

WRDA[®]96

Product Description

WRDA[®]96 is an aqueous solution of modified lignosulfonates containing a catalyst which promotes more complete hydration of portland cement. It does not contain calcium chloride. WRDA 96 is manufactured under rigid control which provides uniform, predictable performance. It is supplied as a dark brown, low viscosity liquid, ready-to-use as received.

One litre weighs approximately $1.17 \text{kg} \pm 0.02 \text{kg}$

Applications

WRDA 96 makes a workable mix with up to 15% less water and yields a stronger, less permeable and more durable concrete. It is used in ready mix plants, job site plants and concrete pavers, for normal weight and light weight concrete, in block, precast and prestressed concrete plants. It should be noted that WRDA 96 is particularly effective in concrete containing slag or fly ash (pozzolans).

Compared to other water reducers, WRDA 96 will typically impart the following additional benefits:

- More controlled set time
- Higher ultimate compressive and flexural strengths

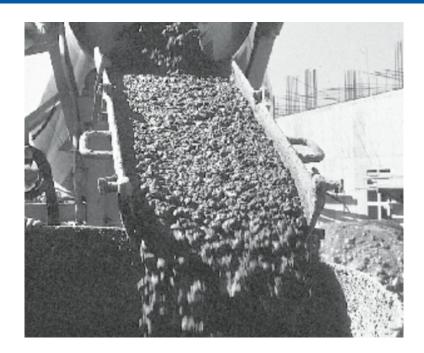
Chemical Action

As a dispersing agent, WRDA 96 lessens the natural interparticle attraction between cement grains in water. It does this by colloidal action, by absorption on the cement particles thus reducing their tendency to clump together and makes the mix more workable with less water. As a cement catalyst, WRDA 96 effects a more complete hydration of the cement, beginning immediately after the cement and water come together at the lower additions of WRDA 96 or immediately after a period of designed and controlled hydration at the higher additions. WRDA 96 increases the gel content of the concrete, the paste or binder that "glues" the concrete aggregates together. The increased gel content adds to the water retention and internal cohesiveness of the mix, reducing bleeding and segregation as it increases workability and placeability.

Addition Rates

Addition rates for WRDA 96 will typically range from 300 to 600mL / 100kg of cementitious material. The amount to be used will depend upon the degree of retardation required under job condition. Longer set time or higher temperature will require higher addition rates.





Compatibility with Other Admixtures

WRDA 96 is compatible with all air-entraining mixtures. Due to a synergistic effect of WRDA 96, the quantity of airentraining agent added to WRDA 96 admixtured concrete may be reduced by 25-50%. By combining the separate effects of air entrainment and dispersion, the water requirement of concrete may be reduced up to 20%. Each admixture should be added separately. WRDA 96 contains no calcium chloride but is compatible in concrete with calcium chloride. Again each admixture should be added separately

Dispensing Equipment

Please contact your local GCP representative for further information regarding the dispensing equipment for this product.

Packaging

WRDA 96 is available in bulk, and 205L drums. WRDA 96 contains no flammable ingredients. It will freeze at about – 2°C but will return to full strength after thawing and thorough mechanical agitation.

Health and Safety

See WRDA 96 Material Safety Data Sheet or consult GCP Applied Technologies.



gcpat.my | For technical information: asia.enq@gcpat.com

Australia 1800 855 525 New Zealand +64 9 448 1146 China Mainland +86 21 3158 2888 Hong Kong +852 2675 7898 India: Chennai +91 44 6624 2308 Delhi +91 124 402 8923 Indonesia +62 21 893 4260 Japan +81 3 5226 0231 Korea +82 32 820 0800 Malaysia +60 3 9074 6133 Philippines +63 49 549 7373 Singapore +65 6265 3033 Thailand +66 2 709 4470 Vietnam +84 8 3710 6168

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GCP Applied Technologies Inc., 2325 Lakeview Parkway, Alpharetta, GA 30009, USA

GCP Applied Technologies (Malaysia) Sdn. Bhd, 7 Lorong CJ 1/1A, Off Jalan Balakong, 43200 Cheras Jaya, Kuala Lumpur, Malaysia

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