

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

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Revision Number 2

EGHS / English

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Name VariDur 200 Powder

Product Code(s) 11-1030, 11-1034

(M)SDS Number 1344867_E

Chemical name

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

Recommended Use Laboratory Use Only.

Uses advised against No information available.

1.3. Details of the supplier of the safety data sheet

Manufacturer ITW Test & Measurement GmbH

Manufacturer Address Boschstraße 10
73734 Esslingen am Neckar / GERMANY
www.buehler-met.de www.buehler.fr www.buehler.co.uk

Phone number +49 (0) 711 4904690-0

E-mail Address lab.eu@buehler.com

1.4. Emergency telephone number

Global Access Code: 334545

Americas: +1 760 476 3962

Middle East/Africa: +1 760 476 3959

UK: +44 8 08 189 0979

Europe: +1 760 476 3961

Asia Pacific: +1 760 476 3960

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Specific target organ toxicity (repeated exposure)

Category 1 - (H372)

2.2. Label elements**Signal word****Danger****Hazard Statements**

H372 - Causes damage to organs through prolonged or repeated exposure if inhaled

EUH208 - Contains Benzoyl peroxide EUH208 - May produce an allergic reaction

Precautionary Statements - EU (§28, 1272/2008)

P260 - Do not breathe dust

P264 - Wash skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P314 - Get medical advice/attention if you feel unwell

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

2.3. Other hazards

No information available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.1 Substances**

Not applicable.

3.2 Mixtures

Chemical name	EC No	CAS No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH registration number
Polymethyl methacrylate	-	9011-14-7	50 - 70%	No data available	
Amorphous Silica	262-373-8 424-440-1	60676-86-0	10 - 25%	No data available	
Silica, cristobalite	238-455-4	14464-46-1	10 - 25%	STOT RE 1 (H372)	
Benzoyl peroxide	Present	94-36-0	0 - 1%	Org. Perox. B (H241) Eye Irrit. 2 (H319) Skin Sens. 1 (H317)	
1,2-Benzenedicarboxylic acid, dicyclohexyl ester	201-545-9	84-61-7	0 - 1%	Repr. 1B (H360D) Skin Sens. 1 (H317)	

Full text of H- and EUH-phrases: see section 16

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

Chemical name	CAS No	SVHC candidates
Polymethyl methacrylate	9011-14-7	-
Amorphous Silica	60676-86-0	-
Silica, cristobalite	14464-46-1	-
1,2-Benzenedicarboxylic acid, dicyclohexyl ester	84-61-7	-
Benzoyl peroxide	94-36-0	-

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance.
Inhalation	Remove to fresh air.
Skin contact	Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Ingestion	Clean mouth with water and drink afterwards plenty of water.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media No information available.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

5.3. Advice for firefighters

Special protective equipment for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas.
Other Information	Refer to protective measures listed in Sections 7 and 8.
For emergency responders	Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions	Should not be released into the environment. See Section 12 for additional Ecological Information.
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6.3. Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Take up mechanically, placing in appropriate containers for disposal.

6.4. Reference to other sections

Reference to other sections	See section 8 for more information. See section 13 for more information.
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Section 7: HANDLING AND STORAGE**7.1. Precautions for safe handling**

Advice on safe handling	Ensure adequate ventilation.
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General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep container tightly closed in a dry and well-ventilated place.
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7.3. Specific end use(s)

Risk Management Methods (RMM)	The information required is contained in this Material Safety Data Sheet.
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Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters****Exposure Limits**

Chemical name	EU	United Kingdom	France	Spain	Germany
Amorphous Silica 60676-86-0	-	STEL: 0.24 mg/m ³ TWA: 0.08 mg/m ³	-	-	TWA: 0.3 mg/m ³
Silica, cristobalite 14464-46-1	-	STEL: 0.3 mg/m ³ TWA: 0.1 mg/m ³	TWA: 0.05 mg/m ³	TWA: 0.05 mg/m ³	-
Benzoyl peroxide 94-36-0	-	STEL: 15 mg/m ³ TWA: 5 mg/m ³	TWA: 5 mg/m ³	TWA: 5 mg/m ³	TWA: 5 mg/m ³
1,2-Benzenedicarboxyl	-	STEL: 15 mg/m ³	-	-	-

ic acid, dicyclohexyl ester 84-61-7		TWA: 5 mg/m ³			
Chemical name	Italy	Portugal	Netherlands	Finland	Denmark
Amorphous Silica 60676-86-0	-	-	-	-	TWA: 0.1 mg/m ³
Silica, cristobalite 14464-46-1	-	TWA: 0.025 mg/m ³	TWA: 0.075 mg/m ³	TWA: 0.05 mg/m ³	TWA: 0.15 mg/m ³ TWA: 0.05 mg/m ³
Benzoyl peroxide 94-36-0	-	TWA: 5 mg/m ³	-	TWA: 5 mg/m ³ STEL: 10 mg/m ³	TWA: 5 mg/m ³
1,2-Benzenedicarboxylic acid, dicyclohexyl ester 84-61-7	-	-	-	-	TWA: 3 mg/m ³
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
Amorphous Silica 60676-86-0	TWA: 0.3 mg/m ³	TWA: 0.3 mg/m ³	TWA: 2.0 mg/m ³ TWA: 1.0 mg/m ³	-	TWA: 0.08 mg/m ³ STEL: 0.24 mg/m ³
Silica, cristobalite 14464-46-1	TWA: 0.15 mg/m ³	TWA: 0.15 mg/m ³	TWA: 2 mg/m ³ TWA: 0.3 mg/m ³ TWA: 4.0 mg/m ³ TWA: 1.0 mg/m ³	TWA: 0.15 mg/m ³ TWA: 0.05 mg/m ³ STEL: 0.45 mg/m ³ STEL: 0.15 mg/m ³	TWA: 0.1 mg/m ³ STEL: 0.3 mg/m ³
Benzoyl peroxide 94-36-0	STEL 10 mg/m ³ TWA: 5 mg/m ³	STEL: 5 mg/m ³ TWA: 5 mg/m ³	STEL: 10 mg/m ³ TWA: 5 mg/m ³	TWA: 5 mg/m ³ STEL: 10 mg/m ³	TWA: 5 mg/m ³ STEL: 15 mg/m ³
1,2-Benzenedicarboxylic acid, dicyclohexyl ester 84-61-7	TWA: 5 mg/m ³	-	-	-	TWA: 5 mg/m ³ STEL: 15 mg/m ³

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration (PNEC) No information available

8.2. Exposure controls

Personal protective equipment

Eye/face protection Tight sealing safety goggles.

Skin and body protection Wear suitable protective clothing.

Environmental exposure controls No information available.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state Powder(s)
Appearance Blue
Odor Odorless
Color No information available
Odor Threshold No information available

<u>Property</u>	<u>Values</u>	<u>Remarks Method</u>
pH	No data available	None known
Melting / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash Point	251°C	None known
Evaporation Rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability limit	No data available	
Lower flammability limit	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	No data available	None known
Water Solubility	Insoluble	
Solubility(ies)	No data available	None known
Partition coefficient: n-octanol/water	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Viscosity	No data available	None known

9.2. Other information

Softening Point	No information available
Molecular Weight	No information available
VOC Content (%)	No information available
Liquid Density	No information available
Bulk Density	No information available
Particle Size	No information available
Particle Size Distribution	No information available

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions.

Explosion Data

Sensitivity to Mechanical Impact	None.
Sensitivity to Static Discharge	None.

10.3. Possibility of hazardous reactions

Possibility of Hazardous Reactions	None under normal processing.
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10.4. Conditions to avoid

None known.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

None under normal use conditions.

Section 11: TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects****Information on likely routes of exposure****Product Information**

Inhalation	Specific test data for the substance or mixture is not available.
Eye contact	Specific test data for the substance or mixture is not available.
Skin contact	Specific test data for the substance or mixture is not available.
Ingestion	Specific test data for the substance or mixture is not available.

Information on toxicological effects

Symptoms No information available.

Numerical measures of toxicity**Acute Toxicity****Unknown acute toxicity**

- 99 % of the mixture consists of ingredient(s) of unknown toxicity
- 99 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
- 99 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 99 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
- 99 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
- 99 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Benzoyl peroxide	= 7710 mg/kg (Rat) = 6400 mg/kg (Rat)	-	-
1,2-Benzenedicarboxylic acid, dicyclohexyl ester	= 30 mL/kg (Rat)	-	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	No information available.
Serious eye damage/eye irritation	No information available.
Respiratory or skin sensitization	No information available.
Germ cell mutagenicity	No information available.

Carcinogenicity No information available.

Reproductive Toxicity No information available.

Chemical name	EU - Annex VI Reproductive
1,2-Benzenedicarboxylic acid, dicyclohexyl ester	Repr. 1B

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity No information available.

12.2. Persistence and degradability

Persistence and Degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation No information available.

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

Chemical name	PBT and vPvB assessment
Benzoyl peroxide	Not applicable
1,2-Benzenedicarboxylic acid, dicyclohexyl ester	Not applicable

12.6. Other adverse effects

Other adverse effects No information available.

Chemical name	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances
1,2-Benzenedicarboxylic acid, dicyclohexyl ester	Group III Chemical	-

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	No information available.

Section 14: TRANSPORT INFORMATION

<u>IMDG/IMO</u>	NOT REGULATED
14.1 UN-No.	Not Regulated
14.2 Proper Shipping Name	NOT REGULATED
14.3 Hazard Class	NOT REGULATED
14.4 Packing Group	NOT REGULATED
14.5 Marine Pollutant	Not applicable
14.6 Special Provisions	None
14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code	No information available

<u>RID</u>	NOT REGULATED
14.1 UN-No.	NOT REGULATED
14.2 Proper Shipping Name	NOT REGULATED
14.3 Hazard Class	NOT REGULATED
14.4 Packing Group	NOT REGULATED
14.5 Environmental hazard	Not applicable
14.6 Special Provisions	None

<u>ADR</u>	NOT REGULATED
14.1 UN-No.	NOT REGULATED
14.2 Proper Shipping Name	NOT REGULATED
14.3 Hazard Class	NOT REGULATED
14.4 Packing Group	NOT REGULATED
14.5 Environmental hazard	Not applicable
14.6 Special Provisions	None

<u>IATA</u>	NOT REGULATED
14.1 UN-No.	NOT REGULATED
14.2 Proper Shipping Name	NON REGULATED
14.3 Hazard Class	NOT REGULATED
14.4 Packing Group	NOT REGULATED
14.5 Environmental hazard	Not applicable
14.6 Special Provisions	None

Section 14: TRANSPORT INFORMATION

<u>IMDG/IMO</u>	NOT REGULATED
14.1 UN-No.	Not Regulated
14.2 Proper Shipping Name	NOT REGULATED
14.3 Hazard Class	NOT REGULATED
14.4 Packing Group	NOT REGULATED

14.5 Marine Pollutant Not applicable
 14.6 Special Provisions None
 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code No information available

RID NOT REGULATED
 14.1 UN-No. NOT REGULATED
 14.2 Proper Shipping Name NOT REGULATED
 14.3 Hazard Class NOT REGULATED
 14.4 Packing Group NOT REGULATED
 14.5 Environmental hazard Not applicable
 14.6 Special Provisions None

ADR NOT REGULATED
 14.1 UN-No. NOT REGULATED
 14.2 Proper Shipping Name NOT REGULATED
 14.3 Hazard Class NOT REGULATED
 14.4 Packing Group NOT REGULATED
 14.5 Environmental hazard Not applicable
 14.6 Special Provisions None

IATA NOT REGULATED
 14.1 UN-No. NOT REGULATED
 14.2 Proper Shipping Name NON REGULATED
 14.3 Hazard Class NOT REGULATED
 14.4 Packing Group NOT REGULATED
 14.5 Environmental hazard Not applicable
 14.6 Special Provisions None

Section 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

France

Occupational Illnesses (R-463-3, France)

Chemical name	French RG number	Title
Polymethyl methacrylate 9011-14-7	RG 65	-
Silica, cristobalite 14464-46-1	RG 25	-
Benzoyl peroxide 94-36-0	RG 66	-

Water hazard class (WGK) slightly hazardous to water (WGK 1)

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work .

Authorizations and/or restrictions on use:

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV). This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII).

Persistent Organic Pollutants

Not applicable.

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable.

International Inventories

TSCA	Contact supplier for inventory compliance status.
DSL/NDSL	Contact supplier for inventory compliance status.
EINECS/ELINCS	Contact supplier for inventory compliance status.
ENCS	Contact supplier for inventory compliance status.
IECSC	Contact supplier for inventory compliance status.
KECL	Contact supplier for inventory compliance status.
PICCS	Contact supplier for inventory compliance status.
AICS	Contact supplier for inventory compliance status.

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

No information available.

Section 16: OTHER INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under sections 2 and 3

H372 - Causes damage to organs through prolonged or repeated exposure if inhaled
H241 - Heating may cause a fire or explosion
H319 - Causes serious eye irritation
H317 - May cause an allergic skin reaction

Legend

SVHC: Substances of Very High Concern for Authorization:

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	-	Skin designation

Key literature references and sources for data

www.ChemADVISOR.com/

Issuing Date 01-Mar-2017

Revision Date 13-Apr-2017

This safety data sheet complies with the requirements of: Regulation (EC) No. 1907/2006.

Disclaimer

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End of Safety Data Sheet