

1. Product and company identification

Product identifier

Trade name: 633F16 - Sliding Paste, White

Recommended use and restrictions on use

General use: Lubricant
Reserved for industrial and professional use.

Initial supplier identifier

Company name: Otto Bock HealthCare Canada Ltd.

Street/POB-No.: 5470 Harvester Road

Postal Code, city: Burlington, ON L7L 5N5, CA
Canada

WWW: www.ottobock.ca

E-mail: info.canada@ottobock.com

Telephone: (800) 665-3327

Telefax: (800) 463-3659

Department responsible for information:

Mark Agro, Telephone: (800) 665-3327 (9 am - 5 pm)

Additional information:

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

Emergency phone number

COLLECT, Telephone: (613) 996-6666

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 20 °C and 101.3 kPa: solid

Form: paste

Color: light brown

Odor: characteristic

Classification: Reproductive toxicity 2. Aquatic toxicity - acute 2. Aquatic toxicity - chronic 2.

Hazard symbols:



Signal word:

Warning

Hazard statements:

Suspected of damaging fertility.

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.
 Dispose of contents/container to hazardous or special waste collection point.

Regulatory status

This material is considered hazardous by the WHMIS in Canada.

Hazards not otherwise classified

Special danger of slipping by leaking/spilling product.
 see section 11: Toxicological information

3. Composition / Information on ingredients

Chemical characterisation: Base oil

Relevant ingredients:

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

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 and effects, both acute and delayed

No data available

Information to physician

Treat symptomatically.

5. Fire fighting measures

Flash point/flash point range:

Not applicable

Auto-ignition temperature: No data available

Suitable extinguishing media:

Water spray jet, extinguishing 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

Special protective equipment and precautions for fire-fighters:

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:

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 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

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.

Storage

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

Exposure guidelines

Occupational exposure limit values:

| CAS No. | Designation | Type | Limit value |
|-----------|-------------------------------|--------------------|--|
| | 633F16 - Sliding Paste, White | Canada: OEL 15 min | 10 mg/m ³ (Oil mist mineral) |
| | | Canada: OEL 8 hour | 5 mg/m ³ (Oil mist mineral) |
| | | Canada: OEL TWA | 0.2 mg/m ³ (Oil mist mineral) |
| | | Canada: OEL TWA | 1 mg/m ³ |
| | | | (Oil mist mineral, highly refined) |
| 1305-62-0 | Calcium hydroxide | Canada: VEMP | 5 mg/m ³ (Oil mist mineral) |
| | | Canada: OEL 8 hour | 5 mg/m ³ |
| | | Canada: OEL TWA | 5 mg/m ³ |
| | | Canada: VEMP | 5 mg/m ³ |
| 1314-13-2 | Zinc oxide | Canada: OEL 15 min | 10 mg/m ³ |
| | | Canada: OEL 8 hour | 2 mg/m ³ |
| | | Canada: OEL STEL | 10 mg/m ³ (respirable fraction) |
| | | Canada: OEL TWA | 2 mg/m ³ (respirable fraction) |
| | | Canada: VECD | 10 mg/m ³ (respirable fraction) |
| | | Canada: VEMP | 2 mg/m ³ (respirable fraction) |

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 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.

Glove material: Nitrile rubber

Layer thickness: ≥ 0.38 mm

Breakthrough time: > 480 min

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. 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:

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

| | |
|--|---|
| Appearance: | Physical state at 20 °C and 101.3 kPa: solid Form: paste Color: light brown |
| Odor: | characteristic |
| 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: | No data available |
| Flammability: | No data available |
| Explosion limits: | No data available |
| Vapor pressure: | No data available |
| Vapor density: | No data available |
| Density: | at 15 °C: 1.10 g/cm ³ |
| Water solubility: | insoluble |
| Partition coefficient: n-octanol/water: | No data available |
| Auto-ignition temperature: | No data available |
| Thermal decomposition: | No data available |
| 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.

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.

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 toxicity 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

Mobility in soil

No data available

Persistence and degradability

Further details: No data available

Additional ecological information

Volatile organic compounds (VOC):

0 % by weight / 0 g/L

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

13. Disposal considerations

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

ADR/RID, IMDG, IATA-DGR:

UN 3077

UN proper shipping name

ADR/RID, IMDG, IATA-DGR:

UN 3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
 (Zinc salt, inorganic)

Transport hazard class(es)

ADR/RID:

Class 9, Code: M7

IMDG:

Class 9, Subrisk -

IATA-DGR:

Class 9

Packing group

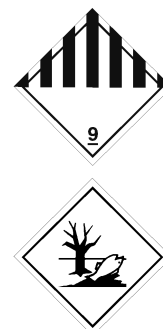
ADR/RID, IMDG, IATA-DGR:

III

Environmental hazards

Marine pollutant:

yes


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

No data available

Canada: Transportation of Dangerous Goods (TDG)

UN Number:

UN3077

Shipping name:

UN 3077,
 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
 (Zinc salt, inorganic)

TDG class:

9

Packing group:

III

Special provisions:

16, 99

Explosive limit and limited quantity index:

5 kg

Marine pollutant:

P

Sea transport (IMDG)

UN number: UN 3077
Proper shipping name: UN 3077,
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(Zinc salt, inorganic)
Class or division, Subsidiary risk: Class 9, Subrisk -
Packing Group: III
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)

UN/ID number: UN 3077
Proper shipping name: UN 3077,
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(Zinc salt, inorganic)
Class or division, Subsidiary risk: Class 9
Packing Group: III
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 - Canada

Calcium hydroxide: DSL: listed
Dizinc pyrophosphate: DSL: listed
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene: DSL: listed
Zinc oxide: DSL: listed

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.

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 |

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

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
 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
 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 toxicity: Reproductive toxicity
 RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
 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
 WHMIS: Workplace Hazardous Materials Information System

Reason of change: Changes in section 2: Classification, labelling
Changes in section 3: Composition/information on ingredients
Changes in section 12: Ecological information
Changes in section 15: Regulatory information
General revision

Date of first version: 9/12/2020

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.