

# **ARTIC OCF**



# Antifreeze fluid setting and hardening accelerator. Chloride-free



# **Technical Data**

# Physical state:

liquid

#### Colour:

brown

# Specific weight:

about 1.2 kg/L

#### Main chemical action:

cement setting accelerator

# Secondary chemical action:

- W/C ratio reducer
- Lowers freezing points

#### Rating:

UNI EN 934 - 2 / ASTM C 494 Type G

#### **Proportion:**

1 - 4 kg per 100 kg of cement

#### Storage:

12 months

#### Available in:

# **DESCRIPTION**

ARTIC OCF is a special chloride-free fluidifying agent and accelerator. ARTIC OCF has a physical and chemical effect that encourages cement hydration and it speeds up concrete setting and hardening times.

Its fluidifying effect decreases the mix water requirement by 5-10%, maintains slump and increases tensile strength. As a secondary effect, ARTIC OCF also lowers the freezing point of mix water.

If you use ARTIC OCF in cold periods of the year and according to the recommended proportions, it accelerates setting time and speeds up initial development of the concrete mix resistance and it prevents frost damage. It's important to remember that, at temperatures below +10°C, slower development of tensile strength in the concrete has been shown. ARTIC OCF complies with the ASTM C 494 Type E and UNI EN 934 - 2 standards.

# **APPLICATIONS**

ARTIC OCF can be used in all types of concrete, including standard, reinforced, pre-cast and lorry-borne concrete as well as in prefabricated and pre-stressed concrete applications, as it is chloride-free. ARTIC OCF is particularly recommended for producing concrete in cold climates.

### **ADVANTAGES**

ARTIC OCF offers the following advantages to concrete mixes:

- opportunity to cast concrete during the winter when forecast temperatures only reach -10°C (before casting concrete at lower temperatures, contact DRACO Italiana S.p.A.'s technical office);
- quick development of the concrete's resistance to low temperatures, enabling early formwork removal and protecting it from frost damage.

#### COMPATIBILITY

ARTIC OCF is compatible with all cement types and classes as well as other DRACO Italiana S.p.A. additives.

# PROPORTIONS AND INSTRUCTIONS

ARTIC OCF may be used in 1 to 4 Kg proportions per 100 kg of cement. ARTIC OCF should be added at the same time as mix water during production at the concrete mixing plant.

It may also be added to the on-site concrete mixer before casting. Carefully mix it for at least 5 minutes at the highest RPM after transfer. Because of the risk of winter frost, use Portland R 425 high-resistance cement with a proportion of not less than 300 kg/m<sub>3</sub>.



- 10-25-kg canisters

250-kg drum



- 1,000-kg tank

Loose in tank

# **PACKAGING & STORAGE**

- 10-25-kg canisters
- 250-kg drum
- 1,000-kg tank
- Loose in tank

Before using ARTIC OCF at very low temperatures, reheat and remix it. This product keeps its features unchanged for one year if properly stored in its original packaging.

To properly proportion this product, DRACO Italiana S.p.A. supplies special batching plants.

# CONCRETE CURING

After casting, it is good practice to use protective devices to shield concrete from rapid evaporation, especially in dry and windy climates. In order to achieve the best results, you should use PROBETON CURING N.



# **ARTIC OCF**

# **Technical Data**

Noxiousness level in compliance with 88/379 EEC:

no

Inflammability:

no

**Customs code:** 

3823/4000/0

# **SPECIFICATION ITEM**

Concrete casts in winter and at low temperatures should include ARTIC OCF antifreeze, a chloride-free fluidifying agent and accelerator, which complies with the ASTM C 494 Type E and UNI EN 934-2 standards. This additive should be used according to the manufacturer's recommendations. DRACO Italiana S.p.A. qualified personnel will provide customer support upon request.

