

# WRDA<sup>®</sup> PN 40

Water reducer

---

## Product Description

WRDA<sup>®</sup> PN 40 is an aqueous solution of highly purified polycarboxylate and carbohydrates. WRDA PN 40 is a dispersing agent which provides uniform, predictable performance and conforms to AS 1478 Type WR. One litre weighs approximately 1.070kg ± 0.02kg. WRDA PN 40 contains no Triethanolamine.

## Applications

WRDA PN 40 provides a workable mix with less water resulting in stronger, less permeable and more durable concrete. It can be used in pre-mix, on-site and pre-cast plants for normal and specialty concretes. WRDA PN 40 is ideally suited for lean concrete mixes as well as concrete that uses manufactured sand.

## Chemical Action

As a dispersing agent, WRDA PN 40 lessens the natural inter-particle attraction between cement grains in water. It does this by absorbing itself onto the cement particle reducing their tendency to clump together, resulting in the mix being more workable with less water. WRDA PN 40 is also formulated with set and strength catalysts which promote more complete hydration of cement and Pozzolan materials. WRDA PN 40 contains finishability agents that provide enhanced “slickness” to the surface of the concrete. This allows for easier trowelling, resulting in a greatly improved finish to the concrete as compared to what can be achieved using conventional water reducers. WRDA PN 40 will also assist in producing concrete that will pump better due to the finishability agents that are used.

## Addition Rates

WRDA PN 40 will provide water reduction with neutral sets at the recommended dose rates. At increased dose rates it can give some retardation, however this will generally depend on environmental conditions at the time of dosing. The dose rate for WRDA PN 40 will typically range between 200 and 600mL / 100kg of total cementitious material. Optimal dose rate will be 300~500 ml/100 kg total cementitious material.

## Compatibility with Other Admixtures

WRDA PN 40 is compatible with all air-entraining concrete admixtures, however the quantity of air entraining agent when added with WRDA PN 40 may be altered to achieve required air entrainment. Initial lab and field trials are recommended to establish exact dose rates.

WRDA PN 40 can be used in conjunction with MIRA<sup>®</sup> mid-range water reducers and ADVA<sup>®</sup> range of high range water reducers and both non-chloride and chloride-based accelerators. Each admixture should be added separately to the mix.

WRDA PN 40 should not be used with Darex<sup>®</sup> Super 20, Daracem<sup>®</sup> or Daracem 19A.

## Dispensing Equipment

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

## Packaging

WRDA PN 40 is available in 205L drums.

WRDA PN 40 is non-flammable, it can freeze at about  $-2^{\circ}\text{C}$  but after thawing and agitating will have no adverse effect on the performance of the product.

## Health and Safety

Read and understand the product label and Safety Data Sheet (SDS) if handling the product directly. All users should acquaint themselves with this information prior to working with the product and follow the precautionary statements. SDSs can be obtained by contacting your local GCP representative or office.

[gcpat.com.au](http://gcpat.com.au) | Australia customer service: 1800 855 525

We hope the information here will be helpful. It is based on data and knowledge considered to be true and accurate, and is offered for consideration, investigation and verification by the user, but we do not warrant the results to be obtained. Please read all statements, recommendations, and suggestions in conjunction with our conditions of sale, which apply to all goods supplied by us. No statement, recommendation, or suggestion is intended for any use that would infringe any patent, copyright, or other third party right.

WRDA, MIRA, ADVA, DAREX and DARACEM are trademarks, which may be registered in the United States and/or other countries, of GCP Applied Technologies, Inc. This trademark list has been compiled using available published information as of the publication date and may not accurately reflect current trademark ownership or status.

© Copyright 2021 GCP Applied Technologies, Inc. All rights reserved

GCP Applied Technologies Inc., 62 Whittemore Avenue, Cambridge, MA 02140, USA

GCP Australia Pty. Ltd., 14 Colebard Street West, Archerfield, Brisbane, Queensland 4108, Australia

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

GCP Australia Pty. Ltd., 14 Colebard Street West, Archerfield, Brisbane, Queensland 4108, Australia

This document is only current as of the last updated date stated below and is valid only for use in Australia. It is important that you always refer to the currently available information at the URL below to provide the most current product information at the time of use. Additional literature such as Contractor Manuals, Technical Bulletins, Detail Drawings and detailing recommendations and other relevant documents are also available on [www.gcpat.com.au](http://www.gcpat.com.au). Information found on other websites must not be relied upon, as they may not be up-to-date or applicable to the conditions in your location and we do not accept any responsibility for their content. If there are any conflicts or if you need more information, please contact GCP Customer Service.

Last Updated: 2023-07-06

[gcpat.com.au/solutions/products/wrda-pn-40](http://gcpat.com.au/solutions/products/wrda-pn-40)