



HERO® intentionally entrains air bubbles with diameters between 0.3 and 1 mm, improving concrete durability where repeated freeze-thaw cycles occur. It is intended to reduce freeze-thaw deterioration in precast concrete and road pavements.

Guideline for Use

Determine the dosage under site conditions because entrained-air content is strongly affected by mixing method and duration. For improved performance, dilute HERO with part of the concrete mixing water before adding it to the mix.

Applications

- Concrete road pavements, airport runways, industrial floors and walkways
- Concrete for irrigation and drainage networks, particularly in cold climates
- Concrete for cold stores and jetties
- Concrete placement in cold regions
- Precast products, concrete walls, New Jersey barriers and concrete kerbs
- Concrete containing cement with high free-lime content

Approvals / Standards

- ASTM C260
- ACI 212.3R-16
- INSO 2930
- EN 934

Advantages / Benefits

- Improves resistance to freeze-thaw cycles
- May reduce water demand without reducing workability
- Improves durability in cold environments
- Reduces segregation of fine and coarse aggregate
- Reduces harmful bleeding
- Permits controlled beneficial bleeding and helps reduce ingress of water and chemical salts
- Disrupts capillary continuity within the concrete
- Improves cohesion in poorly graded mixes
- Reduces concrete permeability

Dosage

The resulting concrete air content should be 4 to 6%. The usual dosage is 0.1 to 0.5% by weight of cement, depending on cement type, water-cement ratio, ambient temperature and aggregate type. Continuous site testing is required.

Storage

+10°C to +30°C; store in dry conditions away from direct sunlight.

Packaging

20 kg plastic can / 1100 kg IBC container

Shelf Life

1 year from the date of production in the original packaging.

Health and Safety

- Do not swallow and avoid contact with the eyes.
- In case of accidental contact with the skin or eyes, rinse immediately with plenty of fresh water.
- If swallowed, seek immediate medical attention.
- Refer to the Material Safety Data Sheet (MSDS).
- Non-flammable.

Basis Of Data

Product Information

chemical_base	Chemical, including surfactants
form_and_color	Liquid / transparent yellow
density	1.03±0.03 g/cm ³
pH	7±2
chloride_ion	None



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