

## Section 1: Identification

### Product Identifier

Product Name Z4 Universal Investment, MG-Vest Investment  
Product Code 80005, 80011, 80016, 80082

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

Recommended use Used by dental and other professional as a casting and pressing investment

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

Manufacturer/Supplier Vacalon Company Inc  
12960 Stonecreek Dr Ste C  
Pickerington, OH 43147 USA  
www.vacalon.com • info@vacalon.com  
Telephone (General) 614-577-1945

### Emergency telephone number

Hazmat Services Inc (24 hour) 800-373-7542 (USA)  
484-951-2432 (International)

## Section 2: Hazard Identification

### Classification of the substance or mixture

Hazard Category • Specific target organ toxicity - repeated exposure, Category 2, H373

### Label elements

Signal word • Warning  
Pictogram • GHS08



### Hazard statements

H373 • May cause damage to lungs through prolonged or repeated inhalation.

### Precautionary statements

#### Prevention

P260 • Do not breathe dust.  
P270 • Do not eat, drink or smoke when using this product  
P284 • In case of inadequate ventilation wear respiratory protection.

#### Response

P314 • Get medical attention/advice if you feel unwell.

#### Storage/Disposal

P501 • Dispose of contents/container according to regulations.

#### Other

• Contains a small amount of crystalline silica. Prolonged or repeated inhalation of respirable crystalline silica dust may cause delayed lung injury. (silicosis)

## Section 3. Composition/Information on Ingredients

Chemical characterization • Mixture

### Components

Chemical Name	Identifiers	%	Classification
Quartz (SiO <sub>2</sub> )	CAS: 14808-60-7 EC Number: 238-878-4	70% to 90%	STOT RE 2, H373
Magnesium Oxide	CAS: 1309-48-4 EC Number: 215-171-9	5% - 15%	

Amonium Phosphate	CAS: 7722-76-1 EC Number: 231-764-5	5% - 15%	
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## **Section 4. First-Aid Measures**

### **Description of first-aid measures**

- Inhalation
- Move person to fresh air. If not breathing, give artificial respiration. Seek medical attention if problems persist.
- Skin
- Wash with water and soap. This product is not skin irritating.
- Eye
- Flush eyes with plenty of water and seek medical attention if problems persist.
- Ingestion
- Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth out immediately. When in doubt, or if symptoms are observed immediately get medical attention.

### **Most important symptoms and effects, both acute and delayed**

- No data available

### **Indication of any immediate medical attention and special treatment needed**

- No data available

## **Section 5. Firefighting Measures**

### **Extinguishing media**

- Suitable extinguishing media
- The product itself will not support combustion. In a sustained fire use an extinguisher appropriate for surrounding area.

### **Unsuitable extinguishing media**

- None known

### **Special hazards arising from the substance or mixture**

- No data available

### **Advice for firefighters**

- The product itself will not burn. Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

## **Section 6. Accidental Release Measures**

### **Personal precautions, protective equipment and emergency procedures**

- Avoid casing dust.
- Wear breathing protection to protect against the effects of dust.
- Wear protective clothing.

### **Environmental precautions**

- Prevent further leakage or spillage if safe to do so. Avoid run off to waterways and sewers

### **Methods and material for containment and cleaning up**

- Containment/Clean-up measures
- Clean-up mechanically and dispose of according to regulations.

### **Reference to other sections**

No data available

## **Section 7. Handling and Storage**

### **Precautions for safe handling**

- Handling
- Handle and open with care.
  - Prevent formation of dust.

### **Information about protection against explosion and fires**

- Product is not flammable.
- No special measures required.

### **Condition for safe storage, including any incompatibilities**

- Technical measures and storage conditions
- No data available

- Information about common storage area      • No data available  
 Additional storage information                • Store in cool, dry conditions in well sealed containers

## **Section 8. Exposure Controls/Personal Protection**

### **Control parameters**

- Occupational Exposure Limit Values (as respirable dust)  
 Nuisance dusts  
 OSHA PEL    • 5 mg/m<sup>3</sup> (TWA)  
 ACGIH-TLV  
 Metal Oxides (CAS No. 1309-48-4)  
 OSHA-PEL    • 5 mg/m<sup>3</sup> (TWA)  
 Quartz (CAS No. 14808-60-7)  
 OSHA-PEL    • 0.05 mg/m<sup>3</sup> (TWA)  
 ACGIH-TLV    • 0.025 mg/m<sup>3</sup> (TWA)  
 Cristobalite (CAS No. 14464-46-1)  
 OSHA-PEL    • 0.05 mg/m<sup>3</sup> (TWA)  
 ACGIH-TLV    • 0.025 mg/m<sup>3</sup> (TWA)

### **Exposure Controls**

- Engineering measures/controls                • Local ventilation should be designed and installed to keep exposure to respirable dust below 0.025 mg/m<sup>3</sup>
- Personal Protective Equipment
- Respiratory    • In case of insufficient ventilation, wear suitable respiratory equipment.
- Eye/Face    • Wear chemical resistant safety glasses
- Hands    • Wear appropriate chemical resistant gloves
- Skin/Body     • Chemical resistant protective clothing or apron
- General industrial hygiene considerations    • Wash hands before breaks and at the end of work
- Environmental exposure controls                • No data available

## **Section 9. Physical and Chemical Properties**

<b>Appearance/Description</b>	White/Off-White Powder		
Odor	Odorless	Odor Threshold	No data available
pH	4 - 5 in contact with water	Specific Gravity	No data available
Melting Point/Range	No data available	Boiling Point/Range	No data available
Water Solubility	Insoluble	Viscosity	No data available
Partition coefficient: n-octanol/water	No data available	Decomposition Temperature	No data available
<b>Volatility</b>			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available	Explosive Properties	Product is not explosive.
<b>Flammability (solid, gas)</b>	Product is not flammable		
Flash Point	No data available	UEL	No data available
Auto-ignition Temperature	No data available	LEL	No data available

## **Section 10. Stability and Reactivity**

- Reactivity    • No data available
- Chemical Stability                                    • Stable at normal temperatures, may solidify when mixed with water
- Possibility of hazardous reactions            • No data available
- Conditions to avoid                                 • No data available
- Incompatible materials                             • No data available

Hazardous decomposition products

- When preheating temperature reach 200°C slight ammonia odor is released.

## **Section 11. Toxicological Information**

### **Information on toxicological effects**

Likely routes of exposure

- Inhalation

### **Acute/potential health effects**

Inhalation

- Inhalation of powder may result in irritation of the upper respiratory tract (mouth, nose, throat)

Skin

- Skin contact material may cause irritation or dryness.

Eyes

- Skin contact with dust may produce itching and temporary mechanical irritation.

Ingestion

- May cause temporary mechanical irritation of digestive tract, nausea, vomiting and diarrhea.

### **Sensitizing effects**

- No data available

### **Acute toxicity data**

- No data available

### **Delayed and immediate effects as well as chronic effects from short and long term exposure**

- Prolonged/repeated inhalation of respirable crystalline silica dust may cause delayed lung injury (silicosis).

### **Carcinogenicity**

- No data available

## **Section 12. Ecological Information**

Ecotoxicity

- No data available

Persistence and degradability

- No data available

Bioaccumulative potential

- No data available

Mobility in soil

- No data available

Other information

- Do not discharge product unmonitored into environment

## **Section 13. Disposal Considerations**

### **Waste treatment methods**

Recommendation

- Dispose of in accordance with all local, state and federal regulations.

Contaminated packaging

- Dispose of in accordance with all local, state and federal regulations.

Other

- Waste is not hazardous as defined by RCRA (40 CFR)

## **Section 14. Transport Information**

### **Land Transport (DOT)**

UN number

- Not applicable

UN proper shipping name

- Not applicable

Transport hazard classes

- Not applicable

Note

- Product is not dangerous according to regulations

### **Marine Transport**

UN number

- Not applicable

UN proper shipping name

- Not applicable

Transport hazard classes

- Not applicable

Marine pollutant

- No

Note

- Product is not dangerous according to regulations

### **Air Transport**

UN/ID number

- Not applicable

UN proper shipping name	• Not applicable
Transport hazard classes	• Not applicable
Note	• Product is not dangerous according to regulations

## **Section 15. Regulatory Information**

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

OSHA Hazardous Communications Standard (29CFR 1910.1200)	• This product is considered hazardous
SARA Hazard Categories	• Immediate and delayed health
TSCA	• This product contains materials listed in the TSCA inventory or otherwise complies with TSCA requirements.
CERCLA	• No reportable ingredients
US - SARA - Section 313	• No reportable ingredients
California Prop 65	• This product contains chemicals known by the state of California to cause cancer or birth defects.

## **Section 16. Other Information**

Last Revision Date	• 08/24/2021
Original Preparation Date	• 03/01/2015

### Disclaimer

This document has been prepared using data from current manufacturer's SDS's of the component parts of the product and from other sources considered to be technically reliable. This document is not meant to be an all-inclusive document on worldwide hazard communication regulations and shall be used only as a guide. Each user of this material needs to evaluate the conditions of use and design the appropriate protective mechanisms to prevent employee exposures, property damage or release to the environment, in addition to complying with all Federal, State, Provincial and Local laws and regulations. The information contained in this SDS is furnished without warranty, expressed or implied, regarding the accuracy or results obtained from the use thereof. Vacalon assumes no legal responsibility for the use or reliance upon the data in this sheet. In no event will the manufacturer or the distributor be responsible for damages of any nature whatsoever resulting from the use of or reliance upon this information or the misuse of the product.

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