

## **SAFETY DATA SHEETS**

**This SDS packet was issued with item:**

073242724

**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).**

073242765

**Safety Data Sheet**

according to Regulation (EU) No. 1907/2006

**TempoCem NE**

Print date: 31.08.2010

MSDS: 4500

Page 1 of 5

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

TempoCem NE

**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:

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, Fatty acid.

**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.

**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.

**Safety Data Sheet**

according to Regulation (EU) No. 1907/2006

**TempoCem NE**

Print date: 31.08.2010

MSDS: 4500

Page 2 of 5

**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**Important health, safety and environmental information**

	Test method
pH-Value:	not applicable
<b>Changes in the physical state</b>	
Boiling point:	> 200 °C
point of decomposition:	> 130 °C
Flash point:	> 110 °C
Vapour pressure:	< 1 hPa
(at 20 °C)	
Density:	2,3 g/cm <sup>3</sup>
Water solubility:	slightly soluble
Vapour density:	> 1

**Other information**

Ignition temperature: &gt; 300 °C

**Safety Data Sheet**

according to Regulation (EU) No. 1907/2006

**TempoCem NE**

Print date: 31.08.2010

MSDS: 4500

Page 3 of 5

**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. 2000 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
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

**Safety Data Sheet**

according to Regulation (EU) No. 1907/2006

**TempoCem NE**

Print date: 31.08.2010

MSDS: 4500

Page 4 of 5

**Inland waterways transport**

UN number: 3077  
 ADN R 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  
 : Y911  
 400 kg

**15. Regulatory information****Labelling**

Danger symbols: N - Dangerous for the environment

**Safety Data Sheet**

according to Regulation (EU) No. 1907/2006

**TempoCem NE**

Print date: 31.08.2010

MSDS: 4500

Page 5 of 5

**Hazardous components which must be listed on the label**

Zinc Oxide , ZnO

**R phrases**

50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**S phrases**

61 Avoid release to the environment. Refer to special instructions / Safety data sheets.

**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**

50/53 Very toxic to aquatic organisms, 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 NE

Product code: 110302\_212104 (4500\_GHS)

Page 1 of 6

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

#### 1.1. Product identifier

TempoCem NE Auomix, 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  
email address: [Info@dmg-america.com](mailto:Info@dmg-america.com)  
Website: [www.dmg-america.com](http://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:

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:

Very toxic to aquatic life with long lasting effects.

#### 2.2. Label elements

Signal word: Warning

Pictograms: GHS09



#### **Hazard statements**

H410 Very toxic to aquatic life with long lasting effects.

#### **Precautionary statements**

P273 Avoid release to the environment.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

#### **Chemical characterization**

chemical characterization (preparation): ZnO, Fatty acid.

# Safety Data Sheet

## TempoCem NE

Product code: 110302\_212104 (4500\_GHS)

Page 2 of 6

### Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification	
Index No	GHS classification	
REACH No		
215-222-5	zinc oxide	65 - 70 %
1314-13-2	N - Dangerous for the environment R50-53	
030-013-00-7	Aquatic Acute 1, Aquatic Chronic 1; H400 H410	

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 (CO<sub>2</sub>).

#### 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.

Store only in original container.

## SECTION 8: Exposure controls/personal protection



# Safety Data Sheet

## TempoCem NE

Product code: 110302\_212104 (4500\_GHS)

Page 3 of 6

### 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

pH-Value: not applicable

#### **Test method**

#### **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/cm<sup>3</sup>

Water solubility: slightly soluble

Vapour density: > 1

## 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

### 11.1. Information on toxicological effects

#### **Acute toxicity**

LD50: Rat. 2000 mg/kg

# Safety Data Sheet

## TempoCem NE

Product code: 110302\_212104 (4500\_GHS)

Page 4 of 6

CAS No	Chemical name	Exposure routes	Method	Dose	Species	Source
1314-13-2	zinc oxide	oral	LD50 mg/kg	> 5000	Rat	IUCLID

### 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)


# Safety Data Sheet

## TempoCem NE

Product code: 110302\_212104 (4500\_GHS)

Page 5 of 6

**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: 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

50 Very toxic to aquatic organisms.

# Safety Data Sheet

## TempoCem NE

Product code: 110302\_212104 (4500\_GHS)

Page 6 of 6

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.

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

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

### Further Information

-

---

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