

1. Product and company identification

Product identifier

Trade name: 618T40 - Sintering Powder

Recommended use and restrictions on use

General use: Coating agent for orthopedic procedures.
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: Form: solid, powdery

Color: varying colors

Odor: like acrylic acid

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) and WHMIS in Canada.

Hazards not otherwise classified

Danger of dust explosion.

see section 11: Toxicological information

3. Composition / Information on ingredients

Chemical characterisation: Mixture on the basis of Polyolefine copolymerisate with pigments and polytetrafluoroethylene (PTFE)

4. First aid measures

In case of inhalation: In case of troubles after inhalation of dust: Provide fresh air.
In case of respiratory difficulties seek medical attention.
Move victim to fresh air, put at rest and loosen restrictive clothing.
When fumes of molten material have been inhaled: Immediately get medical attention.

Following skin contact: If burned by hot product, quench immediately with cold tap water.
Cover wounds with sterile dressing. Seek medical attention.

After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. In case of troubles or persistent symptoms, consult an ophthalmologist.

After swallowing: Never give anything by mouth to an unconscious person. Rinse mouth. If you feel unwell, seek medical advice.

Most important symptoms and effects, both acute and delayed

After eye contact: Dusts: mild irritant

Information to physician

Treat symptomatically.

5. Fire fighting measures

Flash point/flash point range: No data available

Auto-ignition temperature: > 313 °C

Suitable extinguishing media: Water spray jet, foam, extinguishing powder, carbon dioxide.

Extinguishing media which must not be used for safety reasons: Full water jet.

Specific hazards arising from the chemical

Danger of dust explosion.
In case of fire may be liberated: Hydrogen fluoride, Tetrafluoroethylene, Hexafluoropropylene, Fluorides, aldehydes, Acrolein, organic acids, Zinc oxide, carbon monoxide and carbon dioxide.

Special protective equipment and precautions for fire-fighters:

Wear a self-contained breathing apparatus and chemical protective clothing. Wear appropriate protective equipment.

Additional information: Cool endangered containers with water spray and, if possible, remove from danger zone.
Do not breathe fumes.
Do not allow fire water to penetrate into surface or ground water.

6. Accidental release measures

Personal precautions: Avoid contact with the substance. Avoid generation of dust. Do not breathe dust. Provide fresh air.

Environmental precautions:

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

Methods for clean-up:

Take up mechanically, placing in appropriate containers for disposal.

Use grounding equipment.

7. Handling and storage

Handling

Advices on safe handling:

Use local exhaust in the field of the processing equipment.

Avoid contact with skin, eyes, and clothing. Do not breathe dust.

Wear appropriate protective equipment. When using do not eat, drink or smoke.

Precautions against fire and explosion:

Avoid generation of dust. Dust may form explosive mixtures with air. To avoid dust explosion, dust accumulation should be avoided.

Use grounding equipment.

Do not smoke, no open fire, no sparks.

Storage

Requirements for storerooms and containers:

Provide earthing of containers, equipment, pumps and ventilation facilities.

storage temperature: < 40°C. Keep container dry.

Avoid heat and light. Protect from moisture contamination.

Hints on joint storage:

Keep away from food, drink and animal feedingstuffs.

8. Exposure controls / personal protection

Engineering controls

Use local exhaust in the field of the processing equipment.

See also information in chapter 7, section storage.

Personal protection equipment (PPE)

Eye/face protection:

At processing: Tightly sealed goggles according to OSHA Standard - 29 CFR: 1910.133 or ANSI Z87.1-2010

Skin protection:

At processing: Wear suitable protective clothing.

At processing: Protective gloves according to EN 374.

Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Respiratory protection:

If necessary: Dust mask.

General hygiene considerations:

Avoid contact with skin, eyes, and clothing. Do not breathe dust. Wash hands before breaks and after work. When using do not eat, drink or smoke.

Environmental exposure controls

Refer to 6.: Section "Environmental precautions".

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance:	Form: solid, powdery Color: varying colors
Odor:	like acrylic acid
Odor threshold:	No data available
pH:	No data available
Melting point/freezing point:	80 - 130 °C
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:	1 g/cm ³
Water solubility:	insoluble
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	> 313 °C
Thermal decomposition:	> 400 °C
Explosive properties:	Dust may form explosive mixtures with air.

10. Stability and reactivity

Reactivity:	Dust may form explosive mixtures with air.
Chemical stability:	Product is stable under normal storage conditions. Average shelf life of 5 years.
Possibility of hazardous reactions:	Fine dust: danger of dust explosion.
Conditions to avoid:	Avoid open flames. Avoid sparks. Protect from excessive heat.
Incompatible materials:	Strong acids, strong bases
Hazardous decomposition products:	In case of strong heating >430°C: Hydrogen fluoride, Tetrafluoroethylene, Hexafluoropropylene, Fluorides, aldehydes, Acrolein, organic acids, Zinc oxide, carbon monoxide and carbon dioxide.
Thermal decomposition:	> 400 °C

11. Toxicological information

Toxicological tests

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.

Symptoms

After eye contact: Dusts: mild irritant

12. Ecological information

Ecotoxicity

Further details: No data available

Mobility in soil

No data available

Persistence and degradability

Further details: Degradation: with UV-radiation/sunlight

Additional ecological information

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

13. Disposal considerations

Product

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

Package

Recommendation: Waste key number:
ASN 150102 Plastic packaging
ASN 150104 metallic packaging
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

Canada: Transportation of Dangerous Goods (TDG)

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 - Canada

No data available

National regulations - U.S. Federal Regulations

No data available

National regulations - U.S. State Regulations

No data available

16. Other information

Hazard rating systems:



NFPA Hazard Rating:

Health: 1 (Slight)

Fire: 1 (Slight)

Reactivity: 0 (Minimal)

HMIS Version III Rating:

Health: 1 (Slight)

Flammability: 1 (Slight)

Physical Hazard: 0 (Minimal)

Personal Protection: B

HEALTH	1
FLAMMABILITY	1
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
 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
 MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
 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
 UV: Ultraviolet
 vPvB: Very persistent and very bioaccumulative
 WHMIS: Workplace Hazardous Materials Information System

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Date of first version: 23/2/2007

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.