

Nanoment® SP 2115 GW

High-Range Water Reducer / Superplasticizer Chemical Admixture for Concrete

Product Definition

Nanoment SP 2115 GW is a water reducing and super plasticizing type of chemical admixture designed for the needs of ready-mix concrete production.

Use

Nanoment SP 2115 GW is recommended for use in the applications and purposes below.

- Ready-mix concrete requiring high workability and workability retention property.
- Precast concrete production where high early strength development is required.
- Heavily reinforced structural elements such as shear walls, columns and beams.
- Industrial floors.
- Reinforced concrete slabs and floors.

Advantages and Properties

- Provides an effective dispersion of cement particles due to the effect of modified polymer chains available in its microstructure.
- Nanoment SP 2115 GW is a chemical admixture which, without affecting the consistency, permits a high reduction in the water content of a given concrete, or which, without affecting the water content, increases the slump/flow considerably, or produces both effects simultaneously.
- As compared to reference concrete, usage of Nanoment SP 2115 GW in an appropriate dosage increases the workability of fresh concrete and provides easiness in mixing, transporting, placing and vibration works.
- Enhances the strength and durability of hardened concrete by achieving the target workability class in lower water to binder ratios.
- Improves the early and ultimate strength of hardened concrete as compared to a reference concrete in the same consistency without chemical admixture.
- Reduces shrinkage and creep of concrete.
- Does not contain chloride or any other substances that may cause corrosion.

Application Details, Suggestions and Warnings

- Nanoment SP 2115 GW should be added to the fresh concrete during mixing. Mixing time should be extended until a homogeneous mixture is obtained. Nanoment SP 2115 GW should not be added to the dry mixture.
- As the dosage of the chemical admixtures is greatly influenced from cement type, properties of the concrete ingredients and mix design, it is recommended that the optimum dosage of admixture should be determined on trial batches.
- Nanoment SP 2115 GW is generally compatible with the Portland cement types described in EN 197-1. In addition, it can be used in concrete mixes containing mineral admixtures

such as silica fume, fly ash and ground granulated blast furnace slag. The optimum dosage of Nanoment SP 2115 GW should be determined on trial batches.

Recommended Dosage

The recommended dosage rate of Nanoment SP 2115 GW for general concreting operations is between 0.6 % - 1.8 % of the weight of binding material (cement + mineral admixture). It should be considered that the required dosage of Nanoment SP 2115 GW to achieve a target performance will be different for each concrete mixture. The appropriate dosage should be determined on trial batches. Please contact Kalekim Lyksor R&D department for technical support. Overdose may cause segregation and increase in setting time.

Technical Properties

Colour and form	Brown – Liquid
Chemical base	Modified polymer
Density (kg/lt)	1.12 – 1.16 (at +20 °C)
Chloride ion content	Max 0.1% - chloride free acc. to TS EN 934-2
Alkali content	Max 5%
pH	3 – 7
Conformity	TS EN 934-2 Table 3.1

Cleaning of Tools

Concreting tools contact with Nanoment SP 2115 GW can be easily cleaned with water.

Packaging

30 kg drum

1000 kg IBC

Bulk delivery

Storage and Shelf Life

Shelf life of Nanoment SP 2115 GW is 12 months when stored in its original package and recommended storage conditions. Nanoment SP 2115 GW should be stored in dry conditions between +5 °C and +35 °C. It should be protected from direct sunlight and frost.

Security and Health

In case of contact with skin, wash with clean water. In case of contact with eye, wash with clean water. Eye contact should be medical consulted immediately. For further information please refer to Material Safety Data Sheet (MSDS).

Legal Liability

The technical recommendations in this product data sheet are based on the experimental studies performed on reference concrete mixtures designed in the R&D laboratories of Kalekim LYKSOR. The results may not be applicable to different concrete mixtures produced with different materials than the ones used in the experiments in Kalekim Lyksor. All customers and users are required to determine the appropriate Kalekim LYKSOR products for their intended use and to test the suitability of Kalekim LYKSOR product for their application. Please contact Kalekim

LYKSOR for the appropriate product selection and usage details. Kalekim LYKSOR is not responsible for the improper usage of the products.