

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

### 1.1. Product identifier

# D1 Glazes & Paints

OBA LTP Low Temperature Paintings

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

**Relevant identified uses:** Metal production and processing, including alloys  
**Uses advised against:** Other

### 1.3. Details of the supplier of the safety data sheet

#### Manufacturer

Morgan Molten Metal Systems GmbH

**Telephone:** +49 (0) 56 57 7010

Noltinastrasse 29

D 37297 Berkatal

Morgan Molten Metal Systems (Suzhou) Co. Ltd.

**Telephone:** +86 (0) 512 6292 3188

108 Tong Sheng Lu

CN 215 126 Suzhou

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Morganite Crucible (India) Ltd

**Telephone:** +91 (0) 240 2554405

B-11 M.I.D.C.

IN 431 136 Waluj Aurangabad

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Morganite Brasil Ltda

**Telephone:** +55 (0) 11 4075-0400

Av do Taboão 3265

BR 09565-000 São Bernardo do Campo São Paulo

#### Supplier (manufacturer/importer/only representative/downstream user/distributor)

Morgan Molten Metal Systems GmbH

**Telephone:** +49 (0) 56 57 7010

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#### Information contact

Morgan Molten Metal Systems GmbH

**Information telephone** +49 (0) 56 57 7010

**Website** <http://www.morganmms.com/>

### 1.4. Emergency telephone number

Morgan Molten Metal Systems GmbH

**Telephone** +49 (0) 56 57 7010

This number is serviced during office hours.

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008:  
STOT RE 1, H372

### 2.2. Label elements

Classification according to Regulation (EC) No 1272/2008 [CLP]

Hazard pictograms



GHS08  
Danger

Signal word:

Hazard statements:

H372 Causes damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).

Precautionary statements:

P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P264 Wash hands 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

Special labelling of particular preparations:

Only for commercial users. Safety data sheet available for professional user on request. Contains .?.  
May produce an allergic reaction.

### 2.3. Other hazards

This substance/mixture does not contain components in concentrations of 0.1% or higher, which are classified as either persistent, bioaccumulating and toxic (PBT) or very persistent and very bioaccumulating (vPvB). No risks worthy of mention. Please observe the information on the safety data sheet at all times. Preparations supplied in a dry form may release dust during handling until mixed with water as per installation and operating instructions. Once installed and commissioned, all preparations may release dust if products are abraded, broken or otherwise damaged through mishandling. Crystalline silica is present as a natural impurity in some of the product components and can be produced in small quantities within the product during prolonged use above 900 °C. Long-term exposure to respirable crystalline silica may cause lung disease,

## SECTION 3: Composition / information on ingredients

### 3.1. Substances

not applicable

### 3.2. Mixtures

aqueous suspensions containing ceramic materials

#### Composition/information on ingredients

Substance:	CAS-No.:	REACH-no.:	Concentration:	Classification: EC 1272/2008 (CLP):	M, ATE, Note
inhalable Quartz	14808-60-7		0 - 5 %	STOT RE 1, H372	
Naturally occurring substances, Kaolinite	999999-99-4		0 - 5 %	STOT RE 1, H372	
Sodium nitrite	7632-00-0		< 1 %	Ox. Liq./Sol. 2/3, H272; Acute Tox. 3, H301; Eye Irrit. 2, H319; Aquatic Acute 1, H400	M = 0

Boronic acid	10043-35-3	< 0,1 %	-	M = 1
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(Full text of H- and EUH-statements: see section 16.)

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

**General information:** In case of accident or unwellness, seek medical advice immediately

**In case of inhalation:** Move victim to fresh air. Put victim at rest and keep warm. Call a physician immediately.

**Following skin contact:** After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, consult a physician.

**After eye contact:** In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Seek medical attention if problems persist.

**After ingestion:** Rinse mouth thoroughly with water. Do NOT induce vomiting. Call a physician immediately.

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

No known symptoms to date.

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

No special measures are necessary. Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

**Suitable extinguishing media:** Water fog. High power water jet. Carbon dioxide (CO<sub>2</sub>). Foam. dry extinguishing powder.

**Unsuitable extinguishing media:** none

### 5.2. Special hazards arising from the substance or mixture

none

### 5.3. Advice for firefighters

**General information**

Co-ordinate fire-fighting measures to the fire surroundings. The product itself does not burn.

**Special protective equipment for fire-fighters:**

In case of fire: Wear self-contained breathing apparatus.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

No special measures are necessary.

### 6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

### 6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).  
 Treat the recovered material as prescribed in the section on waste disposal.

## 6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Advices on safe handling

No special precautionary measures are necessary.

#### Precautions against fire and explosion:

No special fire protection measures are necessary.

### 7.2. Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Keep/Store only in original container. Keep container tightly closed.

#### Hints on joint storage

Keep away from food, drink and animal feedingstuffs.

### 7.3. Specific end use(s)

Observe instructions for use.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### occupational exposure limit value

Substance:	CAS-No.:	Source:	Occupational exposure limit value:[ppm]	Occupational exposure limit value:[mg/m <sup>3</sup> ]	Limitation of exposure peaks:	Remark:

#### Substance with a common (EC) occupational exposure limit value.

Substance:	CAS-No.:	Source:	Occupational exposure limit value:[ppm]	Occupational exposure limit value:[mg/m <sup>3</sup> ]	Limitation of exposure peaks:	Remark:

#### DNEL-/PNEC-values

##### DNEL value

Substance:	CAS-No.:	DNEL/DMEL

##### PNEC Value

Substance:	CAS-No.:	PNEC

#### Additional information

AGS A: respirable dust fraction E: inhalable dust fraction Y: A risk of reproductive effects needs not to be feared if the occupational exposure limit value (AGW) and the biological limit value (BGW) is kept

### 8.2. Exposure controls

#### Occupational exposure controls:

Provide adequate ventilation as well as local exhaust at critical locations. Technical measures and the application of suitable work processes have priority over personal protection equipment.

#### General protection and hygiene measures:

When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work. Apply skin care products after work. Wash contaminated clothing prior to re-use.

#### Personal protection equipment

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

#### Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required. Respiratory protection necessary at: Dust formation. Suitable respiratory protection apparatus: Full-face mask or mouthpiece with particulate filter: maximum use concentration for substances with exposure limits: P1 filter: up to a max. of 4 times the exposure limit. P2 filter: up to a max. of 15 times the exposure limit. P3 filter: up to a max. of

#### Hand protection

Hand protection is not required

#### Eye/face protection

Tightly sealed safety glasses. Eye glasses with side protection

#### Body protection:

Body protection: not required.

#### Environmental exposure controls

refer to chapter 7. No further action is necessary.

#### Consumer exposure controls

refer to chapter 7. No further action is necessary.

#### Exposure Scenario:

none

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

#### Appearance

Physical state: Liquid  
Colour: coloured  
Odour: odourless  
Odour threshold: No data available

#### Safety relevant basis data

	parameter	Value	unit	Remark
Melting point/freezing point:		700	°C	solid
Initial boiling point and boiling range:		100	°C	Water
Flammability:				none
lower flammability or explosive limits:				not applicable
Upper flammability or explosive limits:				not applicable
Flash point:				not applicable
Ignition temperature:				No data available
Decomposition temperature:				No data available
pH:	g/L at 20 °C)	6 - 10		
Kinematic viscosity:				No data available
Water solubility (g/L):				No data available

<b>Partition coefficient: n-octanol/water:</b>		No data available
<b>Vapour pressure:</b>		No data available
<b>Density:</b>	1,3 - 1,9 g/cm <sup>3</sup>	
<b>Relative density:</b>		No data available
<b>Particle properties:</b>		No data available

## 9.2. Other information

none

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No known hazardous reactions.

### 10.2. Chemical stability

The substance is chemically stable under recommended conditions of storage, use and temperature.

### 10.3. Possibility of hazardous reactions

none

### 10.4. Conditions to avoid

No information available.

### 10.5. Incompatible materials

Hydrogen fluoride

### 10.6. Hazardous decomposition products

No information available.

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes within the meaning of Regulation (EC)

#### No. 1272/2008

No information available.

<b>M-factor:</b>	-	<b>Acute toxicity (dermal):</b>	-
<b>Acute toxicity (oral):</b>	-	<b>Acute toxicity (inhalative):</b>	-

#### Acute toxicity

Substance:	CAS-No.:	Toxicological information
Sodium nitrite	7632-00-0	LD50 oral (rat) 85 mg/kg
Boronic acid	10043-35-3	LD50 oral (rat) 2660 mg/kg

#### Skin corrosion/irritation:

No information available. Not an irritant. Bridging principle "Dilution".

#### Serious eye damage/irritation:

No information available. Not an irritant. Bridging principle "Dilution".

#### Respiratory or skin sensitisation:

No information available. not sensitising. Bridging principle "Dilution".

### CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

#### Carcinogenicity:

There are no data available on the preparation/mixture itself. No indication of human carcinogenicity.

Bridging principle "Dilution".

#### Germ cell mutagenicity:

There are no data available on the preparation/mixture itself. No indications of human germ cell mutagenicity exist. Bridging principle "Dilution".

#### Reproductive toxicity:

There are no data available on the preparation/mixture itself. No indications of human reproductive toxicity exist. Bridging principle "Dilution".

### STOT-single exposure:

No information available.

### STOT-repeated exposure:

The product is: aqueous suspensions containing ceramic materials Based on available data, the classification criteria are not met.

### Aspiration hazard

No information available. Not an irritant. Bridging principle "Dilution".

### Additional information

none

## 11.2. Information about other hazards

### 11.2.1 Endocrine disrupting properties

There are no data available on the preparation/mixture itself.

### 11.2.2 Other Information

none

## SECTION 12: Ecological information

### 12.1. Toxicity

No information available.

### Ecotoxicity

Substance:	CAS-No.:	Ecotoxicity
Sodium nitrite	7632-00-0	LC50 (fish, 96 h) 0,675 mg/L LC50 (crustaceans, 48h) 35,1 mg/L
Boronic acid	10043-35-3	LC50 (fish, 96 h) 487 mg/L LC50 (crustaceans, 48h) 180 mg/L LC50 (crustaceans, 48h) 226 mg/L LC50 (crustaceans, 48h) 91 mg/L

### 12.2. Persistence and degradability

The methods for determining the biological degradability are not applicable to inorganic substances.

### 12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

### 12.4. Mobility in soil

No information available.

### 12.5. Results of PBT and vPvB assessment

The mixture contains the following substances fulfilling the PBT-/vPvB criteria according to REACH Annex XIII

## 12.6 Endocrine disruptive effect

No known endocrine disrupting properties

## 12.7. Other adverse effects

none

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## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Appropriate disposal/Product:

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

#### Appropriate disposal / Package

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

#### List of proposed waste codes / waste designations according to EWC / AVV

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

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## SECTION 14: Transport information

### 14.1. UN number

UN No.: none

### 14.2. UN proper shipping name

#### Land transport (ADR/RID)

No dangerous good under transport regulations.

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#### Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)

No dangerous good under transport regulations.

-

### 14.3. Transport hazard class(es)

Hazard label(s) / Label: -

Classification code: / Classification Code: -

### 14.4. Packing group

Packing group/ Packing Group: keine

### 14.5. Environmental hazards

ADR/RID / IMDG / ICAO-TI / IATA-DGR:  
Marine pollutant:

Yes

  

No

  

### 14.6. Special precautions for user

Land transport (ADR/RID)

transport category: -

Special provisions: -

tunnel restriction code: -

Limited quantity (LQ): -

Sea transport (IMDG)



EmS-No: -  
Special provisions: - Limited quantity (LQ): -

#### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Remark none

### SECTION 15: Regulatory information

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

##### EU legislation

**Regulation (EC) No. 1005/2009 on substances that lead to the depletion of the ozone layer**  
The substance/mixture/product with its ingredients is not subject to the Regulation.

**Regulation (EU) No 649/2012 on the export and import of dangerous chemicals**  
The substance/mixture/product with its ingredients is not subject to the Regulation.

**The substance/product is registered with strictly controlled conditions as defined in Article 18(4) of Regulation (EC) No. 1907/2006 (REACH Regulation) and must therefore be handled as such.**

Use restriction according to REACH annex XVII, no.:

##### National regulations

Observe in addition any national regulations!

##### Restrictions of occupation

No information available.

Restrictions of occupation

**Not subject to StörfallVO.**

##### Solvents Regulation (31st BImSchV)

Use restriction according to REACH annex XVII, no.:

##### Other regulations, restrictions and prohibition regulations

TRGS 900 TRGS 903

#### 15.2. Chemical Safety Assessment

**For this preparation a chemical safety assessment has been carried out.** -

For this substance a chemical safety assessment is not required.

### SECTION 16: Other information

#### Relevant H- and EUH-phrases (Number and full text):

##### Hazard statements

H301	Toxic if swallowed.
360FD	May damage fertility. Suspected of damaging the unborn child.
H372	Causes damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.

**Training advice**

none

**Recommended restrictions of use:**

refer to chapter 1.

**Further remarks:**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage

**Documentation of changes:**

Update according to current regulations

**Key literature references and sources for data**

Information comes from reference works, the literature or safety data sheets of the components.

**Abbreviations and acronyms**

none