



Muraplast FRV

(Formerly Known as Zentrament FRV)
Slump Retaining, Super Plasticizer

Product Properties

- High early strength Retarding Super plasticizer
- Chloride free as per IS 456
- Non-Toxic and Non-flammable
- Substantial increase of early and final strength
- Improvement in rheological properties
- Confirming to IS 9103, ASTM C – 494 Type B and Type F and ASTM C-1017 Type II, Depending upon Dosage.

Areas of Application

- As a super plasticizer for ready-mix concrete
- Also can be used for Pre-cast concrete and Pre-stressed concrete
- For marine and massive structures requiring long slurry retention period
- Can be used with all standard cements

Application Notes

General

Muraplast FRV is a good early strength super plasticizer especially formulated for concretes designed for high strengths. The super plasticizer based on selected SNF polymers is free from chlorides and aids concretes in attaining good early and final strengths. The concretes with **Muraplast FRV** are homogenous and free from bleeding and segregation. The super plasticized concretes are pumpable and require minimum compaction. **Muraplast FRV** meets requirements of IS 9103, ASTM C – 494 Type B and Type F and ASTM C-1017 Type II, Depending upon Dosage

Advantages

Muraplast FRV is suitable for use in ready-mix concrete plants, pre-cast industry, mass concreting, marine and massive structures where retention of slurry is necessary to keep the concrete workable for a longer period. Properly designed concrete produces a very homogenous concrete, which is easily workable without bleeding and segregation

Usage of **Muraplast FRV** reduces the chances of pump blocking and reduces the abrasion in the pipelines, thereby extending the life of concrete pumps and it enhances workability in hot weather & reduces chances of cold joint formation

Instructions for Use

Muraplast FRV is to be added to the concrete during mixing & should preferably be dosed along with mixing water additional water. Adding **Muraplast FRV** to the dry aggregate/cement mix is not recommended. It is most effective when dosed after about 70% of the mixing water has been added to concrete

The mixing time after addition of the admixture should be long enough to allow the admixture to unfold its plasticizing effect completely

If dosage on the job-site into transit mixer trucks is necessary, please follow corresponding engineering and safety rules.

Dosage

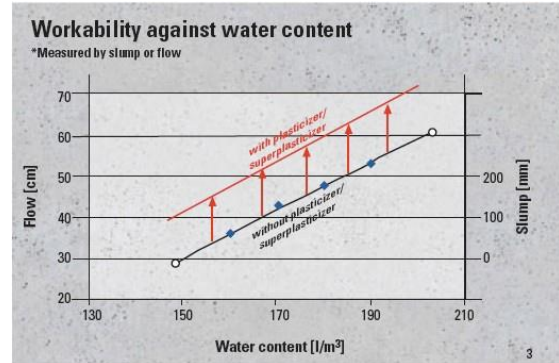
Muraplast FRV is generally added between 0.8 to 2.0% by weight of cement for flow concrete depending on the workability and retardation requirement for individual job site recommended dosage for high early strength is 1.5 to 3.0% by weight of cement. However, it is recommended that site trials be taken to determine optimum dosage. In certain cases due to variations of cement, sand aggregates, weather or site conditions dosages may vary from recommendations

Muraplast FRV can be used in combination with other MC Admixtures. For this you can consult to our Technical team.

Further Instructions / Precautions

- To determine individual technical suitability, preliminary tests should be carried out under application conditions. We shall be glad to assist you for your concrete technology testing/needs.
- Relevant standards for production, placing and curing of concrete should be followed.
- Efficient curing is essential for any concrete and is best-achieved using **Emcoril** range of curing compounds. This will avoid negative effects of quick water loss from the concrete.
- Depending upon the concrete mix severe over dosage of the admixture especially retarding plasticizers and superplasticizers may result in bleeding/segregation of concrete quick loss of workability, extended initial and final setting times etc.
- Slight overdosing may not severely affect the ultimate strength of concrete provided the concrete is properly mixed, handled and placed and adequately compacted and cured

Graph Showing Workability of Concrete versus the Water content of the mix with and without use of Superplasticizers



Technical Data For Muraplast FRV

Characteristic	Unit	Value*	Comments
Density	Kg/litter	1.16	± 0.03
Mixing Ratio	% By weight of Cement	0.8% to 2.0% 1.5% to 3.0%	For flow concrete For good early strength

*All the technical Values were determined in laboratory, at a temperature of 20^o C and 65% relative humidity

Product Characteristics for Muraplast FRV

Type of Product	SNF Based Retarding Superplasticizer
Form	Liquid
Color	Brown
Shelf Life	12 Months from date of Manufacture if stored in Unopened Packaging. Protect from Rain, Direct Sunlight, Heat and Frost
Delivery	250 kg drums and 30kg Can
Disposal	Empty packs completely and dispose off carefully to protect our Environment

Safety Advice

Please Take notice of the safety information and advice given on the packaging labels, safety information sheets and General Application Advice.

Note: - The information on this Data Sheet is based on our experiences and correct to the best of our knowledge. It is However, not binding. It has to be adjusted to the individual structure, application purpose and especially to local conditions. Our Data refers to the accepted engineering rules, which have to be observed during application. This provided we are liable for the correctness of this data within the scope of our terms and conditions of sale-delivery-and-service. Recommendations of our employees which differ from the data contained in our information sheets are binding if given in written form. The accepted engineering rules must be observed at all times.

Edition: - MC/ND/201205, Some Technical Changes have been made to this print medium. Older editions are invalid and may not be used anymore. If a technically revised new edition is issued, this edition becomes invalid.