

CHEMFIT RETARDFLOW WR200

Concrete Plasticizer Retarder – For Hot Weather Concreting & Long Transport

PRODUCT DESCRIPTION

ChemFit RetardFlow WR200 is a concrete plasticizer and set-retarding admixture specifically designed for hot weather concreting and extended transport times. It improves workability while delaying initial and final set, allowing ample time for placement without compromising concrete quality.

PRIMARY APPLICATIONS

ChemFit RetardFlow WR200 is recommended for use in conditions such as:

- Hot weather concreting (temperatures above 30°C)
- Ready-mix concrete (RMC) with long transport distances
- Mass concrete pours to prevent cold joints
- Large foundation and slab placements
- Precast concrete requiring extended workability
- Sites with difficult or slow placing conditions

KEY FEATURES AND BENIFITS

- **Plasticizing effect** – Improves flowability without extra water
- **Set retardation** – Delays setting time for long-distance transport
- **Ideal for hot weather** – Prevents rapid slump loss and flash setting
- **Chloride-free** – Safe for reinforced and prestressed concrete
- **ASTM C494 Type B & D compliant** – Meets international standards
- **Liquid form** – Easy to dispense and batch
- **Slump retention** – Maintains workability over extended periods

PHYSICAL AND CHEMICAL PROPERTIES

Property	Specification
Appearance	Liquid
Color	Dark brown / Amber
Specific Gravity	1.20 ± 0.02 at 25°C
pH Value	7.5 – 9.5
Chloride Content	Nil ($\leq 0.1\%$)
Water Reduction	6 – 12%
Set Retardation	2 – 8 hours (depends on dosage & temperature)

PACKAGING AND STORAGE

Packaging:

- 200 L drums
- 1000 L IBCs (Intermediate Bulk Containers)

Storage:

- Store in original sealed containers at +5°C to +40°C
- Protect from direct sunlight, frost, and extreme heat

Shelf life: 12 months from date of manufacture

DOSAGE AND COVERAGE RATES

Recommended Dosage: 0.3% – 1.0% by weight of cement

Example (50 kg cement bag): 0.15 – 0.50 kg (\approx 130 – 440 ml) per bag

Yield per 200 L drum: Approx. 400 – 1,330 bags of cement (20 – 66 tons of cement)

Yield per 1000 L IBC: Approx. 2,000 – 6,660 bags of cement (100 – 330 tons of cement)

Dosage Guidelines:

Low dosage (0.3%): Mild plasticizing effect, minimal retardation

Medium dosage (0.5-0.7%): Standard plasticizing with moderate retardation

High dosage (0.8-1.0%): Maximum water reduction and extended retardation for hot weather

NOTE: Concrete trial mixes shall be carried out to confirm optimal dosage for specific project requirements.

APPLICATION GUIDELINES

Dispense directly into mixing water or add to concrete when 70% of water has been added. Mix for minimum 2–3 minutes to ensure uniform dispersion. Compatible with all Portland cements including OPC, PPC, PSC, and SRC. Do not pre-mix with other admixtures in concentrated form. If overdosed, set retardation increases significantly – keep concrete moist during extended setting period. For transport times exceeding 2 hours, higher dosages (0.8-1.0%) are recommended.

HEALTH AND SAFETY

Not classified as hazardous. Avoid eye and prolonged skin contact. For eye contact, rinse with water for 15 minutes. For skin contact, wash with soap and water. If swallowed, do not induce vomiting – rinse mouth and drink water. Use nitrile gloves and goggles during handling. Refer to SDS for detailed information.

CLEANING OF TOOLS

Clean all batching equipment, measuring containers, and spillages with water immediately after use. Dried or cured material may require mechanical removal.

APPROVALS AND STANDARDS

Conforms to:

ASTM C494 / C494M – Type B (Retarding Admixture)

ASTM C494 / C494M – Type D (Water-Reducing & Retarding Admixture)

LEGAL NOTES

All technical data provided in this Product Data Sheet is based on laboratory testing under controlled conditions. Actual field performance may vary due to differences in substrates, application methods, site conditions, and environmental factors. ChemFit makes no warranty of merchantability or fitness for a particular purpose. Users shall conduct their own trials to validate product suitability for the intended application. ChemFit reserves the right to modify product specifications without prior notice. For the most current documentation, request the latest Product Data Sheet and Safety Data Sheet from ChemFit.

CHEMFIT CONSTRUCTION CHEMICALS AND SERVICES LIMITED
OFFICE NO.8, 1KM NEAR GAHEY SOAP SARGDHA ROAD, FAISALABAD
Tell: +923364544837
Web: www.chemfitchemicals.com
Email: chemfit.pro@gmail.com