

# oxabrick LOKO

## Mineral admixture to produce cement-free and unfired compressed earth blocks

Oxabrick® Loko is a mineral admixture that is designed to produce cement-free and unfired compressed earth blocks. The blocks solely require air drying, completely eliminating the need for a firing process. During the air drying process the admixture contributes to a strength development. Due to the stabilisation of the clayey matrix, by Oxabrick® Loko the water resistance is improved depending on the dosage.

### Oxabrick® Loko

Oxabrick® Loko is a blend of mineral powders, including a dispersant and a stabiliser. The dispersant deflocculates and re-arranges clay particles, while the reaction of the stabiliser promotes the agglomeration and hardening of the 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.

### Cleanbrick Loko

Oxara clay-based Cleanbrick Loko is a sustainable and resource-saving alternative to cement-based blocks and fired clay bricks. Higher dosage of Oxacrete® Loko improves the water stability and the initial strength of the blocks, but reduces humidity regulation and recyclability, necessitating careful dosage selection for optimal performance.

### Dosage

40-80 kg Oxabrick® Loko / m<sup>3</sup> Cleanbrick Loko (2-4% of the final mass)\*

\*Dosages vary depending on product requirement. Please contact [tech@oxara.ch](mailto:tech@oxara.ch) for more information.

### Cleanbrick Loko – Properties

Properties	Unit	Value
Density	[kg/m <sup>3</sup> ]	2000-2100
Compressive strength	[MPa]	10-15

## Environmental Data<sup>1</sup>

Functional unit: kg of Cleanbrick Loko (Dosage: 40 kg Oxabrick® Loko / m<sup>3</sup>)

Properties	Unit	Value
Global Warming Potential (GWP)	[kg CO <sub>2</sub> -eq]	0.013
Environmental Impact Score	[UBP]	31
Energy demand, grey energy	[kWh oil-eq]	0.061

<sup>1</sup>Lifecycle 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:

- Indoor masonry walls
- Load-bearing applications possible

### Requirements & Recommendations:

- Protection against rain and capillary rise is recommended for exterior use
- A mortar based on Oxabrick® Loko can be used to assemble the masonry walls

### The product is available:

- In 20 kg bags
- Other delivery options are available too, please contact [tech@oxara.ch](mailto: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 Oxabrick® Loko 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.