

# Arkflow ESR20

Extended workability additive for concrete combining both enhanced consistence Retention & Rheology performance  
 Conforms with ASTM C494 Type S.

## DESCRIPTION

**Arkflow ESR20** is a state of art concrete additive which allows the concrete to be workable for long periods without negatively affecting concrete durability. Its specifically designed molecular structure gives it exceptional properties as a concrete additive. Using **Arkflow ESR20** results extensive workability at all levels of consistency, compared to standard additives. **Arkflow ESR20** is recommended to produce concrete requiring low viscosity, long workability retention and high compressive strength.

## TYPICAL PROPERTIES

**Appearance:** Brownish Viscous Liquid  
**Specific Gravity:** 1.125 ± 0.02 at 25°C  
**Air Entrainment:** 1% approx. from Control mix  
**Chloride Content:** Nil as per BS 5075.

## COMPATIBILITY

With Cements:

**Arkflow ESR20** can be used with most types of Portland cements as well as Pozzolanic Cements, Natural Pozzolan, Ground Granulated Blast Furnace Slag (GGBFS) (**Arcrete BFS100**), Micro Silica (**Arcrete MS920**) and Fly Ash (**Arcrete FA10**). For use with other special cements, we recommend you contact Arkaz Technical Department.

With Other Admixtures:

**Arkflow ESR20** performance will be affected by the presence of other chemical admixtures. We recommend Arkaz Technical Service Department to be contacted for Advice in such circumstances.

## ADDITION RATES

Range:

200 ml - 1500 ml per 100 kg cement  
 0.2% - 1.5% (v/w) by wt. of cement

As with most products of this type the magnitude of the effect obtained with **Arkflow ESR20**, is governed by the quantity of product used, W/C ratio, and the specific nature of the concrete and constituent materials.

It is necessary therefore to assess performance under site conditions using actual materials to determine optimum performance and dosage.

For advice and assistance with trials we recommend that you contact Arkaz.

## EFFECTS OF OVERDOSING

The effects of overdosing **Arkflow ESR20** are a function of the degree of overdose.

When concrete has been produced, which has been overdosed, the level of workability will increase and may under certain situations lead to segregation of the mix. Setting time may also increase, especially if the overdosed concrete is subjected to low ambient temperatures, or if sulfate resisting or certain Pozzolanic cements are employed.

## DISPENSING

It is preferable that **Arkflow ESR20** should be introduced into the mixer by means of independent automatic dispensing equipment. Such equipment or advice on dispensing can be obtained from Arkaz.

## METHOD OF USE

**Arkflow ESR20** is supplied ready for use. When producing high workability concrete or concrete of low w/c ratio it is recommended that **Arkflow ESR20** be added in its supplied form to the batching water prior to addition of the cementitious component. Addition of any other chemical admixture should be undertaken separately.

## PACKAGING

**Arkflow ESR20** is supplied in 210 non-returnable drums. Alternatively, 1,000 liters totes and bulk deliveries can be arranged.

## HEALTH AND SAFETY

For more Safety information you can check Product Material Safety Data Sheet, send an email to [ConcreteDoctor@arkaz.com](mailto:ConcreteDoctor@arkaz.com) or Contact Arkaz Technical Service Department.

## STORAGE & SHELF LIFE

**Arkflow ESR20** should preferably be stored away from extremes of cold or heat. Always keep product in shaded storage.

Storage Life in Manufacturer's Drums: 12 months from date of manufacture.

Storage Life in Bulk Storage: 12 months from date of delivery.

## TECHNICAL SERVICE

The technical service department of Arkaz is available to assist in the correct and best use of our products, these resources and advice are at your disposal entirely without obligation.

Please contact:  
concretedoctor@arkaz.com

## LEGAL DISCLAIMER

The information given is based on data and knowledge considered to be true and accurate and is offered for the user's consideration, investigation and verification. Since the conditions of use are beyond our control, we do not warrant the results to be obtained. Please read all statements, recommendations or suggestions in conjunction with our conditions of sale including those limiting warranties and remedies which apply to all goods supplied by us. No statement, recommendation or suggestion is intended for any use which would violate or infringe statutory obligations or any rights belonging to a third party.

These products may be covered by patents or patents pending.



Copyright 2023  
Printed in K.S.A. Version 1.0  
31-December-2022