

## MATERIAL SAFETY DATA SHEET

### Mineralis

|  |  |                       |   |      |                   |       |       |     |                     |     |                              |  |                           |                    |  |                        |                 |       |            |  |              |   |           |                  |   |      |  |            |                     |              |                           |           |                      |      |                                   |                            |  |                  |                                  |          |  |         |  |          |  |            |   |          |  |                   |   |                |  |
|--|--|-----------------------|---|------|-------------------|-------|-------|-----|---------------------|-----|------------------------------|--|---------------------------|--------------------|--|------------------------|-----------------|-------|------------|--|--------------|---|-----------|------------------|---|------|--|------------|---------------------|--------------|---------------------------|-----------|----------------------|------|-----------------------------------|----------------------------|--|------------------|----------------------------------|----------|--|---------|--|----------|--|------------|---|----------|--|-------------------|---|----------------|--|
| <p>1. Trade Name<br/>Mineralis</p> <p>2. Manufacturer<br/>Eternit Guangzhou Building Systems Co. Ltd. (China)</p> <p>3. Product appearance<br/>Through-coloured material with fine sanding lines and speckled white highlights.</p> <p>4. Product composition<br/>Natural organic fibre cement, calcium silicates hydrates, selected quartz and pigments.</p> <p>5. Product approved uses<br/>General building material for external and internal applications.</p> <p>6. Physical data</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Normal density</td> <td>1600kg/m<sup>3</sup></td> </tr> <tr> <td>Nominal specific gravity (h<sub>2</sub>O=1)</td> <td>1.60</td> </tr> <tr> <td>pH (10% solution)</td> <td>12-13</td> </tr> <tr> <td>Odour</td> <td>Nil</td> </tr> <tr> <td>Solubility in water</td> <td>Nil</td> </tr> </table> <p>7. Fire &amp; explosion data<br/>I = 2.7 in accordance to BS 476: Part 6;<br/>Class 1 in accordance to BS 476: Part 7</p> <p>8. Health hazards</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Occupational exposure limits</td> <td> <ul style="list-style-type: none"> <li>10mg/m<sup>3</sup> (total inhalable dust)</li> <li>0.1mg/m<sup>3</sup> (respirable quartz particles)</li> </ul> </td> </tr> <tr> <td>Primary route(s) of entry</td> <td>Inhalation of dust</td> </tr> <tr> <td>Medical conditions (which may be aggravated)</td> <td>Respiratory conditions</td> </tr> <tr> <td>Target organ(s)</td> <td>Lungs</td> </tr> </table> <p>9. Health effects</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Inhalation</td> <td>Acute over exposure to dust may cause irritation of the respiratory tract.</td> </tr> <tr> <td>Skin contact</td> <td>Prolonged contact could lead to irritation for sensitive persons.</td> </tr> <tr> <td>Ingestion</td> <td>Mild discomfort.</td> </tr> </table> | Normal density   | 1600kg/m <sup>3</sup> | Nominal specific gravity (h <sub>2</sub> O=1) | 1.60 | pH (10% solution) | 12-13 | Odour | Nil | Solubility in water | Nil | Occupational exposure limits | <ul style="list-style-type: none"> <li>10mg/m<sup>3</sup> (total inhalable dust)</li> <li>0.1mg/m<sup>3</sup> (respirable quartz particles)</li> </ul> | Primary route(s) of entry | Inhalation of dust | Medical conditions (which may be aggravated) | Respiratory conditions | Target organ(s) | Lungs | Inhalation | Acute over exposure to dust may cause irritation of the respiratory tract. | Skin contact | Prolonged contact could lead to irritation for sensitive persons. | Ingestion | Mild discomfort. | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Eyes</td> <td>Mild transient irritation or inflammation.</td> </tr> </table> <p>10. First aid /emergency procedures</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Inhalation</td> <td>Get some fresh air.</td> </tr> <tr> <td>Skin contact</td> <td>Wash thorough with water.</td> </tr> <tr> <td>Ingestion</td> <td>Get plenty of drink.</td> </tr> <tr> <td>Eyes</td> <td>Flush copiously with fresh water.</td> </tr> </table> <p>Seek medical advice if irritation or discomfort persists.</p> <p>11. Storage precautions</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Storage at site/ warehouse</td> <td>Pallets should be stored on flat surface in a dry, covered, and well-ventilated area, protected against dust and rain.</td> </tr> <tr> <td>During transport</td> <td>Should be covered with a canvas.</td> </tr> </table> <p>12. Precautions for safe handling and use</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Handling</td> <td>Use sufficient natural or mechanical ventilation to reduce dust level below the Threshold Limit Value (TLV).</td> </tr> <tr> <td>Goggles</td> <td>Use protective eyewear whenever machining the product (drilling, sawing, sending, etc.).</td> </tr> <tr> <td>Clothing</td> <td>Use working clothes and gloves to protect against mechanical injury.</td> </tr> <tr> <td>Respirator</td> <td>Approved respiratory protective equipment should be made available while working in concentrations above or around TLV.</td> </tr> <tr> <td>Overalls</td> <td>Normal protective working overalls are adequate.</td> </tr> </table> <p>13. Spill or leak procedures</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Spilled materials</td> <td>Collect dust with vacuum cleaner during fabrication. If sweeping is necessary, use a dust suppressor or wet-sweep work areas.</td> </tr> <tr> <td>Waste disposal</td> <td>Dispose as a building product waste, according to the local regulations. The collected dust is to bind with cement before disposing in a landfill.</td> </tr> </table> | Eyes | Mild transient irritation or inflammation. | Inhalation | Get some fresh air. | Skin contact | Wash thorough with water. | Ingestion | Get plenty of drink. | Eyes | Flush copiously with fresh water. | Storage at site/ warehouse | Pallets should be stored on flat surface in a dry, covered, and well-ventilated area, protected against dust and rain. | During transport | Should be covered with a canvas. | Handling | Use sufficient natural or mechanical ventilation to reduce dust level below the Threshold Limit Value (TLV). | Goggles | Use protective eyewear whenever machining the product (drilling, sawing, sending, etc.). | Clothing | Use working clothes and gloves to protect against mechanical injury. | Respirator | Approved respiratory protective equipment should be made available while working in concentrations above or around TLV. | Overalls | Normal protective working overalls are adequate. | Spilled materials | Collect dust with vacuum cleaner during fabrication. If sweeping is necessary, use a dust suppressor or wet-sweep work areas. | Waste disposal | Dispose as a building product waste, according to the local regulations. The collected dust is to bind with cement before disposing in a landfill. |
| Normal density   | 1600kg/m <sup>3</sup>  |                       |   |      |                   |       |       |     |                     |     |                              |  |                           |                    |  |                        |                 |       |            |  |              |   |           |                  |   |      |  |            |                     |              |                           |           |                      |      |                                   |                            |  |                  |                                  |          |  |         |  |          |  |            |   |          |  |                   |   |                |  |
| Nominal specific gravity (h <sub>2</sub> O=1)  | 1.60   |                       |   |      |                   |       |       |     |                     |     |                              |  |                           |                    |  |                        |                 |       |            |  |              |   |           |                  |   |      |  |            |                     |              |                           |           |                      |      |                                   |                            |  |                  |                                  |          |  |         |  |          |  |            |   |          |  |                   |   |                |  |
| pH (10% solution)  | 12-13  |                       |   |      |                   |       |       |     |                     |     |                              |  |                           |                    |  |                        |                 |       |            |  |              |   |           |                  |   |      |  |            |                     |              |                           |           |                      |      |                                   |                            |  |                  |                                  |          |  |         |  |          |  |            |   |          |  |                   |   |                |  |
| Odour  | Nil  |                       |   |      |                   |       |       |     |                     |     |                              |  |                           |                    |  |                        |                 |       |            |  |              |   |           |                  |   |      |  |            |                     |              |                           |           |                      |      |                                   |                            |  |                  |                                  |          |  |         |  |          |  |            |   |          |  |                   |   |                |  |
| Solubility in water  | Nil  |                       |   |      |                   |       |       |     |                     |     |                              |  |                           |                    |  |                        |                 |       |            |  |              |   |           |                  |   |      |  |            |                     |              |                           |           |                      |      |                                   |                            |  |                  |                                  |          |  |         |  |          |  |            |   |          |  |                   |   |                |  |
| Occupational exposure limits   | <ul style="list-style-type: none"> <li>10mg/m<sup>3</sup> (total inhalable dust)</li> <li>0.1mg/m<sup>3</sup> (respirable quartz particles)</li> </ul> |                       |   |      |                   |       |       |     |                     |     |                              |  |                           |                    |  |                        |                 |       |            |  |              |   |           |                  |   |      |  |            |                     |              |                           |           |                      |      |                                   |                            |  |                  |                                  |          |  |         |  |          |  |            |   |          |  |                   |   |                |  |
| Primary route(s) of entry  | Inhalation of dust   |                       |   |      |                   |       |       |     |                     |     |                              |  |                           |                    |  |                        |                 |       |            |  |              |   |           |                  |   |      |  |            |                     |              |                           |           |                      |      |                                   |                            |  |                  |                                  |          |  |         |  |          |  |            |   |          |  |                   |   |                |  |
| Medical conditions (which may be aggravated)   | Respiratory conditions   |                       |   |      |                   |       |       |     |                     |     |                              |  |                           |                    |  |                        |                 |       |            |  |              |   |           |                  |   |      |  |            |                     |              |                           |           |                      |      |                                   |                            |  |                  |                                  |          |  |         |  |          |  |            |   |          |  |                   |   |                |  |
| Target organ(s)  | Lungs  |                       |   |      |                   |       |       |     |                     |     |                              |  |                           |                    |  |                        |                 |       |            |  |              |   |           |                  |   |      |  |            |                     |              |                           |           |                      |      |                                   |                            |  |                  |                                  |          |  |         |  |          |  |            |   |          |  |                   |   |                |  |
| Inhalation   | Acute over exposure to dust may cause irritation of the respiratory tract.   |                       |   |      |                   |       |       |     |                     |     |                              |  |                           |                    |  |                        |                 |       |            |  |              |   |           |                  |   |      |  |            |                     |              |                           |           |                      |      |                                   |                            |  |                  |                                  |          |  |         |  |          |  |            |   |          |  |                   |   |                |  |
| Skin contact   | Prolonged contact could lead to irritation for sensitive persons.  |                       |   |      |                   |       |       |     |                     |     |                              |  |                           |                    |  |                        |                 |       |            |  |              |   |           |                  |   |      |  |            |                     |              |                           |           |                      |      |                                   |                            |  |                  |                                  |          |  |         |  |          |  |            |   |          |  |                   |   |                |  |
| Ingestion  | Mild discomfort.   |                       |   |      |                   |       |       |     |                     |     |                              |  |                           |                    |  |                        |                 |       |            |  |              |   |           |                  |   |      |  |            |                     |              |                           |           |                      |      |                                   |                            |  |                  |                                  |          |  |         |  |          |  |            |   |          |  |                   |   |                |  |
| Eyes   | Mild transient irritation or inflammation.   |                       |   |      |                   |       |       |     |                     |     |                              |  |                           |                    |  |                        |                 |       |            |  |              |   |           |                  |   |      |  |            |                     |              |                           |           |                      |      |                                   |                            |  |                  |                                  |          |  |         |  |          |  |            |   |          |  |                   |   |                |  |
| Inhalation   | Get some fresh air.  |                       |   |      |                   |       |       |     |                     |     |                              |  |                           |                    |  |                        |                 |       |            |  |              |   |           |                  |   |      |  |            |                     |              |                           |           |                      |      |                                   |                            |  |                  |                                  |          |  |         |  |          |  |            |   |          |  |                   |   |                |  |
| Skin contact   | Wash thorough with water.  |                       |   |      |                   |       |       |     |                     |     |                              |  |                           |                    |  |                        |                 |       |            |  |              |   |           |                  |   |      |  |            |                     |              |                           |           |                      |      |                                   |                            |  |                  |                                  |          |  |         |  |          |  |            |   |          |  |                   |   |                |  |
| Ingestion  | Get plenty of drink.   |                       |   |      |                   |       |       |     |                     |     |                              |  |                           |                    |  |                        |                 |       |            |  |              |   |           |                  |   |      |  |            |                     |              |                           |           |                      |      |                                   |                            |  |                  |                                  |          |  |         |  |          |  |            |   |          |  |                   |   |                |  |
| Eyes   | Flush copiously with fresh water.  |                       |   |      |                   |       |       |     |                     |     |                              |  |                           |                    |  |                        |                 |       |            |  |              |   |           |                  |   |      |  |            |                     |              |                           |           |                      |      |                                   |                            |  |                  |                                  |          |  |         |  |          |  |            |   |          |  |                   |   |                |  |
| Storage at site/ warehouse   | Pallets should be stored on flat surface in a dry, covered, and well-ventilated area, protected against dust and rain.                                 |                       |   |      |                   |       |       |     |                     |     |                              |  |                           |                    |  |                        |                 |       |            |  |              |   |           |                  |   |      |  |            |                     |              |                           |           |                      |      |                                   |                            |  |                  |                                  |          |  |         |  |          |  |            |   |          |  |                   |   |                |  |
| During transport   | Should be covered with a canvas.   |                       |   |      |                   |       |       |     |                     |     |                              |  |                           |                    |  |                        |                 |       |            |  |              |   |           |                  |   |      |  |            |                     |              |                           |           |                      |      |                                   |                            |  |                  |                                  |          |  |         |  |          |  |            |   |          |  |                   |   |                |  |
| Handling   | Use sufficient natural or mechanical ventilation to reduce dust level below the Threshold Limit Value (TLV).   |                       |   |      |                   |       |       |     |                     |     |                              |  |                           |                    |  |                        |                 |       |            |  |              |   |           |                  |   |      |  |            |                     |              |                           |           |                      |      |                                   |                            |  |                  |                                  |          |  |         |  |          |  |            |   |          |  |                   |   |                |  |
| Goggles  | Use protective eyewear whenever machining the product (drilling, sawing, sending, etc.).   |                       |   |      |                   |       |       |     |                     |     |                              |  |                           |                    |  |                        |                 |       |            |  |              |   |           |                  |   |      |  |            |                     |              |                           |           |                      |      |                                   |                            |  |                  |                                  |          |  |         |  |          |  |            |   |          |  |                   |   |                |  |
| Clothing   | Use working clothes and gloves to protect against mechanical injury.   |                       |   |      |                   |       |       |     |                     |     |                              |  |                           |                    |  |                        |                 |       |            |  |              |   |           |                  |   |      |  |            |                     |              |                           |           |                      |      |                                   |                            |  |                  |                                  |          |  |         |  |          |  |            |   |          |  |                   |   |                |  |
| Respirator   | Approved respiratory protective equipment should be made available while working in concentrations above or around TLV.                                |                       |   |      |                   |       |       |     |                     |     |                              |  |                           |                    |  |                        |                 |       |            |  |              |   |           |                  |   |      |  |            |                     |              |                           |           |                      |      |                                   |                            |  |                  |                                  |          |  |         |  |          |  |            |   |          |  |                   |   |                |  |
| Overalls   | Normal protective working overalls are adequate.   |                       |   |      |                   |       |       |     |                     |     |                              |  |                           |                    |  |                        |                 |       |            |  |              |   |           |                  |   |      |  |            |                     |              |                           |           |                      |      |                                   |                            |  |                  |                                  |          |  |         |  |          |  |            |   |          |  |                   |   |                |  |
| Spilled materials  | Collect dust with vacuum cleaner during fabrication. If sweeping is necessary, use a dust suppressor or wet-sweep work areas.                          |                       |   |      |                   |       |       |     |                     |     |                              |  |                           |                    |  |                        |                 |       |            |  |              |   |           |                  |   |      |  |            |                     |              |                           |           |                      |      |                                   |                            |  |                  |                                  |          |  |         |  |          |  |            |   |          |  |                   |   |                |  |
| Waste disposal   | Dispose as a building product waste, according to the local regulations. The collected dust is to bind with cement before disposing in a landfill.     |                       |   |      |                   |       |       |     |                     |     |                              |  |                           |                    |  |                        |                 |       |            |  |              |   |           |                  |   |      |  |            |                     |              |                           |           |                      |      |                                   |                            |  |                  |                                  |          |  |         |  |          |  |            |   |          |  |                   |   |                |  |

The health and safety information contained herein is believed to be accurate and correct based on our current knowledge at the date of issue and no liability can be accepted for any loss, injury or damage resulting from its use. It is intended as a guide for the safe handling, storage, and use under normal conditions, but does not necessarily refer to the particular requirements of a customer when further advice should be obtained.

This data sheet and information it contains is not intended to supersede any terms or conditions of sale and does not constitute a specification. Nothing contained herein is to be construed as a recommendation for use in violation of any patent or applicable laws or regulation.

## **Safety Working Practices**

As with all products containing quartz, e.g. concrete and clay, when Mineralis panels are machined mechanically (cutting, sanding, drilling) the released dust may contain quartz particles. Inhalation of high concentrations of dust may irritate the airways, and dust may also cause irritation of eyes and/or skin. Inhalation of dust containing quartz, especially fine (respirable size) particulate matter, in high concentrations over prolonged periods of time, can lead to lung disease (silicosis) and an increased risk of lung cancer.

Work safely by following the recommended practices:

1. Avoid dust inhalation with the use of cutting/sanding equipment fitted with dust extraction/suppression accessories and wherever practical.
2. Ensure adequate ventilation of all work sites.
3. Avoid contact with eyes and skin by wearing an approved respirator (dust mask of at least Type P2) together with appropriate PPE (personal protective equipment) such as helmet, goggles, boots and protecting clothing.