

oxacrete CARE

Mineral admixture to produce Cleancrete Care: a cement-free, clay-based concrete

Oxacrete® Care is a mineral-based admixture that improves the workability of clay-based, cement-free concrete - Cleancrete Care. Once the material is cast the admixture stiffens the material, allowing the removal of the formwork. After initial stiffening, Oxacrete® Care does not interfere with the final strength development that is reached through drying of the clayey material.

Oxacrete® Care

Oxacrete® Care is a blend of mineral powders, including a dispersant and a coagulant. The dispersant deflocculates and re-arranges clay particles in the earth, while the coagulant promotes the agglomeration and hardening of clayey materials. The additive is classified as non-toxic and non-hazardous according to the Globally Harmonized System (GHS) and has been approved under the Chemicals Ordinance (ChemO) in Switzerland.

Cleancrete Care

Oxara clay-based Cleancrete Care is a sustainable and resource-saving alternative to cement-based concrete, in applications where high compressive strength is not required. Cleancrete Care retains the advantageous properties of clay, such as its ability to regulate indoor humidity levels, and can be easily repaired and reused after its service life. This reversibility also means that the material has a limited water resistance and needs to be protected against rain and capillary rise.

Dosage

6–20 kg Oxacrete® / m³ Cleancrete (0.3 – 1% of the final mass)*

*Dosage varies with clay content. Please contact tech@oxara.ch for more information.

Cleancrete Care – Properties

| Properties | Unit | Value | Norm Reference / Test type |
|----------------------|----------------------|-----------|--|
| Consistency class | [-] | F2-F4 | SN EN 12350-5 |
| Spread flow | [mm] | 350-550 | SN EN 12350-5 |
| Open time | [h] | 2 | |
| Density | [kg/m ³] | 1900-2170 | |
| Demolding time | [day] | 5 | For a wall section of 2.5 m height at 20°C |
| Compressive strength | [MPa] | 2 | Adapted from SN EN 12390-3 |
| Shrinkage | [%] | 1-2 | |

Environmental Data¹

Functional unit: kg of Cleancrete Care (Dosage: 6 kg Oxacrete® Care / m³)

| Properties | Unit | Value |
|--------------------------------|--------------------------|-------|
| Global Warming Potential (GWP) | [kg CO ₂ -eq] | 0.006 |
| Environmental Impact Score | [UBP] | 47 |
| Energy demand, grey energy | [kWh oil-eq] | 0.035 |

¹Lifecycle assessment data was calculated as part of the ZeroStrat Project, which was conducted in collaboration with ETH Zurich and commissioned by the Swiss Federal Office of Energy (SFOE).

Application possibilities:

- Internal non-load bearing walls
- Screeds
- Furniture
- Cast blocks
- Composite application with wood

Requirements & recommendations:

- Protection against rain and capillary rise is recommended for exterior use
- A minimum ambient temperature of 15°C is recommended during the process from casting to demolding

The product is available:

- In 20 kg bags
- Other delivery options are available too, please contact tech@oxara.ch for more information



Storage:

- Store in a dry area
- Keep away from direct sunlight
- Maintain ambient temperatures (10°C to 30°C / 50°F to 86°F)
- Protect from weather elements

Health and safety information for the handling with Oxacrete® Care Admixture:

Avoid dust formation. Use in places with adequate ventilation. Avoid breathing dust. Use personal protective equipment. Consult the Safety Data Sheet for exposure limits. Dispose of contents/container in accordance with local regulations.