

**DESCRIPTION**

DuraForce(v-) is a water-based liquid integral moisture vapor reduction admixture. A division 03 solution to a division 07 and 09 problem. It is formulated to react with the hydroxide ions produced by the cement hydration process. DuraForce(v-) then creates additional hydration products within the capillary pores and blocks them, which shuts down the moisture vapor movement through the concrete. DuraForce(v-) is non-toxic and volatile organic compound (VOC) free and does not contribute to or cause corrosion of traditional reinforcement steel.

**PROPERTIES**

Physical State	Liquid
Odor	Odorless
Color	Hazy Whitish Liquid
Turbidity	60-70
Freezing Point	32°F (0°C)
Boiling Point	212°F (100°C)
VOCs	0.0 g/L
pH	11.0-12.0
Specific Gravity	1.20-1.25

**FEATURES & BENEFITS**

- No moisture test needed
- Expedites subsequent trades
- Integrated in the concrete mix at the plant
- No additional topical moisture vapor control required
- Discontinued capillaries helping with internal cure
- Reduces shrinkage up to 10% by day 28 based on ASTM C494 in compliance with ASTM C157
- Reduced permeability by 98% per ASTM D5084
- 10% mitigating effect on ASR per ASTM C1260
- Compatible with structural normal and light weight concrete
- Type S Admixture per ASTM C494/C494M
- VOC compliant

**APPLICATIONS**

- Normal and light weight structural concrete including (but not limited to)
  - » Slabs-on-ground
  - » Slab on metal decks
  - » Secondary toppings
  - » Below grade
  - » Roof decks
  - » Floorings, coatings, and roofings

**MIXING INSTRUCTIONS**

DuraForce(v-) should be added directly to the freshly mixed concrete at the end of the batch process with the tail water. Mix for 7 minutes at full charging speed to ensure complete uniform distribution. DuraForce(v-) is compatible with all other concrete mix constituents and reinforcements, if added separately.

**PACKAGING & STORAGE**

DuraForce(v-) is available in 275 gal (1040 L) totes, 55 gal (208 L) drums, and 15 gal (56 L) minidrums.

Store product above 32°F (0°C) and never allow to freeze. Do not store in direct sunlight for long periods nor in opened containers. It is recommended that all product be used within one year of purchase for best results.

**GENERAL SPECIFICATIONS**

The dosage rate for DuraForce(v-) is 12 oz (355 mL) per 100 lb (45 kg) total cementitious material. Mix water shall be adjusted on a one-for-one basis with the added DuraForce(v-). However, a specific dosage rate should be established by the project engineer or government agency for a given application based on project conditions and requirements.

**WARRANTY**

- Warranted to 100% in situ Relative Humidity (RH)
- Warranted against concrete moisture vapor emission induced flooring, roofing, or coating failure



ABC Polymer Industries, LLC warrants that its DuraForce(v-) ("product"), will reduce the permeability of structural concrete with mix designs between 0.30 and 0.54 water to total cementitious material ratio to not exceed an in-place permeability performance of 6.0 X 10 E-8 cm/s per ASTM D5084 during the concrete's lifetime; exclusive of any cracking regardless of cause. ABC Polymer warrants its DuraForce(v-) product to be free from manufacturing defects and to meet the technical properties of the current Technical Data Sheet if used as directed within shelf life and never allowed to freeze. This is only a short version of the DuraForce(v-) warranty. Full warranty information by request at 205.620.9889 or Sales@FullForceSolutions.us.