

TECHNICAL DATA

DESCRIPTION: HP Retarder is a water-reducing, set-retarding, concrete admixture in a concentrated form. HP Retarder meets or exceeds ASTM C494, Type D. The resulting performance includes increased compressive and flexural strengths, extended set times of two hours or greater (depending upon the dosage added per sack of cement), reduced drying shrinkage and reduced water absorption.

- ADVANTAGES:**
- Meets or exceed ASTM C 494, Type D
 - Extends set times 2 hours or more which can increase compressive and flexural strengths
 - Reduced drying shrinkage and water absorption
 - Reduces crazing
 - No slump loss

APPLICATION: For best results, HP Retarder should be used at a rate of 2-3 liquid ounces per 94 lb bag of portland cement. For HP Mortar or HP concrete, start with ½ ounces per bag. This range will produce maximum water reducing qualities. If more retardation is desired, the dosage can be increased as shown in the following chart:

HP Retarder liquid* per 100 lb of HP Cement- to meet ASTM C494, Type D

Below 65°F	2 fluid ounces
65°F – 85°F	3 fluid ounces
Above 85°F	4 fluid ounces

HP Retarder (dry powder) per bag of HP Mortar or HP Concrete Mix- to meet ASTM C494, Type D

Below 65°F	½ ounce
65°F – 85°F	1 ounce
Above 85°F	1.5 ounces

CAUTION:

WARNING! KEEP OUT OF REACH OF CHILDREN. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Keep container closed when not in use. **DO NOT** take internally. Use only with adequate ventilation. Use impervious gloves and eye protection.

In case of eye contact, flush thoroughly with clean water for at least 15 minutes. In case of skin contact, wash affected areas with soap and water. If irritation persists, **SEEK MEDICAL ATTENTION.** Remove and wash contaminated clothing. If inhalation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs, or if material swallowed, **SEEK IMMEDIATE MEDICAL ATTENTION.** Refer to Material Safety Data Sheet (MSDS) for further information.