

Special Grease

Material number 633F38

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1. Product and company identification

Product identifier

Trade name: Special Grease

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

General use: lubricant

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

Dept. 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

2. Hazards identification

Emergency overview

Appearance: Physical state at 68 °F and 101.3 kPa: solid

Form: pasty

Color: green

Odor: characteristic

Classification: Aquatic toxicity - chronic - Category 3;

Hazard statements: Harmful to aquatic life with long lasting effects.

Precautionary statements:

Avoid release to the environment.

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

Regulatory status

This material is not considered hazardous by the U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200) and SIMDUT 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 characterization: lubricant on the basis of mineral oil.

Relevant ingredients:

CAS No.	Designation	Content	Classification
CAS 128-37-0	3,5-Di-tert-butyl-4-hydroxytoluene	0.25 - 1 %	Aquatic toxicity - acute - Category 1. Aquatic toxicity - chronic - Category 1.
CAS 12001-85-3	Naphthenic acids, zinc salts	0.25 - 1 %	Skin Irritation - Category 2. Aquatic toxicity - acute - Category 1. Aquatic toxicity - chronic - Category 1.

4. First aid measures

- General information: Take off contaminated clothing and wash it before reuse.
- In case of inhalation: Provide fresh air. Put victim at rest and keep warm. Seek medical treatment in case of troubles.
- Following skin contact: After contact with skin, wash immediately with soap and plenty of 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 immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Seek medical treatment in case of troubles.

Most important symptoms/effects, acute and delayed

May cause skin and eye irritation.

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, dry chemical powder, carbon dioxide
In case of large fires: Alcohol resistant foam, Water spray jet

Extinguishing media which must not be used for safety reasons:

Full water jet

Specific hazards arising from the chemical

May form dangerous gases and vapours in case of fire.

Protective equipment and precautions for firefighters:

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

Additional information:

Move undamaged containers from immediate hazard area if it can be done safely. Do not allow fire water to penetrate into surface or ground water.

6. Accidental release measures

- Personal precautions:** Provide adequate ventilation. Avoid contact with the substance.
Wear appropriate protective equipment. Take off contaminated clothing and wash it before reuse. Keep unprotected people away.
- 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.
Stop leak if safe to do so.

7. Handling and storage

Handling

- Advices on safe handling:** Provide adequate ventilation, and local exhaust as needed. Avoid contact with the substance.
Wear appropriate protective equipment. Take off contaminated clothing and wash it before reuse.
When using do not eat, drink or smoke.

Storage

- Requirements for storerooms and containers:** Keep container tightly closed and dry. Keep in a cool place.
- Hints on joint storage:** Keep away from food, drink and animal feedingstuffs. Do not store together with oxidizing agents, strong acids or strong bases.

8. Exposure controls / personal protection

Exposure guidelines

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
128-37-0	3,5-Di-tert-butyl-4-hydroxytoluene	USA: ACGIH: TWA USA: NIOSH: TWA	2 mg/m ³ 10 mg/m ³

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** Recommendation: Tightly sealed goggles according to OSHA Standard - 29 CFR: 1910.133 or ANSI Z87.1-2010 (When decanting)
- Skin protection** Wear suitable protective clothing.
In case of prolonged or frequently repeated skin contact: Protective gloves according to OSHA Standard - 29 CFR: 1910.138
Glove material: Nitrile rubber
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:

Avoid contact with skin and eyes. 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. Take off contaminated clothing and wash it before reuse.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance:	Physical state at 68 °F and 101.3 kPa: solid Form: pasty Color: green
Odor:	characteristic
Odor threshold:	No data available
pH value:	not applicable
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	not applicable
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 59 °F: 0.9 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:	NLGI-number = 2

10. Stability and reactivity

Reactivity:	refer to section 10.3
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 light and heat. Protect from moisture contamination.
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: The statements are derived from the properties of the single components. No toxicological data is available for the product as such.

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.

Serious eye damage/irritation: Based on available data, the classification criteria are not met.

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.

Specific symptoms in animal studies, Guinea pig: not sensitising (OECD 406, read across)

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 3,5-Di-tert-butyl-4-hydroxytoluene:
 LD50 Rat, oral: 2930 mg/kg (OECD 401, read across)
 LD50 Rat, dermal: > 5000 mg/kg (OECD 402, read across)

12. Ecological information

Ecotoxicity

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

Information about 3,5-Di-tert-butyl-4-hydroxytoluene:
 Fish toxicity: LC50: > 0.57 mg/L/96h (OECD 203, read across)
 Daphnia toxicity: EC50: 0.17 mg/L/48h
 Algae toxicity: EC50: > 0.42 mg/L/72h

Mobility in soil

No data available

Persistence and degradability

Further details: Information about 3,5-Di-tert-butyl-4-hydroxytoluene
 Biodegradation: 30 % (OECD 302C read across)

Additional ecological information

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

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13. Disposal considerations**Product**

Recommendation: Dispose of waste according to applicable legislation.

Contaminated packaging

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**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**

Product: TSCA Inventory: not listed

3,5-Di-tert-butyl-4-hydroxytoluene: Carcinogen Status:
IARC Rating: Group 3
OSHA Carcinogen: not listed
NTP Rating: not listed
NIOSH Recommendations:
Occupational Health Guideline:
0246**National regulations - Great Britain**

Hazchem-Code: -

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: X = Consult your supervisor

HEALTH	1
FLAMMABILITY	1
PHYSICAL HAZARD	0
	X

Reason of change: Changes in section 1.3: Corporate headquarters

Date of first version: 8/18/2016

Department issuing data sheet

Contact person: see section 1: Dept. 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.