

SAFETY DATA SHEETS

This SDS packet was issued with item:

073242757

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

073242658 073242773

Safety Data Sheet

according to Regulation (EU) No. 1907/2006

TempoCem, TempoCem Soft

Print date: 04.03.2011

MSDS: 4510

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1. Identification of the substance/preparation and of the company/undertaking**Identification of the substance or preparation**

TempoCem, TempoCem Soft

Company/undertaking identification

| | | | |
|---------------|--|----------|------------------------|
| Company name: | DMG Chemisch-Pharmazeutische Fabrik GmbH | | |
| Street: | Elbgaustraße 248 | | |
| Place: | D-22547 Hamburg | | |
| Telephone: | +49. (0) 40. 84006-0 | Telefax: | +49. (0) 40. 84006-222 |
| Internet: | www.dmg-dental.com | e-mail: | info@dmg-dental.com |

2. Hazards identification**Classification**

Indications of danger : Dangerous for the environment

R-phrases:

Irritating to skin.

May cause sensitization by skin contact.

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3. Composition/information on ingredients**Chemical characterization (Mixture)**

chemical characterization (preparation): ZnO, EUGENOL

Hazardous components

| EC-No. | CAS-No. | Chemical name | Quantity | Classification |
|-----------|-----------|---------------|-----------|----------------|
| 215-222-5 | 1314-13-2 | zinc oxide | 65 - 75 % | N R50-53 |
| | 97-53-0 | eugenol | < 10 % | Xi R38-43 |

Full text of each relevant R phrase can be found in heading 16.

4. First aid measures**After inhalation**

Move victim to fresh air. Put victim at rest and keep warm.

After contact with skin

After contact with skin, wash immediately with: Water and soap.

After contact with eyes

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

After ingestion

Immediately get medical attention.

5. Fire-fighting measures**Suitable extinguishing media**Water fog. Extinguishing powder. Sand. Foam. Carbon dioxide (CO₂).**Extinguishing media which must not be used for safety reasons**

High power water jet.

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6. Accidental release measures**Personal precautions**

Provide adequate ventilation. Wear suitable protective clothing.

Environmental precautions

Do not empty into drains or the aquatic environment.

Methods for cleaning up/taking up

Collect mechanically.

7. Handling and storage**Handling****Advice on safe handling**

Keep container tightly closed. Wear suitable protective clothing and gloves. Avoid contact with eyes.

Storage**Requirements for storage rooms and vessels**

Keep container tightly closed in a cool, well-ventilated place.

Store only in original container.

8. Exposure controls/personal protection**Exposure limit values****Exposure controls****Occupational exposure controls**

Ensure adequate ventilation of the storage area.

Protective and hygiene measures

When using do not eat or drink.

Respiratory protection

The following must be prevented: inhalation.

Hand protection

Tested protective gloves are to be worn: Suitable material: NBR (Nitrile rubber).

Eye protection

Tightly sealed safety glasses.

9. Physical and chemical properties**General information**

| | |
|-----------------|---------------|
| Physical state: | Paste |
| Colour: | brown / white |
| Odour: | eugenol |

Important health, safety and environmental information

| | Test method |
|--------------------------------------|----------------|
| pH-Value: | not applicable |
| Changes in the physical state | |
| Boiling point: | > 200 °C |
| point of decomposition: | > 130 °C |
| Flash point: | > 110 °C |

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Vapour pressure: < 1 hPa
(at 20 °C)
Density: 2,3 g/cm³
Water solubility: slightly soluble
Vapour density: > 1

Other information

Ignition temperature: > 300 °C

10. Stability and reactivity**Conditions to avoid**

heat.
Decomposition takes place from temperatures above: 130 °C

Materials to avoid

Keep in a cool place away from acids.

11. Toxicological information**Acute toxicity**

LD50: Rat. 250 mg/kg

Corrosive and irritant effects

Frequently or prolonged contact with skin may cause dermal irritation.
Irritant effect on the eye: Frequently or prolonged contact with skin may cause dermal irritation.

12. Ecological information**Persistence and degradability**

Preparation not tested.

Further information

Do not empty into drains or the aquatic environment. Leakage into the environment must be prevented.

13. Disposal considerations**Advice on disposal**

Carry out a burning of hazardous waste according to official regulations.

Waste disposal number of waste from residues/unused products

180106 WASTES FROM HUMAN OR ANIMAL HEALTH CARE AND/OR RELATED RESEARCH (except kitchen and restaurant wastes not arising from immediate health care); wastes from natal care, diagnosis, treatment or prevention of disease in humans; chemicals consisting of or containing dangerous substances
Classified as hazardous waste.

14. Transport information**Land transport (ADR/RID)**

UN number: 3077
ADR/RID class: 9
Classification code: M7
Warning plate
Hazard-no.: 90
Hazard label: 9

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according to Regulation (EU) No. 1907/2006

TempoCem, TempoCem Soft

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ADR/RID packing group: III

Description of the goods

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc Oxide, ZnO)

Other applicable information (land transport)

Special provisions: 274 335 601

E1

: 3

: E

Inland waterways transport

UN number: 3077

ADNR class:

9

Classification code: M7

Hazard label: 9

Packing group: III

Description of the goods

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc Oxide, ZnO)

Other applicable information (inland waterways transport)

Special provisions: 274 601

Marine transport

UN number: 3077

IMDG code: 9

Marine pollutant: •

Hazard label: 9

IMDG packing group: III

EmS: F-A, S-F

Limited quantity: 5 kg

Description of the goods

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc Oxide, ZnO)

Other applicable information (marine transport)

Special provisions: 274, 909, 944

Air transport

UN/ID number: 3077

ICAO/IATA-DGR: 9

Hazard label: 9

ICAO packing group: III

Limited quantity Passenger: 30 kg G

IATA-packing instructions - Passenger: 911

IATA-max. quantity - Passenger: 400 kg

IATA-packing instructions - Cargo: 911

IATA-max. quantity - Cargo: 400 kg

Description of the goods

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc Oxide, ZnO)

Other applicable information (air transport)

E1

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: Y911
400 kg**15. Regulatory information****Labelling**

Danger symbols: N - Dangerous for the environment

Hazardous components which must be listed on the label

Zinc Oxide , ZnO

R phrases

- | | |
|-------|--|
| 38 | Irritating to skin. |
| 43 | May cause sensitization by skin contact. |
| 50/53 | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |

S phrases

- | | |
|-------|---|
| 37 | Wear suitable gloves. |
| 61 | Avoid release to the environment. Refer to special instructions / Safety data sheets. |
| 24/25 | Avoid contact with skin and eyes. |

National regulatory information

Water contaminating class (D): 3 - highly water contaminating

16. Other information**Full text of R-phrases referred to under sections 2 and 3**

- | | |
|-------|--|
| 38 | Irritating to skin. |
| 43 | May cause sensitization by skin contact. |
| 50 | Very toxic to aquatic organisms. |
| 50/53 | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| 53 | May cause long-term adverse effects in the aquatic environment. |

Further Information

-

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)

Safety Data Sheet

TempoCem, TempoCem Soft

Product code: 11030, 110303, 212129 (4510_GHS)

Page 1 of 6

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

1.1. Product identifier

TempoCem Automix, TempoCem Soft, TempoCem Smartmix

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

1.3. Details of the supplier of the safety data sheet

| | | |
|------------------------|--|---|
| Company Name: | DMG AMERICA LLC | |
| Address: | 242 South Dean Street | |
| City, State, Zip Code: | Englewood, NJ. 07631 | |
| Telephone: | (800) 662-6383 | Emergency no. - INFOTRAC (800) 535 - 5053 |
| email address: | Info@dmg-america.com | |
| Website: | www.dmg-america.com | |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Indications of danger: N - Dangerous for the environment

R phrases:

Irritating to skin.

May cause sensitisation by skin contact.

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

GHS classification

Hazard categories:

Hazardous to the aquatic environment: Aquatic Acute 1

Hazardous to the aquatic environment: Aquatic Chronic 1

Hazard Statements:

Causes skin irritation.

May cause an allergic skin reaction.

Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Signal word: Warning

Pictograms: GHS09



Hazard statements

| | |
|------|---|
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H410 | Very toxic to aquatic life with long lasting effects. |

Precautionary statements

| | |
|------|--|
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P273 | Avoid release to the environment. |

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

chemical characterization (preparation): ZnO, EUGENOL

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Hazardous components

| EC No | Chemical name | Quantity |
|--------------|---|-----------|
| CAS No | Classification | |
| Index No | GHS classification | |
| REACH No | | |
| 215-222-5 | zinc oxide | |
| 1314-13-2 | N - Dangerous for the environment R50-53 | 65 - 75 % |
| 030-013-00-7 | Aquatic Acute 1, Aquatic Chronic 1; H400 H410 | |
| | eugenol | < 10 % |
| 97-53-0 | Xi - Irritant R38-43 | |
| | | |

Full text of R and H phrases: see Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Move victim to fresh air. Put victim at rest and keep warm.

After contact with skin

After contact with skin, wash immediately with: Water and soap.

After contact with eyes

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

After ingestion

Immediately get medical attention.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water fog. Extinguishing powder. Sand. Foam. Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons

High power water jet.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Wear suitable protective clothing.

6.2. Environmental precautions

Do not empty into drains or the aquatic environment.

6.3. Methods and material for containment and cleaning up

Collect mechanically.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Keep container tightly closed. Wear suitable protective clothing and gloves. Avoid contact with eyes.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place.

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Store only in original container.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls



Occupational exposure controls

Ensure adequate ventilation of the storage area.

Protective and hygiene measures

When using do not eat or drink.

Respiratory protection

The following must be prevented: inhalation.

Hand protection

Tested protective gloves are to be worn: Suitable material: NBR (Nitrile rubber).

Eye protection

Tightly sealed safety glasses.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|-----------------|---------------|
| Physical state: | Paste |
| Colour: | brown / white |
| Odour: | eugenol |

| | |
|-----------|----------------|
| pH-Value: | not applicable |
|-----------|----------------|

Changes in the physical state

| | |
|--------------------------------|------------------|
| Boiling point: | > 200 °C |
| point of decomposition: | > 130 °C |
| Flash point: | > 110 °C |
| Ignition temperature: | > 300 °C |
| Vapour pressure: (at 20 °C) | < 1 hPa |
| Density: | 2,3 g/cm³ |
| Water solubility: | slightly soluble |
| Vapour density: | > 1 |

Test method

SECTION 10: Stability and reactivity

10.4. Conditions to avoid

heat.

Decomposition takes place from temperatures above: 130 °C

10.5. Incompatible materials

Keep in a cool place away from acids.

SECTION 11: Toxicological information

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TempoCem, TempoCem Soft

Product code: 11030, 110303, 212129 (4510_GHS)

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11.1. Information on toxicological effects

Acute toxicity

LD50: Rat. 250 mg/kg

Irritation and corrosivity

Frequently or prolonged contact with skin may cause dermal irritation.

Irritant effect on the eye: Frequently or prolonged contact with skin may cause dermal irritation.

SECTION 12: Ecological information

12.2. Persistence and degradability

Preparation not tested.

Further information

Do not empty into drains or the aquatic environment. Leakage into the environment must be prevented.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Carry out a burning of hazardous waste according to official regulations.

Waste disposal number of waste from residues/unused products

180106 WASTES FROM HUMAN OR ANIMAL HEALTH CARE AND/OR RELATED RESEARCH (except kitchen and restaurant wastes not arising from immediate health care); wastes from natal care, diagnosis, treatment or prevention of disease in humans; chemicals consisting of or containing dangerous substances
Classified as hazardous waste.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:

3077

14.2. UN proper shipping name:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide, ZnO)

14.3. Transport hazard class(es):

9

14.4. Packing group:

III

Hazard label:

9



Classification code:

M7

Special Provisions:

274 335 601

Limited quantity:

5 kg

Transport category:

3

Hazard No:

90

Tunnel restriction code:

E

Other applicable information (land transport)

E1

Marine transport (IMDG)

14.1. UN number:

3077

14.2. UN proper shipping name:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide, ZnO)

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TempoCem, TempoCem Soft

Product code: 11030, 110303, 212129 (4510_GHS)

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14.3. Transport hazard class(es):

9

14.4. Packing group:

III

Hazard label:

9



Special Provisions:

274, 335

Limited quantity:

5 kg

EmS:

F-A, S-F

Other applicable information (marine transport)

E1

Air transport (ICAO)

14.1. UN number:

3077

14.2. UN proper shipping name:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide, ZnO)

14.3. Transport hazard class(es):

9

14.4. Packing group:

III

Hazard label:

9



Special Provisions:

A97 A158 A179

Limited quantity Passenger:

30 kg G

IATA-packing instructions - Passenger:

956

IATA-max. quantity - Passenger:

400 kg

IATA-packing instructions - Cargo:

956

IATA-max. quantity - Cargo:

400 kg

Other applicable information (air transport)

E1

: Y956

14.5. Environmental hazards

Dangerous for the environment:

yes



SECTION 15: Regulatory information

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

National regulatory information

Water contaminating class (D):

3 - highly water contaminating

SECTION 16: Other information

Full text of R phrases referred to under Sections 2 and 3

| | |
|-------|--|
| 38 | Irritating to skin. |
| 43 | May cause sensitisation by skin contact. |
| 50 | Very toxic to aquatic organisms. |
| 50/53 | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |

Safety Data Sheet

TempoCem, TempoCem Soft

Product code: 11030, 110303, 212129 (4510_GHS)

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53 May cause long-term adverse effects in the aquatic environment.

Full text of H statements referred to under Sections 2 and 3

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Further Information

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The data for the hazardous ingredients were taken respectively from the last version Date 04/13/2016 of the sub-contractor's safety data sheet.