

Safety Data Sheet

According to 1907/2006/EG, Article 31



1. Identification of the substance/ mixture and of the company/undertaking

Item description: XPAND 732-0006

Relevant identified uses of the substance or mixture and uses advised against
No further relevant information available.

Application of the substance Investment for dental casting

Manufacturer: **Dentify GmbH**
Scheffelstr. 22
78234 Engen / Germany

Information: Tel: + 49-7733-977 62 40, Fax: +49-7733-977 62 44
(Mo – Do 8:00 – 16:30, Fr 8:00 – 15:00)

Emergency: Tel: + 49-7733-977 62 40
(Mo – Do 8:00 – 16:30, Fr 8:00 – 15:00)

2. Hazards identification

Classification of the substance according to regulation (EC) No. 1272/2008
STOT RE H372

Causes damage to the lung through prolonged or repeated exposure.
Route of exposure: Inhalative

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Xn; Harmful
R48/20: Harmful: danger of serious damage to health by prolonged exposure through inhalation

Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
Do not breathe dust.

Classification system: The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

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

Hazard determining components of labelling:
Quartz (SiO₂)
Cristobalite

Hazard statements

H372 Causes damage to the lung through prolonged or repeated exposure. Route of exposure: Inhalative.

Precautionary statements

P285 In case of inadequate ventilation wear respiratory protection.
P270 Do not eat, drink or smoke when using this product.

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P260 Do not breathe dust.
P314 Get medical advice/attention if you feel unwell.
P501 Dispose of contents / container in accordance with local / regional / national / international regulations.

Information concerning particular hazards for human and environment:

Contains quartz. Do not breathe dust. May cause lung injury (silicosis / lung cancer). Wear protection mask.

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

3. Composition/ information on ingredients

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 14808-60-7	Quartz (SiO ₂)	50-90%
EINECS: 238-878-4	Xn R48/20 STOT RE 1, H372	

CAS: 14464-46-1	crystalite	1-30%
EINECS: 238-455-4	Xn R48/20 STOT RE 2, H373	

CAS: 1309-48-4	magnesium oxide	1-20%
EINECS: 215-171-9	substance with a community workplace exposure limit	
Index number: 025-199-09-0		

Non-Dangerous components:

CAS: 7722-76-1	ammonium digydrogenorthophosphate	1-20%
EINECS: 231-764-5		

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

4. First aid measures

Description of first aid measures

General information:

Take affected persons out into the fresh air. Position and transport stably in side position. In case of troubles or persistent symptoms, consult an medical.

After inhalation:

Take affected persons into fresh air and keep quiet.
In case of irregular breathing or respiratory arrest provide artificial respiration.

After skin contact:

Call a doctor immediately.

After eye contact:

Wash with water and soap.
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing:

Rinse out mouth and then drink plenty of water.
In case of troubles, consult an medical.

Most important symptoms and effects, both acute and delayed

No further relevant information available.

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5. Firefighting measures

Extinguishing media

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

Special hazards arising from the substance or mixture No further relevant information available.

Advice for firefighters

Protective equipment: Wear self-contained respiratory protective device.

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Wear fully protective suit.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Avoid formation of dust. Wear respiratory protection.

Environmental precautions: Do not allow to enter sewers / Surface or ground water.
Do not allow to penetrate the ground / soil.

Methods and material for containment and cleaning up:
Pick up mechanically.
Avoid generation of dust.
Dispose contaminated material as waste according to item 13.

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 disposal information.

7. Handling and Storage

Handling:
Precautions for safe handling
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of dust.
Do not breathe dust.
Keep receptacles tightly sealed.
Wash hands before breaks and at the end of work.
Do not eat, drink, smoke at the workplace.
Take off immediately all contaminated clothing.

Information about fire - and explosion protection: No special measures required.

Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles:
Keep container in a well-ventilated, cool and dry place.
Protect from moisture.

Information about storage in one common storage facility: Not required.

Further information about storage conditions:
Keep container tightly sealed.

Storage class: No information available.

Specific end use(s) No further relevant information available.

8. Exposure controls/ personal protection

Additional information about design of technical facilities: No further data; see item 7.

Control parameters
Ingredients with limit values that require monitoring at the workplace:
14808-60-7 Quartz (Si O₂)
MAK (Germany) alveolengängige Fraktion
14464-46-1 cristobalite
MAK (Germany) alveolengängige Fraktion
1309-48-4 magnesium oxide
WEL (Great Britain)
Long-term value: 10⁻⁴ mg/m³
(as Mg) *inhalable dust **fume and respirable dust
AGW (Germany)
Long-term vlue: 1,25* 10⁻² mg/m³
2 (II); *alveonlengängig *eintembar; AGS, DFG

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

Exposure controls
Personal protective equipment:
General protective and hygienic measures:
The usual precautionary measures are to be adhered to when handling chemicals.
Wash hands before breaks and at the end of work.

Respiratory protection: Suitable respiratory protective device recommended.

Protection of hands:

Material of gloves	The glove material has to be impermeable and resistant to the product. Due to missing tests no recommendation to the glove material can be given for the product. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
Penetration time of glove material	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 can not be calculated in advance and has therefore to be checked prior to the application.
Eye protection:	The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed. Dust protection goggles.

9. Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:

Form:	Powder
Colour:	white
Odour:	Odourless
pH-value:	Not applicable

Change in condition

Melting point:	undetermined
Boiling point:	undetermined

Flash point: Not applicable.

Flammability (solid, gaseous): Not determined

Flash point: Not applicable.

Flammability (solid, gaseous): Not determined.

Ignition temperature:

Decomposition temperature: Not determined.

Self-igniting: Product is not selfigniting.

Danger of explosion: Product does not present an explosion hazard.

Density: Not determined.

Solubility in / Miscibility with water: Insoluble.

Other information No further relevant information available.

10. Stability and reactivity

Reactivity No data available.

Chemical stability No data available.

Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

Possibility of hazardous reactions No data available.

Conditions to avoid Moisture.

Incompatible materials: No further relevant information available.

Hazardous decomposition products:

While warming up the set investments in a preheating furnace fumes occur: ammonia.

11. Toxicological information

Information on toxicological effects

Acute toxicity: No data available.

Primary irritant effect:

on the skin: No data available.

on the eye: No irritating effect.

Sensitization: No data available.

Additional toxicological information:

Contains quartz. Do not breathe dust. May cause lung injury (silicosis / lung cancer). Wear protection mask.

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12. Ecological information

Aquatic toxicity:	No further relevant information available.
Persistence and degradability	No further relevant information available.
Bioaccumulative potential	No further relevant information available.
Mobility in soil	No further relevant information available.
Additional ecological information:	
General notes:	The product may not be released into the environment without control. Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.
Results of PBT and vPvB assessment	
PBT:	Not applicable.
vPvB:	Not applicable.
Other adverse effects	No further relevant information available.

13. Disposal considerations

Waste treatment methods	
Recommendation	Waste disposal according to official state regulations.
Waste disposal key:	
	The waste disposal code as prescribed in the European Waste Catalogue (EWC) depends on the waste producer and can thus vary for a product. The waste disposal code should thus be obtained separately from the waste producer in each case.
European waste catalogue	
	According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.
Uncleaned packaging:	
Recommendation:	Dispose unclean packages in compliance with the local, official regulations.

14. Transport information

UN-Number	
ADR, ADN, IMDG, IATA	Void.
UN proper shipping name	
ADR, AND, IMDG, IATA	Void.
Transport hazard class(es)	
ADR, AND, IMDG, IATA	Void.
Packing group	
ADR, IMDG, IATA	Void
Environmental hazards:	
Marine pollutant:	No
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:	Not applicable.
UN "Model Regulation"	UN-,-

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture	
Labelling according to Regulation (EC) No 1272/2008	The product is classified and labelled according to the CLP regulation.
National regulations:	
Information about limitation of use:	Employment restrictions concerning juveniles must be observed. Employment restrictions concerning pregnant and lactating women must be observed.

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Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16. Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases	H372 Causes damage to the lung through prolonged or repeated exposure. Route of exposure: Inhalative. H373 May cause damage to organs through prolonged or repeated exposure. R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
Department issuing MSDS: Abbreviations and acronyms: ADR:	Department of product security. 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 Harmonized 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)
STOT RE 1:	Specific target organ toxicity-Repeated exposure, Hazard Category 1
STOT RE 2:	Specific target organ toxicity-Repeated exposure, Hazard Category 2

The above given data are based upon our stand of knowledge and experience from the issuing date, they do not have any relevance of characteristics warranty. No responsibility will be taken for the faultlessness and integrity.