

Safety data sheet

According to (EG) Nr. 1907/2006 EC

* **SECTION 1: Identification of the substance/mixture and of the company/undertaking**

1.1 Product identifier

Trade name: **Investment material liquid**

Type: ServoCast, ServoNorm, ServoQuick

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

Uses of the substance or mixture:

Mixing liquid for investment material in dental technology

Uses advised against:

No further relevant information available.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier

Servo-Dental GmbH & Co. KG

Street/P.O Box

Rohrstraße 30

Post code/City

58093 Hagen, Germany

Informing department

Technical information telephone +49(0)2331/9591-0

Telephone / fax / e-mail

+49(0)2331/9591-0 / +49(0)2331/9591-25 / info@servo-dental.de

1.4 Emergency telephone number / e-mail

Poison Information Center Mainz, www.giftinfo.uni-mainz.de,

telephone:+49 (0)6131/19240

* **SECTION 2: Hazards identification**

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

The product is not classified according to the CLP regulation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

Void

Hazard pictograms: Void

Signal word: Void

Hazard statements:

Void

2.3 Other hazards

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Results of PBT and vPvB assessment

- **PBT:** Not applicable.
 - **vPvB:** Not applicable.
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SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

Description: -

Dangerous components: Void

Additional information: For the wording of the listed hazard phrases refer to section 16.

* SECTION 4: First aid measures

4.1 Description of first aid measures

General information

No special measures required.

After inhalation

Supply fresh air; consult doctor in case of symptoms.

After skin contact

Instantly wash with water and soap and rinse thoroughly.

After eye contact

Rinse opened eye for several minutes under running water.

After swallowing

Rinse out mouth and then drink plenty of water. In case of persistent symptoms consult doctor.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

* SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

Not suitable:

5.2 Special hazards arising from the substance or mixture

No further relevant information available.

5.3 Advice for firefighters

Protective equipment: No special measures required.

Additional information: -

* SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

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Not required.

6.2 Environmental precautions

No special measures required.

6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (diatomite, universal binders, for small amounts tissues).

6.4 Reference to other sections

No dangerous materials are released.

See Section 8 for information on personal protection equipment.

* SECTION 7: Handling and storage

7.1 Precautions for safe handling

No special measures required.

Information about protection against explosions and fires

No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and containers: No special requirements.

Information about storage in one common storage facility: Not required

Further information about storage conditions: Protect from frost.

7.3 Specific end use(s)

No further relevant information available.

* SECTION 8: Exposure controls/personal protection

Additional information about design of technical systems:

No further data; see item 7.

8.1 Control parameters

Components with critical values that require monitoring at the workplace:

Component: formaldehyde; CAS no. : 50-00-0

Specification: MEL()

Value: Short-term value: 2.5 mg/m³, 2 ppm

Long-term value: 2.5 mg/m³, 2 ppm

Additional information: The lists that were valid during the compilation were used as basis.

8.2 Exposure controls

Personal protective equipment

General protective and hygienic measures

The usual precautionary measures should be adhered to in handling the chemicals.

Eye protection

not absolutely necessary.

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Protection of hands

Check protective gloves prior to each use for their proper condition.
recommended

Gloves

Material of gloves:

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material:

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:

Butyl rubber, BR

Nitrile rubber, NBR

Body protection:

Light weight protective clothing

Breathing equipment

Not required.

* SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

- Appearance / Form:	Fluid
- Colour :	whitish
Smell:	Odourless
Odour threshold:	Not determined.
pH value :	9,5 @ 20 °C
Melting point/Melting range:	Not determined
Boiling point/Boiling range:	100 °C
Flash point:	Not applicable.
Inflammability (solid, gaseous):	Not applicable.
Critical values for inflammability explosion:	Not determined.
Steam pressure:	23 hPa @ 20 °C
Steam density :	Not applicable.
Relative density:	1,2 g/cm ³ @ 20°C
Solubility in / Miscibility with:	Fully miscible
Partition coefficient (n-octanol/water):	Not determined.
Self-inflammability:	Product is not selfigniting.
Decomposition temperature:	Not determined.
Viscosity:	Not determined.
Danger of explosion:	Product is not explosive.

9.2 Other information

No further relevant information available.

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According to (EG) Nr. 1907/2006 EC

* **SECTION 10: Stability and reactivity**

10.1 Reactivity

No further relevant information available.

10.2 Chemical stability

Conditions to be avoided:

No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions

No dangerous reactions known.

10.4 Conditions to avoid

No further relevant information available.

10.5 Incompatible materials

No further relevant information available.

10.6 Hazardous decomposition products

None

* **SECTION 11: Toxicological information**

11.1 Information on toxicological effects

Acute toxicity

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.

Respiratory or skin sensitisation

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

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.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

* **SECTION 12: Ecological information**

12.1 Toxicity

Aquatic toxicity: No further relevant information available.

12.2 Persistence and degradability

No further relevant information available.

Safety data sheet

According to (EG) Nr. 1907/2006 EC

12.3 Bioaccumulative potential

No further relevant information available.

12.4 Mobility in soil

No further relevant information available.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects

No further relevant information available.

* SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation: Smaller quantities can be disposed with household garbage.

Uncleaned packagings

Recommendation: Disposal must be made according to official regulations.

European waste catalogue

18 01 06 chemicals consisting of or containing dangerous substances

* SECTION 14: Transport information

14.1 UN Number

ADR, ADN, IMDG, IATA: Void

14.2 UN proper shipping name

ADR, ADN, IMDG, IATA: Void

14.3 Transport hazard class(es)

ADR, ADN, IMDG, IATA: Void

14.4 Packing group

ADR, IMDG, IATA: Void

14.5 Environmental hazards

Marine Pollutant: ☐ yes / ☒ no

14.6 Special precautions for user

Not applicable.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable.

Transport/Additional information: -

UN "Model Regulation": Void

* SECTION 15: Regulatory information

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

Safety data sheet

According to (EG) Nr. 1907/2006 EC

mixture

National regulations

- Water hazard class: Generally not hazardous for water.

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Changes compared to the previous version

- * Data compared to the previous version altered

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the

International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Wording of hazard phrases and precautionary phrases listed in Sections 2 to 15

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Safety data sheet

According to (EG) Nr. 1907/2006 EC

* **SECTION 1: Identification of the substance/mixture and of the company/undertaking**

1.1 Product identifier

Trade name: **Investment material powder**

Type: ServoCast, ServoNorm, ServoQuick

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

Uses of the substance or mixture:

Investment material for casting in dental technology

Uses advised against:

No further relevant information available.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier

Servo-Dental GmbH & Co. KG

Street/P.O Box

Rohrstraße 30

Post code/City

58093 Hagen, Germany

Informing department

Technical information telephone +49(0)2331/9591-0

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1.4 Emergency telephone number / e-mail

Poison Information Center Mainz, www.giftinfo.uni-mainz.de,
telephone:+49 (0)6131/19240

* **SECTION 2: Hazards identification**

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

STOT RE 1 H372 Causes damage to organs through prolonged or repeated exposure.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms:



GHS08

Signal word: Danger

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According to (EG) Nr. 1907/2006 EC

Hazard-determining components of labelling

contains: Quartz, cristobalite

Hazard statements:

H372 H372 Causes damage to organs through prolonged or repeated exposure.

Precautionary statements:

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

2.3 Other hazards

Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

Description: Mixture of Quartz, cristobalite and additives

Dangerous components:

Component: Quartz

EINECS: 238-878-4 CAS-Nr. : 14808-60-7

Amount : 25 - 50 %

Classification according to Regulation (EC) No 1272/2008:
STOT RE 2, H373

Component: Cristobalite

EINECS: 238-455-4 CAS-Nr. : 14464-46-1

Amount : 25 - 50 %

Classification according to Regulation (EC) No 1272/2008:
STOT RE 2, H373

(For the wording of the listed hazard phrases refer to section 16.)

* **SECTION 4: First aid measures**

4.1 Description of first aid measures

After inhalation

Supply fresh air. Seek immediate medical advice.

After skin contact

Instantly wash with water and soap and rinse thoroughly.

After eye contact

Seek medical treatment.

After swallowing

Rinse out mouth and then drink plenty of water. In case of persistent symptoms consult doctor.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

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According to (EG) Nr. 1907/2006 EC

* **SECTION 5: Firefighting measures**

5.1 Extinguishing media

Suitable extinguishing agents: CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

Not suitable:

5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

5.3 Advice for firefighters

Protective equipment: No special measures required.

Additional information

* **SECTION 6: Accidental release measures**

6.1 Personal precautions, protective equipment and emergency procedures

Avoid causing dust.

Use breathing protection against the effects of fumes/dust/aerosol.

6.2 Environmental precautions

No special measures required.

6.3 Methods and material for containment and cleaning up

Collect mechanically.

Send for recovery or disposal in suitable containers.

6.4 Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

* **SECTION 7: Handling and storage**

7.1 Precautions for safe handling

Wear protective equipment. Keep unprotected persons away.

Waste air is to be released into the atmosphere only via suitable separators.

Information about protection against explosions and fires

No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and containers: No special requirements.

Information about storage in one common storage facility: Not required

Further information about storage conditions: None

7.3 Specific end use(s)

No further relevant information available.

* **SECTION 8: Exposure controls/personal protection**

Additional information about design of technical systems:

No further data; see item 7.

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According to (EG) Nr. 1907/2006 EC

8.1 Control parameters

Components with critical values that require monitoring at the workplace:

Component: magnesium oxide; CAS no. : 1309-48-4
Specification : WEL
Value : Long-term value: 10* 4** mg/m³
(as Mg) *inhalable dust **fume and respirable dust

Additional information: The lists that were valid during the compilation were used as basis.

8.2 Exposure controls

Personal protective equipment

General protective and hygienic measures

Keep away from foodstuffs, beverages and food.
Wash hands during breaks and at the end of the work.

Eye protection

Not absolutely necessary.

Protection of hands

Check protective gloves prior to each use for their proper condition.
recommended

Gloves

Material of gloves:

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material:

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:

Butyl rubber, BR
Nitrile rubber, NBR

Body protection:

Light weight protective clothing

Breathing equipment

Filter P1.

Recommended filter device for short term use:

P2 (FFP 2 EN 149:2001) / P3 (FFP 3 EN 149:2001)

* SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

- Appearance / Form:	Powder
- Colour :	whitish
Smell:	Odourless
Odour threshold:	Not determined.

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pH value :	Not applicable.
Melting point/Melting range:	Not determined
Boiling point/Boiling range:	> 999 °C
Flash point:	Not applicable
Inflammability (solid, gaseous):	Not determined.
Critical values for inflammability explosion:	Not determined.
Steam pressure:	Not applicable.
Steam density :	Not applicable.
Relative density:	Not determined
Solubility in / Miscibility with:	Insoluble
Partition coefficient (n-octanol/water):	Not determined.
Self-inflammability:	Product is not explosive.
Decomposition temperature:	Not determined.
Viscosity:	Not applicable.
Danger of explosion:	Product is not explosive.
Solids content:	100 %

9.2 Other information

No further relevant information available.

* SECTION 10: Stability and reactivity

10.1 Reactivity

No further relevant information available.

10.2 Chemical stability

Conditions to be avoided:

No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions

No dangerous reactions known.

10.4 Conditions to avoid

No further relevant information available.

10.5 Incompatible materials

No further relevant information available.

10.6 Hazardous decomposition products

Ammonia

Additional information: -

* SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

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According to (EG) Nr. 1907/2006 EC

Serious eye damage/irritation

Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

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.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard

Based on available data, the classification criteria are not met.

* **SECTION 12: Ecological information**

12.1 Toxicity

Aquatic toxicity: No further relevant information available.

12.2 Persistence and degradability

No further relevant information available.

12.3 Bioaccumulative potential

No further relevant information available.

12.4 Mobility in soil

No further relevant information available.

Additional ecological information:

· General notes: Avoid transfer into the environment

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects

No further relevant information available.

* **SECTION 13: Disposal considerations**

13.1 Waste treatment methods

Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings

Packagings that cannot be cleaned are to be disposed of in the same manner as the product.

European waste catalogue

18 01 06 chemicals consisting of or containing dangerous substances

* **SECTION 14: Transport information**

Safety data sheet

According to (EG) Nr. 1907/2006 EC

14.1 UN Number

ADR, ADN, IMDG, IATA: Void

14.2 UN proper shipping name

ADR, ADN, IMDG, IATA: Void

14.3 Transport hazard class(es)

ADR, ADN, IMDG, IATA: Void

14.4 Packing group

ADR, IMDG, IATA: Void

14.5 Environmental hazards

Marine Pollutant: ☐ yes / ☒ no

14.6 Special precautions for user

Not applicable.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable.

Transport/Additional information: -

UN "Model Regulation": Void

* **SECTION 15: Regulatory information**

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

No further relevant information available.

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Changes compared to the previous version

* Data compared to the previous version altered

Abbreviations and acronyms

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GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

STOT RE 1: Specific target organ toxicity - Repeated exposure, Hazard Category 1

Safety data sheet

According to (EG) Nr. 1907/2006 EC

Wording of hazard phrases and precautionary phrases listed in Sections 2 to 15

H372 Causes damage to organs through prolonged or repeated exposure.
