

## 1. Identification

### Product identifier

Trade name: 85V1 - Retrasil

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

General use: Retarder for Silicone-Vulcanizer 85H11 - Pastasil.  
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](http://www.ottobockus.com)

Telephone: +1 (801) 956-2400

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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

## 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: Mixture on the basis of polysiloxane and silicon dioxide

Relevant ingredients:

CAS No.	Designation	Concentration	Classification
CAS 78-27-3	1-Ethynylcyclohexanol	< 5 %	Acute Toxicity - oral - Category 4. Acute Toxicity - dermal - Category 4. Eye Irritation - Category 2A.

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

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 mechanically with cloth or paper. Wash with generous amount of water and soap. In case of skin irritation, consult a physician.
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. Do not induce vomiting without medical assistance. Seek medical treatment in case of troubles.

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

After contact with skin: Mild irritant

After eye contact: Mild irritant

### Information to physician

Treat symptomatically.

## 5. Fire-fighting measures

### Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:

Foam, Extinguishing powder, water spray jet, carbon dioxide

Extinguishing media which must not be used for safety reasons:

Full water jet

### Specific hazards arising from the chemical

Combustible.

In case of fire may be liberated: silicon dioxide, carbon monoxide and carbon dioxide.

### Protective equipment and precautions for firefighters

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

Additional information:

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

Avoid contact with skin, eyes, and clothing. Wear appropriate protective equipment.

Provide fresh air.

### Environmental precautions:

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

### Methods and material for containment and cleaning up

Methods for clean-up: Soak up with absorbent materials such as sand, siliceus earth, acid- or universal binder. Store in special closed containers and dispose of according to ordinance. Final cleaning: Fouled surfaces must be immediately cleaned with suitable solvents. (solvents: refer to section 9). Thoroughly clean surrounding area. Dispose of waste according to applicable legislation.

## 7. Handling and storage

### Precautions for safe handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed. Avoid contact with skin, eyes, and clothing. Wear appropriate protective equipment. When using do not eat, drink or smoke.

### 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. Do not drop, drag or bang the container. Store at room temperature.

### Hints on joint storage:

Do not store with strong oxidizing agents.

## 8. Exposure controls/personal protection

### Control parameters

### Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
14808-60-7	Silicon dioxide (Quartz (SiO <sub>2</sub> ))	USA: ACGIH: TWA	0.025 mg/m <sup>3</sup> (respirable fraction)
		USA: IDLH: TWA	25 mg/m <sup>3</sup> (respirable fraction, cristobalite/tridymite)
		USA: IDLH: TWA	50 mg/m <sup>3</sup> (respirable fraction, quartz/tripoli)
		USA: NIOSH: TWA	0.05 mg/m <sup>3</sup> (respirable fraction)
		USA: OSHA: TWA	10 mg/m <sup>3</sup> / % SiO <sub>2</sub> + 2 (respirable fraction)
		USA: OSHA: TWA	250 mppcf/ % SiO <sub>2</sub> +5 (fine dust)
		USA: OSHA: TWA	30 mg/m <sup>3</sup> / % SiO <sub>2</sub> + 2 (inhalable fraction)

### Appropriate engineering controls

Provide adequate ventilation.

### Personal protection equipment (PPE)

Respiratory protection: Respiratory protection is not necessary if room is well ventilated.

Hand protection: OSHA Standard - 29 CFR: 1910.138 Protective gloves according to OSHA Standard - 29 CFR: 1910.138.  
Glove material: Butyl caoutchouc (butyl 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.

Body protection: Wear suitable protective clothing.

General hygiene considerations:  
Avoid contact with skin, eyes, and clothing.  
When using do not eat, drink or smoke.  
Wash hands before breaks and after work.  
Have eye wash bottle or eye rinse ready at work place.

### 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: liquid
Color:	beige
Odor:	weak
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:	203 °F (c.c.)
Evaporation rate:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	> 392 °F
pH:	No data available
Dynamic viscosity:	at 77 °F: 15,000 mPa*s
Solubility:	slightly soluble in acetone, alcohol (ethanol) partially soluble/dispersible in aliphatic hydrocarbons, aromatic hydrocarbons (toluene, xylene), chlorinated hydrocarbons
Water solubility:	practically insoluble
Partition coefficient: n-octanol/water:	No data available
Vapor pressure:	No data available
Density:	at 77 °F: 1.075 g/mL
Vapor density:	No data available
Particle characteristics:	Not applicable

## 10. Stability and reactivity

Reactivity: No data available

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions:  
No dangerous reactions are known.

Conditions to avoid: Excessive heating

Incompatible materials: Strong oxidizing agents

Hazardous decomposition products:  
In case of fire may be liberated: silicon dioxide, carbon monoxide and carbon dioxide.

## 11. Toxicological information

### Information on toxicological effects

Acute toxicity: LD50 Rat, oral: (1-Ethynylcyclohexanol) 590 mg/kg  
LD50 Rabbit, percutan: (1-Ethynylcyclohexanol) 980 mg/kg

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 contact with skin: Mild irritant  
After eye contact: Mild irritant

## 12. Ecological information

### Ecotoxicity

Further details: No data available

### Persistence and degradability

Further details: Silicone-ingredient(s): not bio-degradable  
1-Ethynylcyclohexanol: moderately/partially biodegradable ( 20-70%/28 d, OECD 302B )

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

#### 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

Product: TSCA: All ingredients are listed or exempt from listing.

Silicon dioxide (Quartz (SiO<sub>2</sub>)): Carcinogen Status: IARC Rating: Group 1

OSHA Carcinogen: not listed

NTP Rating: listed

NIOSH Recommendations:

Occupational Health Guideline: 0553

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

Silicon dioxide (Quartz (SiO<sub>2</sub>)): California Proposition 65: cancer

### Further regulations, limitations and legal requirements

No data available

## 16. Other information

Revision date: 12/17/2025

Date of first version: 6/13/2008

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: 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:

Acute Toxicity: Acute toxicity  
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  
Eye Irritation: Eye irritation  
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  
TRGS: Technical Rules for Hazardous Substances  
vPvB: Very persistent and very bioaccumulative

### 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.