

EURO NIV HP

SUPERPLASTICISER - HIGH RANGE WATER REDUCER SELF-LEVELLING - ONE-COMPONENT Compliant with requirements EN 934-2: T.3.1, 3.2

CE

Marguage

la marque du bâtiment

1. PRESENTATION

EURO NIV HP is a new generation, chlorine-free superplasticiser.

- It is used in concrete and mortar.
- > Used in concrete mixer, mixer truck, bucket, pump, chute, wheelbarrow.
- Used indoors and outdoors.
- Acts by defloculating the fine elements of concrete.
- > Promotes the dispersion of cement, hence the complete hydration of cement.
- Helps obtain concrete with a high level of workability while decreasing the water/cement ratio.

EURO NIV HP is especially suitable for ready-mix concrete and for the development of fluid concrete that requires high strength over both short and long term.

2. ADVANTAGES

- Product made to European standards (CE marking).
- Very good embedding of reinforcement metal and heated floor pipes.
- Self-levelling and self-compacting.
- Allows the execution of high performance concrete.
- Reduces the amount of entrained air and therefore improves mechanical performances and surface finish.
- Ideal complement to all types of fibres.
- Time saving and ease of implementation.
- · Facilitates the execution work.
- Eliminates the vibration of concrete and allows greater heights to be poured in a single operation.
- Reduces bubbling.
- Does not reduce the setting time.
- · Reduces the need for surfacing and smoothing.
- Very economical.
- Free of CHLORINE. Does not attack metal reinforcements.

Figure 1: Equalisation of a screed after execution with EURO NIV HP

3. AREAS OF APPLICATION

- All types of concrete (except aluminous concrete):
 - o Foundation, shuttered, formed, prestressed...
 - Pumped concrete.
 - o Fibre concrete (all types).
- Tying.
- Slabs, liquid screeds, grouts.
- Thin and heavily reinforced structure, heated floor.
- Etc.



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4. INSTRUCTIONS

Substrate preparation:

Substrates must be sound, clean, free of laitance, moss, lichen, oil and grease.

Remove dust and loose material.

Use:

Always follow water dosage.

Reduce the amount of water when aggregates are wet.

Increase the amount of water if aggregates are dry (e.g. limestone or porous type).

On soil, sand and beam-and-block flooring, use a polyane film.

Dry substrates must first be moistened.

Outdoors (in case of strong wind or sunshine), apply CURO PLUS after execution.

Concretes and mortars can be coloured using **DORTHZ COLOR**.

Make the necessary repairs to the substrate before application, fill cracks (ACCRO FLEX NF) and apply anti-rust (PAINT M COVER) on exposed metal parts.

Typical dosage for a batch:

35 kg of cement

12 buckets of gravel-sand mixture

or 5 buckets of sand and 8 buckets of gravel

16 litres of water

100 to 200 ml of EURO NIV HP

To fluidify concrete with no water reduction, the average consumption is 0.3 to 0.6% by weight relative to the cement, i.e. 100 ml to 200 ml for 35 kg of cement.

<u>For a mixer</u>: 1 to 2 litres of **EURO NIV HP** per m³ of concrete for a dosage of 350 kg of cement (CPJ-CEM 1/A (D) 52.5 or 52.5 R).

Mixing time: 1 to 3 min per m³.

The incorporation of **EURO NIV HP** in the mixer shall be carried out at the worksite.

The mixing water can be reduced by 10% to 20%:

- To enhance the mechanical properties of the structure.
- Depending on the desired effect for self-compacting and self-levelling concrete.

The average dose is 0.6 to 2.5% by weight of cement, i.e. 200 ml to 750 ml for 35 kg of cement.

Optimum at 450 ml per bag of cement of 35 kg.

Once introduced in the concrete, **EURO NIV HP** acts on the spread for approximately 90 minutes.

EURO NIV HP must always be added to the mixing water:

Incorporation: 2/3 of water, then cement, sand, gravel, then pour the remaining 1/3 of water with **EURO NIV HP**, leave to mix for 5 min once incorporation is complete.

Adding fibres greatly reduces fluidity but improves workability.

<u>Compatibility</u>: **EURO NIV HP** is compatible with the Dorthz range of additives (except **EURO PLAST** and **DORTHZ FLUID**).

If used with other products (especially those that reduce the amount of cement), suitability tests shall be carried out systematically.





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du bâtiment Application:

la marque

Application

Compliant with standard EN

conditions · 934-2

Minimum

application temperature

: +5℃

Cleaning of the equipment

: Water (do not allow to dry)

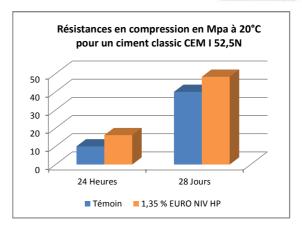


Figure 2: Laboratory tests carried out with identical consistency (water reduction: 17%)

5. CHARACTERISTICS

Appearance in container : Brown liquid

pH : 7 ±1

Density : $1.16 \pm 0.05 \text{ g.cm}^{-3}$

CI content : < 1 g/L.

Freezing temperature : -4°C (recovers its properties after thawing)

Shelf life : 1 year in its unopened original packaging (For more information, please refer to paragraph 9 of the safety data sheet).

6. SAFETY OF USE

- See the product's Safety Data Sheet at <u>www.quickfds.fr</u>.
- · Pay attention to the tightness of the formwork.

The details provided in this Data Sheet are given in good faith, for information purposes only. They shall not in any case constitute a guarantee on our part, or engage our responsibility when using our products. This Data Sheet supersedes all previous versions. Compagnie France Chimie reserves the right to make changes to its products and to this data sheet without prior notice. Our clients shall ensure, before any implementation, that these instructions have not been replaced by a more recent version that takes into account new technical data.

Product solely intended for professional use.

