

1. Identification

Product identifier

Trade name: 86T3 - Dupligel

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

 General use: Forming-material for modeling for orthopedic procedures.
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

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

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

Emergency telephone number

CHEMTREC, Telephone: +1 (800) 424-9300

2. Hazard identification

Classification of the substance or mixture

This material is classified as not hazardous.

Label elements

Symbols: not applicable

Hazard statements: not applicable

Precautionary statements: not applicable

3. Composition/information on ingredients

Mixtures

Chemical characterization: A mixture of Glycerol (CAS 56-81-5, <10 %), water and polysaccharide (CAS 9002-18-0)

Additional information: The maximum workplace exposure limits are, where necessary, listed in section 8.

4. First aid measures

In case of inhalation:	Provide fresh air. Seek medical treatment in case of troubles.
Following skin contact:	Remove residues with soap and water. After contact with molten product, cool skin area rapidly with cold water. Seek medical treatment in case of troubles.
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. If burned by hot product, quench immediately with cold tap water. Subsequently consult an ophthalmologist.
After swallowing:	Never give anything by mouth to an unconscious person. Rinse mouth. Do not induce vomiting without medical assistance. In case of accident or unwellness consult a doctor.

Most important symptoms/effects, acute and delayed

After contact with skin: In case of heating: risk of burns.

After eye contact:

Hot molten mass, liquid splashes: risk of burns.

Information to physician

Treat symptomatically.

5. Fire-fighting measures

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:

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

Extinguishing media which must not be used for safety reasons:

Full water jet

Specific hazards arising from the chemical

Product is non-combustible.

Hazardous vapors may form during fires.

Protective equipment and precautions for firefighters

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

Additional information:

Cool endangered containers with water spray and, if possible, remove from danger zone. Use water spray jet to knock down vapors. Do not breathe fumes. Do not allow fire water to penetrate into surface or ground water.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Handle in accordance with good industrial hygiene and safety practice.

Hot molten mass:

Avoid contact with skin, eyes, and clothing. Do not breathe vapors. Protective gloves against thermic risks. Wear closely fitting protective glasses in case of splashes. Provide fresh air. Keep unprotected people away.

Environmental precautions:

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

Methods and material for containment and cleaning up

Methods for clean-up: Solid:
Take up mechanically, placing in appropriate containers for disposal.
Thoroughly clean surrounding area.
Dispose of waste according to applicable legislation.
Hot molten mass: Contain hot liquid after spilling and let it cool down (solidify); then collect mechanically.

7. Handling and storage

Precautions for safe handling

Advices on safe handling: Handle in accordance with good industrial hygiene and safety practice.
Hot molten mass: Provide adequate ventilation, and local exhaust as needed. Do not breathe vapors. Wear appropriate protective equipment.

Precautions against fire and explosion:
Take standard precautions to prevent fire.

Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:
Keep container tightly closed and dry.
Storage temperature: +5°C up to +30°C.

Hints on joint storage: Keep away from food, drink and animal feedingstuffs.

8. Exposure controls/personal protection

Control parameters

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
56-81-5	Glycerol	USA: OSHA: TWA	15 mg/m ³ (total dust)
		USA: OSHA: TWA	5 mg/m ³ (respirable fraction)

Appropriate engineering controls

Provide adequate ventilation.

Personal protection equipment (PPE)

Respiratory protection: Respiratory protection must be worn whenever the TLV (WEL) levels have been exceeded.
Use filter type A (= against vapors of organic substances).

Hand protection: Protective gloves according to OSHA Standard - 29 CFR: 1910.138 Glove material: Nitrile rubber
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.

General hygiene considerations:
Handle in accordance with good industrial hygiene and safety practice.
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

Physical state at 68 °F and 101.3 kPa	Form: solid, elastic
Color:	pink
Odor:	weak, sweetish
Odor threshold:	No data available
Melting point/freezing point:	> 176 °F
Initial boiling point and boiling range:	No data available
Flammability:	No data available
Explosion limits:	No data available
Flash point/flash point range:	No data available
Evaporation rate:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
pH:	7
Viscosity:	No data available
Water solubility:	at 122 °F: soluble
Partition coefficient: n-octanol/water:	No data available
Vapor pressure:	No data available
Density:	approx. 1.1 g/cm ³
Vapor density:	No data available
Particle characteristics:	Not applicable

Additional information

Additional information:	working temperature: 111.2 °F up to 125.6 °F solidifying temperature: < 95 °F
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10. Stability and reactivity

Reactivity:	No data available
Chemical stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions:	No hazardous reactions known.
Conditions to avoid:	Keep away from heat.
Incompatible materials:	No data available
Hazardous decomposition products:	Hazardous vapors may form during fires.

11. Toxicological information

Information on toxicological effects

Acute toxicity:	LD50 Rat, oral: Glycerol > 10,000 mg/kg LD50 Rat, oral: Polysaccharide > 10,000 mg/kg
Toxicological effects:	Acute toxicity (oral): Based on available data, the classification criteria are not met. The product has not been tested. The statement is derived from the properties of the single components. 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 contact with skin: In case of heating: risk of burns.
After eye contact:
Hot molten mass, liquid splashes: risk of burns.

12. Ecological information

Ecotoxicity

Further details: No data available

Persistence and degradability

Further details: Product is biodegradable.

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 penetrate into soil, waterbodies or drains.

13. Disposal considerations

Waste treatment methods

Product

Recommendation: May be reused after remediation.
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

DOT, IMDG, IATA-DGR: not applicable

UN proper shipping name

DOT, IMDG, IATA-DGR: Not restricted

Transport hazard class(es)

DOT, IMDG, IATA-DGR: not applicable

Packing group

DOT, IMDG, IATA-DGR: not applicable

Environmental hazards

Marine pollutant: no

Transport in bulk according to IMO instruments

No data available

Special precautions for user

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

Glycerol: TSCA Inventory: listed
Clean Air Act:
CAA SOCM Chemical: yes
NIOSH Recommendations:
Occupational Health Guideline: 0302

National regulations - U.S. State Regulations

Glycerol: Rhode Island Hazardous Substances: listed

Further regulations, limitations and legal requirements

No data available

16. Other information

Revision date: 12/17/2025

Date of first version: 7/10/2008

Reason of change: General revision: Safety Data Sheet according to Hazardous Products Regulations (HPR) 2022

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

Hazard rating systems:



NFPA Hazard Rating:

Health: 1 (Slight)
Fire: 0 (Minimal)
Reactivity: 0 (Minimal)

HMIS Version III Rating:

Health: 1 (Slight)
Flammability: 0 (Minimal)
Physical Hazard: 0 (Minimal)
Personal Protection: X = Consult your supervisor

HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	0
	X

Abbreviations and acronyms:

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
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
OEL: Occupational Exposure Limit Value
OSHA: Occupational Safety and Health Administration
PBT: Persistent, bioaccumulative and toxic
PNEC: Predicted no-effect concentration
TLV: Threshold Limit Value
TRGS: Technical Rules for Hazardous Substances
vPvB: Very persistent and very bioaccumulative
WEL: Workplace Exposure Limit



SAFETY DATA SHEET

according to HCS 2024 (29 CFR 1910.1200)

86T3 - Dupligel

Material number 086T3

Revision date: 12/17/2025

Version: 5.3

Replaces version: 5.2

Language: en-US

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Page: 8 of 8

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.