into your trouser pockets.

### Environmental exposure controls

Refer to 6.: Section "Environmental precautions".

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

Physical state at 68 °F and 101.3 kPa	solid
	Form: paste
Color:	light brown
Odor:	characteristic
Odor threshold:	No data available
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	No data available
Flammability:	No data available
Explosion limits:	No data available
Flash point/flash point range:	Not applicable
Evaporation rate:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
pH:	Not applicable
Viscosity:	No data available
Water solubility:	insoluble
Partition coefficient: n-octanol/water:	No data available
Vapor pressure:	No data available
Density:	at 59 °F: $1.10 \text{ g/cm}^3$
Vapor density:	No data available
Particle characteristics:	No data available

### Additional information

Additional information: No data available

## 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: Keep away from heat sources, sparks and open flames.

Incompatible materials: Strong oxidizing agents, strong acids, strong bases

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

## 11. Toxicological information

### Information on toxicological effects

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: Based on available data, the classification criteria are not met.  
 Specific symptoms in animal studies (Rabbit): Not an irritant (OECD 405)  
 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: Reproductive toxicant - Category 2 = Suspected of damaging fertility.  
 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 Calcium hydroxide (CAS 1305-62-0):  
 LD50 Rat, oral: > 2,000 mg/kg (OECD 425)  
 LD50 Rabbit, dermal: > 2,500 mg/kg (OECD 402)  
 LC50 Rat, inhalative (dust/mist): > 6.04 mg/L/4h (OECD 436)

## 12. Ecological information

### Ecotoxicity

Aquatic toxicity: Toxic to aquatic life with long lasting effects.

Information about Calcium hydroxide (CAS 1305-62-0):

Fish toxicity:

LC50 Oncorhynchus mykiss: 50.6 mg/L/96h (OECD 203)

Daphnia toxicity:

EC50 Daphnia magna (Big water flea): 49.1 mg/L/48h (OECD 202)

NOEC Crangon septemspinosa: 32 mg/L/14d

Algae toxicity:

ErC50 Pseudokirchneriella subcapitata (green algae): 184.57 mg/L/72h (OECD 201)

NOEC Pseudokirchneriella subcapitata (green algae): 48 mg/L/72h (OECD 201)

Information about Dizinc pyrophosphate (CAS 7446-26-6):

Fish toxicity:

LC50 Danio rerio (zebrafish): 4.5 mg/L/96h (OECD 203)

Daphnia toxicity:

EC50 Daphnia magna (Big water flea): 26 mg/L/48h (OECD 202)

Algae toxicity:

ErC50 Pseudokirchneriella subcapitata (green algae): 0.233 mg/L/72h (OECD 201)

NOEC Pseudokirchneriella subcapitata (green algae): 0.094 mg/L/72h (OECD 201)

Information about Zinc oxide (CAS 1314-13-2):

Fish toxicity:

LC50 Cottus Bairdii: 0.215 mg/L/96h

NOEC: 0.026 - 1.184 mg/L/30d

Daphnia toxicity:

EC50 Daphnia magna (Big water flea): 0.095 mg/L/48h

NOEC: 0.014 - 0.718 mg/L/30d

Algae toxicity:

EC50 Pseudokirchneriella subcapitata (green algae): 0.308 mg/L/72h

NOEC Pseudokirchneriella subcapitata (green algae): 0.024 mg/L/72h

### Persistence and degradability

Further details: No data available

### Bioaccumulative potential

Partition coefficient: n-octanol/water:

No data available

### Mobility in soil

No data available

### Other adverse effects

General information: Do not allow to enter into ground-water, surface water or drains.

## 13. Disposal considerations

### Waste treatment methods

#### Product

Recommendation: Incinerate according to applicable local, state and federal regulations.

#### Package

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

## 14. Transport information

### UN number

DOT: UN3077

IMDG, IATA-DGR: UN 3077

### UN proper shipping name

DOT, IMDG, IATA-DGR: UN 3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
(Zinc salt, inorganic)

### Transport hazard class(es)

DOT: 9

IMDG: Class 9, Subrisk -

IATA-DGR: Class 9



### Packing group

DOT, IMDG, IATA-DGR: III

### Environmental hazards

Marine pollutant: yes

### Transport in bulk according to IMO instruments

No data available

### Special precautions for user

#### USA: Department of Transportation (DOT)

Labels: 9

Symbols: G

Special Provisions: 8, 146, 335, 384, 441, A112, B54, B120, IB8, IP3, N20, N91, T1, TP33

Packaging – Exceptions: 155

Packaging – Non-bulk: 213

Packaging – Bulk: 240

Quantity limitations – Passenger aircraft / rail:

No limit

Quantity limitations – Cargo only: No limit

Vessel stowage – Location: A



### Sea transport (IMDG)

EmS: F-A, S-F  
 Special Provisions: 274 335 375 966 967 969  
 Limited quantities: 5 kg  
 Excepted quantities: E1  
 Package - Instructions: P002, LP02  
 Package - Provisions: PP12  
 IBC - Instructions: IBC08  
 IBC - Provisions: B3  
 Tank instructions - IMO: -  
 Tank instructions - UN: T1, BK2, BK2, BK3  
 Tank instructions - Provisions: TP33  
 Stowage and handling: Category A. SW23  
 Properties and observations: -  
 Marine pollutant: yes  
 Segregation group: none

### Air transport (IATA)

Proper shipping name: UN 3077,  
 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
 (Zinc salt, inorganic)  
 Hazard label: Miscellaneous & Environmentally hazardous  
 Excepted Quantity Code: E1  
 Passenger and Cargo Aircraft: Ltd.Qty.: Pack.Instr. Y956 - Max. Net Qty/Pkg. 30 kg G  
 Passenger and Cargo Aircraft: Pack.Instr. 956 - Max. Net Qty/Pkg. 400 kg  
 Cargo Aircraft only: Pack.Instr. 956 - Max. Net Qty/Pkg. 400 kg  
 Special Provisions: A97 A158 A179 A197 A215  
 Emergency Response Guide-Code (ERG): 9L

## 15. Regulatory information

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

Calcium hydroxide:	TSCA Inventory: listed NIOSH Recommendations: Occupational Health Guideline: 0092
Dizinc pyrophosphate:	TSCA Inventory: listed
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene:	TSCA Inventory: listed; UVCB
Zinc oxide:	TSCA Inventory: listed NIOSH Recommendations: Occupational Health Guideline: 0675*

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

No data available

### Further regulations, limitations and legal requirements

No data available

## 16. Other information

Text for labeling: Contains 20 - 50 % Calcium hydroxide, 2.5 - 5 % Dizinc pyrophosphate, < 1 % Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene, < 0.25 % Zinc oxide.

Revision date: 11/28/2025

Date of first version: 12/9/2020

Reason of change: General revision: Safety Data Sheet according to HCS 2024 (29 CFR 1910.1200)

Classification procedure: Physical hazards, health hazards: on basis of test data expert judgement and weight of evidence determination, bridging principle "substantially similar mixtures"  
Environmental hazards: calculation method

Hazard rating systems:



NFPA Hazard Rating:

Health: 2 (Moderate)

Fire: 1 (Slight)

Reactivity: 0 (Minimal)

HMIS Version III Rating:

Health: 2 (Moderate) - Chronic effects

Flammability: 1 (Slight)

Physical Hazard: 0 (Minimal)

Personal Protection: X = Consult your supervisor

HEALTH	*	2
FLAMMABILITY		1
PHYSICAL HAZARD		0
		X

Abbreviations and acronyms:

Aquatic toxicity - acute: Hazardous to the aquatic environment - acute  
Aquatic toxicity - chronic: Hazardous to the aquatic environment - chronic  
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  
DOT: Department of Transportation's Safety Regulations (USA)  
EC: European Community  
EC50: Effective Concentration 50%  
EmS: Emergency Response Procedures for Ships Carrying Dangerous Goods  
EN: European Standard  
EQ: Excepted quantities  
Eye Damage: Eye damage  
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  
LC50: Median lethal concentration  
LD50: Lethal dose 50%  
MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships  
M-factor: Multiplication factor  
NOEC: No Observed Effect Concentration  
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  
Reproductive toxicant: Reproductive toxicity  
Skin Irritation: Skin irritation  
STOT SE: Specific target organ toxicity - single exposure  
TLV: Threshold Limit Value  
TRGS: Technical Rules for Hazardous Substances  
UN: United Nations  
vPvB: Very persistent and very bioaccumulative  
WEL: Workplace Exposure Limit



# SAFETY DATA SHEET

according to HCS 2024 (29 CFR 1910.1200)

## 633F16 - Sliding Paste, White

Material number 633F16

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Replaces version: 3.0

Language: en-US

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Page: 11 of 11

### 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.