

Safety Data Sheet -Investment material- According to EG 1907/2006 (REACH)

Versions-No.: 02

Valid from: 12/2021
Replaces version No. 01 from 06/2016

1. Identification of substance and company	
1.1 Trade name:	ADENTA VEST CB, ADENTA VEST MG
1.2 Product details:	Mixture of silicon dioxide, monoammonium phosphate, magnesium oxide and additives
Product form:	Powder
Purpose:	For the production of a refractory mould for the casting technique.
1.3 Manufacturer:	Adentatec GmbH
Street:	Konrad-Adenauer-Straße 13
ZIP/city/Country.:	50996 Köln/ GERMANY
Phone:	0 221 - 35 96 100
Fax:	0 221 - 35 96 170
Information department:	Alexander Schnack Tel.: 0 221 - 35 96 100
Emergency information:	030 19240
E-Mail:	Alexander Schnack info@adentatec.com
Homepage:	www.adentatec.com
2. Hazards identification	
2.1 Classification of the substance or mixture . Classification according to Regulation (EC) No 1272/2008	Classification according to Regulation (EC) No 1272/2008 (CLP) STOT RE 1; H372i Notes on classification The classification of the product has been determined on the basis of the following procedures according to Article 9 and the criteria of the Regulation (EC) No 1272/2008: Physical hazards: Evaluation of test data according to Annex I, Part 2. Health and environmental hazards: Calculation procedure according to Annex I, Parts 3, 4 and 5.
2.2 Label elements	<p>Hazard statements H372i Causes damage to organs through prolonged or repeated exposure if inhaled.</p> <p>Precautionary statements P260 Do not breathe dust. P314 If you feel unwell, seek medical advice/attention. P501 Dispose of contents/container in accordance with local and national regulations.</p> <p>Labelling information This product contains more than 10% quartz (fine fraction) classified as STOT RE1.</p> <p>Hazard pictograms GHS08</p> <p>Signal word DANGER</p>
2.3 Other hazards	Depending on handling and use (e.g. grinding, drying), the formation of airborne alveolar crystalline silica is possible. Long-term and/or intensive inhalation of alveolar crystalline



Safety Data Sheet -Investment material- According to EG 1907/2006 (REACH)

Versions-No.: 02

Valid from: 12/2021
Replaces version No. 01 from 06/2016

	<p>silica can cause dust lung disease (silicosis). The main symptoms of silicosis are coughing and breathing problems / shortness of breath.</p> <p>Appropriate protective and monitoring measures should be in place for irregular exposure to respirable crystalline silica. Special care should be taken when handling the product to avoid dust formation.</p> <p>PBT assessment No data available.</p> <p>vPvB assessment No data available.</p>						
3. Composition/Data on components							
<p>The information as to risk and precautions given in the chapters 4 to 8, 10 to 12 do not only apply to the product itself, rather to the resulting dust and vapours generated on working with it.</p> <p>3.1 Chemical composition:</p> <p>Chemical characterization:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 35%;">Quartz (SiO₂)</td> <td style="width: 35%;">>10 wt%</td> <td style="width: 30%;">CAS: 14808-60-7 EINECS: 238-878-4</td> </tr> </table> <p>Classification EC 1272/2008: STOT RE 1; H372i</p> <hr/> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 35%;">Christobalite</td> <td style="width: 35%;">>10 wt%</td> <td style="width: 30%;">CAS: 14464-46-1 EINECS: 238-455-4</td> </tr> </table> <p>Classification EC 1272/2008: STOT RE 1; H372i</p> <hr/> <p>SVHC No</p> <p>Additional information: For the wording of the listed hazard statements, see section 16.</p>		Quartz (SiO ₂)	>10 wt%	CAS: 14808-60-7 EINECS: 238-878-4	Christobalite	>10 wt%	CAS: 14464-46-1 EINECS: 238-455-4
Quartz (SiO ₂)	>10 wt%	CAS: 14808-60-7 EINECS: 238-878-4					
Christobalite	>10 wt%	CAS: 14464-46-1 EINECS: 238-455-4					
4. First aid measures							
4.1 General information:	<p>General information: If there is a risk of unconsciousness, position and transport in a stable lateral position. If symptoms persist, consult a doctor.</p> <p>in case of persistent symptoms. Remove contaminated clothing and shoes immediately and clean thoroughly before reuse.</p> <p>After inhalation: Remove affected person from danger zone. Provide fresh air. In case of irregular breathing/respiratory arrest: Artificial respiration. Call a doctor immediately.</p> <p>After skin contact: Wash with soap and water.</p> <p>After eye contact: Rinse opened eye for 15 minutes under running water and seek medical advice.</p> <p>After ingestion: Rinse mouth thoroughly with water. Do not give anything to unconscious persons. Consult a doctor immediately.</p>						
4.2 Important acute and delayed symptoms and effects:	No further relevant information available.						
4.3 Information for the doctor:	No further relevant information available.						

Safety Data Sheet -Investment material- According to EG 1907/2006 (REACH)

Versions-No.: 02

Valid from: 12/2021
Replaces version No. 01 from 06/2016

5. Fire fighting measures	
5.1 Suitable extinguishing aids:	<p>Suitable extinguishing media Carbon dioxide; Extinguishing powder; Water spray; Foam</p> <p>Unsuitable extinguishing media Full water jet</p>
5.2 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases:	No data available.
5.3 Protective equipment:	Use self-contained breathing apparatus. Product itself does not burn! Match extinguishing media and fire-fighting measures to the surrounding fire. Wear protective suit.
6. Accidental release measures	
6.1 Person-related safety precautions: Protective equipment and to be used in emergencies procedure:	<p>Personnel not trained for emergencies Avoid dust formation. Observe protective regulations (see section 7 and 8).</p> <p>Emergency personnel No information available. Personal protective equipment see section 8.</p>
6.2 Measures for environmental protection:	Do not allow to enter drains/surface waters/groundwater. Do not allow to enter the subsoil/ground.
6.3 Measures for cleaning/collecting:	Take up mechanically. Avoid dust formation. Treat the absorbed material according to the section "Disposal"
6.4 Reference to other sections:	No data available.
7. Handling and storage	
7.1 Information for safe handling:	<p>Information for safe handling Keep container tightly closed. Minimise the risk when handling the product by applying protective and preventive measures. precautionary measures to reduce the risk to a minimum. The working procedure should, as far as the state of the art allows technology, the working procedure should be designed in such a way that hazardous substances are not released or skin contact can be ruled out.</p> <p>General protective and hygienic measures Wash hands before breaks and at the end of work. Do not smoke, eat or drink while working. Immediately remove soiled, Remove contaminated clothing immediately. Do not inhale dust. Keep away from food and drink. Advice on protection against fire and explosion No special measures required.</p>
7.2 Conditions for safe storage, including intolerances: Common storage notes:	<p>Technical measures and storage conditions Keep container dry, tightly closed and in a cool, well-ventilated place. Requirements for storage rooms and containers Store only in the original container. Information on storage in one common storage facility Protect from moisture. Do not store together with: explosive substances. Storage class according to TRGS 510 6.1C Flammable, acutely toxic cat. 3 / toxic or chronically acting hazardous substances</p>

Safety Data Sheet
-Investment material-
According to EG 1907/2006 (REACH)

Versions-No.: 02

Valid from: 12/2021
Replaces version No. 01 from 06/2016

7.3 Specific end uses:	No further relevant information available.
8. Exposure controls and personal protection	
8.1 To be monitored parameter:	<p>Fine dust limit values according to TRGS 900.</p> <p>Components with biological limit values:</p> <p>Observe the general dust limit value for alveolar dust content according to TRGS 900 are 1.25 mg/m³.</p> <p>Additional notes: The lists valid at the time of preparation served as a basis.</p>
8.2 Exposure controls Personal protective equipment:	<p>Suitable technical control equipment Ensure good ventilation. This can be achieved by local or room exhaust ventilation. If this is not sufficient to concentrations below the airborne limits, suitable respiratory equipment must be worn. be worn.</p> <p>Wear safety shoes.</p> <p>Respiratory protection: If occupational exposure limits are exceeded, suitable respiratory protective equipment must be worn. If there are no If there are no occupational exposure limits, adequate respiratory protection measures must be taken if dusts are formed. Respiratory filter particles FP2 - FP3</p> <p>Glove material: Butyl rubber Fluorocarbon rubber (Viton) Nitrile rubber Natural rubber (latex) Chloroprene rubber Neoprene gloves.</p> <p>Hand protection: In case of possible skin contact with the product, the use of gloves, tested according to e.g. EN 374, offers sufficient protection. The protective glove should always be tested for its suitability for the workplace (e.g. mechanical resistance, product compatibility, antistatic properties). The glove manufacturer's instructions and glove manufacturer's instructions and information on the use, storage, care and replacement of the gloves. Protective gloves should be replaced immediately if they become damaged or show the first signs of wear. Arrange work processes so that gloves do not have to be worn all the time.</p> <p>Penetration time of the glove material: The exact penetration time should be obtained from the protective glove manufacturer and adhered to.</p> <p>Eye protection: Safety goggles (DIN 58211, EN 166)</p> <p>Body protection: Light protective clothing</p>

Safety Data Sheet
-Investment material-
According to EG 1907/2006 (REACH)

Versions-No.: 02

Valid from: 12/2021
Replaces version No. 01 from 06/2016

9. Physical and chemical properties	
9.1 Information on basic physical and chemical properties:	<p>Shape / Colour: White to grey powder</p> <p>Odour: Odourless</p> <p>pH value: 5-7</p>
9.2 Other information:	<p>Product is hygroscopic Product sets with water</p>
10. Stability and reactivity	
10.1 Reactivity:	No hazardous reactions are to be expected if used as directed.
10.2 Chemical stability:	Stable if recommended storage and handling instructions are followed (see section 7).
10.3 Possibility of hazardous reactions:	Not applicable
10.4 Conditions to avoid:	Protect from humidity and water.
10.5 Incompatible materials:	Not applicable
10.6 Hazardous decomposition products:	When preheating the set investment material in the preheating furnace as intended, approx. 1 wt.% ammonia is produced. Extract vapours and discharge into the open air
11. Toxicological information	
11.1 Information on toxicological effects:	<p>Acute oral toxicity No data available</p> <p>Acute dermal toxicity No data available</p> <p>Acute inhalation toxicity No data available</p> <p>Skin corrosion/irritation No data available</p> <p>Serious eye damage/irritation No data available</p> <p>Respiratory/skin sensitisation No data available</p> <p>Germ cell mutagenicity No data available</p> <p>Reproductive toxicity No data available</p> <p>Carcinogenicity No data available</p> <p>Specific target organ toxicity single exposure No data available</p> <p>Specific target organ toxicity repeated exposure No data available</p> <p>Aspiration hazard No data available</p>

Safety Data Sheet
-Investment material-
According to EG 1907/2006 (REACH)

Versions-No.: 02

Valid from: 12/2021
Replaces version No. 01 from 06/2016

	<p>Delayed and immediate effects and chronic effects</p> <p>Effects after short or prolonged exposure Contact with skin and eyes may cause mechanical irritation. Inhalation of dusts may cause respiratory irritation of the respiratory tract. May cause silicosis.</p>
12. Ecological information	
12.1 Toxicity:	<p>Fish toxicity (acute) No data available</p> <p>Fish toxicity (chronic) No data available</p> <p>Daphnia toxicity (acute) No data available</p> <p>Daphnia toxicity (chronic) No data available</p> <p>Algal toxicity (acute) No data available</p> <p>Algal toxicity (chronic) No data available</p> <p>Bacterial toxicity No data available</p>
12.2 Persistence and degradability:	No data available
12.3 Bioaccumulative potential:	No data available
12.4 Mobility in soil:	No data available
12.5 Results of PBT and vPvB assessment:	PBT assessment No data available. vPvB assessment No data available.
12.6 Other adverse effects:	<p>No data available.</p> <p>Other information Do not allow uncontrolled release of product into the environment.</p>
13. Disposal considerations	
13.1 Waste treatment Methods:	<p>Product The allocation of a waste code number in accordance with the European Waste Catalogue (AVV) is to be carried out in consultation with the regional waste disposal company. regional waste disposal company.</p> <p>Packaging Packaging must be emptied of all residues and disposed of properly in accordance with the statutory regulations. Packaging that cannot be emptied must be disposed of in consultation with the regional waste disposal company.</p>
14. Transport information	
	<p>14.1 Transport ADR/RID/ADN The product is not subject to ADR/RID/ADN regulations.</p>

Safety Data Sheet -Investment material- According to EG 1907/2006 (REACH)

Versions-No.: 02

Valid from: 12/2021
Replaces version No. 01 from 06/2016

	<p>14.2 Transport IMDG The product is not subject to IMDG regulations.</p> <p>14.3 Transport ICAO-TI / IATA The product is not subject to ICAO-TI / IATA regulations.</p> <p>14.4 Other information No information available.</p> <p>14.5 Environmental hazards For information on environmental hazards, if relevant, see 14.1 - 14.3.</p> <p>14.6 Special precautions for user No information available.</p> <p>14.7 Transport in bulk according to Annex II of the MARPOL Convention and the IBC Code</p>
15. Regulatory information	
<p>15.1 Safety, health and environmental regulations / legislation specific for the substance or mixture:</p>	<p>EU regulations Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation) According to the available data and/or according to the information provided by the upstream suppliers, the product does not contain any substance(s), which is/are considered as substance(s) subject to authorisation according to REACH Regulation (EC) 1907/2006 Annex XIV.</p> <p>REACH Candidate List of Substances of Very High Concern (SVHC) for the Authorisation Procedure According to the available data and/or according to the information provided by the pre-suppliers, the product does not contain any substance(s), which, according to Article 57 in combination with Article 59 of REACH Regulation (EC) 1907/2006, is/are to be considered for inclusion in Annex XIV (List of substances subject to authorisation).</p> <p>Regulation (EC) No 1907/2006 (REACH) Annex XVII: Restrictions on the manufacture, placing on the market and use of certain substances. placing on the market and use of certain dangerous substances, mixtures and articles According to the available data and/or according to the information provided by the pre-suppliers, the product does not contain any substance(s), subject to REACH Regulation (EC) 1907/2006 Annex XVII.</p> <p>Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances. The product is not subject to Annex I, Part 1 or 2.</p> <p>Other regulations National health and safety regulations must be applied when using this product. apply when using this product.</p> <p>National regulations Water hazard class Class 1 Source: Classification according to AwSV (Ordinance on Installations for Handling Substances Hazardous to Water). Other regulations TRGS 906 (List of carcinogenic activities or processes according to § 3 para. 2 No. 3 GefStoffV) must be observed.</p>

Safety Data Sheet -Investment material- According to EG 1907/2006 (REACH)

Versions-No.: 02

Valid from: 12/2021
Replaces version No. 01 from 06/2016

15.2 chemical safety assessment:	A chemical safety assessment has not been carried out for the present mixture.
16. Other information	
<p>Data sources used to compile the data sheet: Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended. EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EU National occupational exposure limit value lists of the respective countries in the respective valid version. Transport regulations according to ADR, RID, IMDG, IATA in the respective valid version. Data sources used to determine physical, toxicological and ecotoxicological data, are indicated directly in the respective sections.</p> <p>. Contact: info@adentatec.com</p> <p>ADR: Accord relatif au transport international 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</p> <p>GHS: Globally Harmonised 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) LC50: Lethal concentration, 50 percent</p> <p>LD50: Lethal dose, 50 percent</p> <p>PBT: Persistent, Bioaccumulative and Toxic</p> <p>vPvB: very Persistent and very Bioaccumulative</p> <p>Resp. Sens. 1: Respiratory sensitisation - Category 1 Skin Sens. 1: Skin sensitisation - Category 1 Muta. 2: Germ cell mutagenicity - Category 2</p> <p>Carc. 1B: Carcinogenicity - Category 1B</p> <p>Repr. 1B: Toxicity to reproduction - Category 1B</p> <p>Aquatic Chronic 4: Harmful to the aquatic environment - long-term - Category 4</p>	