# EGF22

## EXPANDED GLASS GRANULES

**EGF22 Expanded glass granules, are lightweight aggregates and fillers suitable for use in a wide range of applications.**

Using patented technology, recycled glass is crushed, granulated, melted and foamed to produce granules with a closed shell and a porous internal structure. The granules are continuously produced with minimal variation of it's characteristic properties, thereby ensuring consistent performance across a wide range of applications.

Unlike sand, glass granules do not contain crystalline silica, so are ideal in applications that involve cutting or sanding. EGF22 Glass granules are manufactured using sustainably sourced post consumer glass which helps conserve our natural resources and reduce landfill waste.

### APPLICATIONS

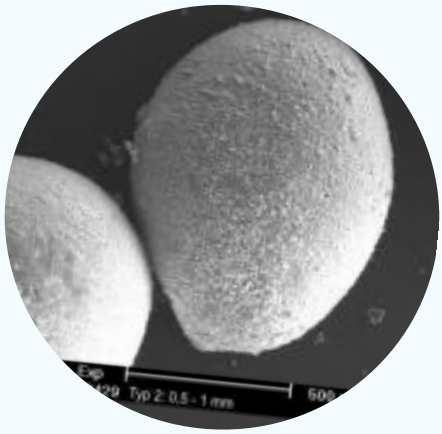
- Renders
- Tile Adhesives
- Screeds
- Mortars
- Lightweight Fill
- Composites
- Lightweight Concrete
- Lightweight Panels
- Non Combustible Panels
- Acoustic Panels
- Masonry Blocks
- Refractories

### FEATURES

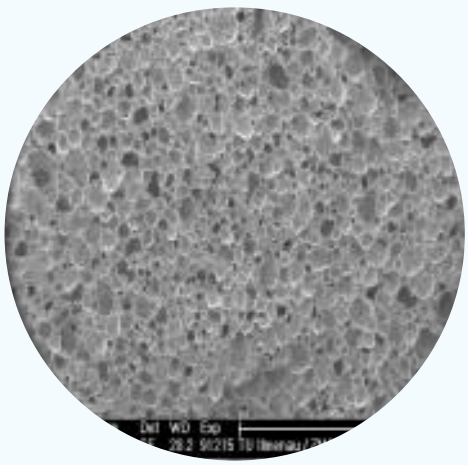
- Lightweight (BD: 170 - 450 kg/m$^3$)
- Non combustible
- Low thermal conductivity (<0.07 w/mk)
- High sound absorption (NRC ≤ 0.95)
- High strength/density ratio
- Free of crystalline silica
- High recycled content (> 95%)
- Fiber free
- Non-toxic
- No VOC (Volatile Organic Compounds)
- Six sizes from 0.1mm to 8mm enables customised gradations

### Granule Properties

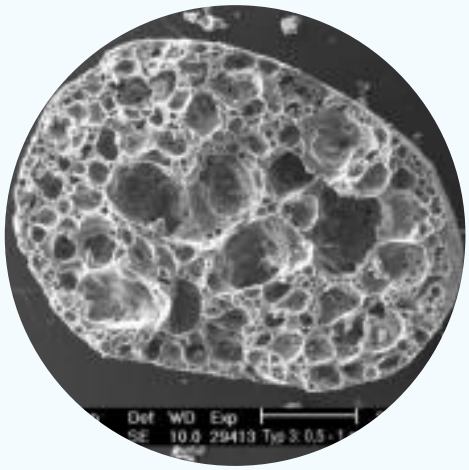
An electron microscope highlights the smooth closed outer shell and the uniform composition of the internal structure. These characteristics result in superior strength/density ratios, reduced water absorption and improved mix workability.



EGF22 Outer Shell



EGF22 Granule Cutaway



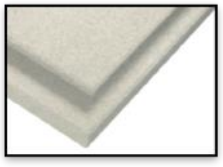
Competitor Granule Cutaway

## MATERIAL PROPERTIES

| Physical Properties | | | EGF22 100/300 | EGF22 250/500 | EGF22 500/1000 | EGF22 1000/2000 | EGF22 2000/4000 | EGF22 4000/8000 |
|---|---|---|---|---|---|---|---|---|
| Grain size | (mm) | EN 933-1 | 0.1 - 0.3 | 0.25 - 0.5 | 0.5 - 1 | 1 - 2 | 2 - 4 | 4 - 8 |
| Loose bulk density | (kg/m$^3$)±15% | EN 1097-3 | 400 | 300 | 250 | 220 | 190 | 170 |
| Particle density | (kg/m$^3$)±15% | DIN V 18004 | 700 | 540 | 450 | 370 | 310 | 300 |
| Compressive strength | (MPa) | EN 13055-1 | >3.5 | >2.9 | >2.6 | >2.4 | >2.4 | >1.9 |
| **Chemical properties** | | | | | | | | |
| Chloride | (wt %) | DIN EN 1744-1 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | < 0.01 |
| Acid-soluble sulfate | (wt %) | | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| Total sulfur | (wt %) | | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| **Other properties** | | | | | | | | |
| Thermal conductivity | (W/(mK)) | DIN 52612-1 | - | - | - | - | 0.07 | 0.07 |
| Water vapour diffusion resistance, μ | | DIN 52615 | - | - | - | - | 5 | 5 |
| 1h water absorption | (wt %) | | 1.06 | 0.88 | 1.59 | 1.71 | 0.55 | 1.3 |
| 24h water absorption | (wt %) | | 2.81 | 3.9 | 8.5 | 7.63 | 7.8 | 9.11 |
| Fire classification | | DIN 4102-4 | A1 | | | | | |
| VOC-class | | DIN EN 717-1 | A+ | | | | | |
| Colour | | | Light Grey | | | | | |
| Softening Point | | | approx. 700 °C | | | | | |
| Material definition | | EN 13055-1 | Lightweight aggregate | | | | | |

## PRODUCT SELECTION TABLE

| Application | EGF22 | EGF22 | EGF22 | EGF22 | EGF22 | EGF22 |
|---|---|---|---|---|---|---|
| Render | ● | ● | ● | | | |
| Tile Adhesive | ● | ● | | | | |
| Floor Screed | | | ● | ● | ● | |
| Self Leveling Underlayment's | ● | ● | | | | |
| Lightweight Concrete | | | ● | ● | ● | ● |
| Masonry Blocks | | | ● | ● | ● | |
| Mortars | | | ● | ● | ● | |
| Concrete Repair | ● | ● | ● | | | |
| Panels/Boards | | ● | ● | ● | ● | ● |
| Resins | | ● | ● | ● | ● | |



## PACKAGING

EGF22 is available in 1.5m$^3$ and 2m$^3$ big bags and 60L PE bags. *[EGF22 100/300 and 4000/8000 not available in 60L bags.]*

*Notes: Specifications are subject to change without notice. The data in this document is typical of average values based on tests by independent laboratories or by the manufacturer and are indicative only. Materials must be tested under intended service conditions to determine their suitability for purpose. Crest Cormix Pty Ltd disclaims any liability for damages or consequential loss as a result of reliance solely on the information presented.*

***Rev BHNov 2020***