



# Plastiment® VZ

## High Performance Retarding Plasticiser

### Technical Data Sheet

#### DESCRIPTION

**Plastiment VZ** is a purpose designed material which is a chemical combination Polycarboxylic materials.

**Plastiment VZ** allows the production of retarded concrete with increased ultimate strengths.

**Plastiment VZ** is a ready to use liquid for producing a more uniformly cohesive quality concrete to meet the specifications and needs of Architects, Consulting Engineers and Contractors.

**Plastiment VZ** conforms to BS5075 Pt 3 ,1982

#### USES

- \* Readymix concrete
- \* Precast concrete
- \* Pumped concrete
- \* Lightweight concrete
- \* Wet shotcrete
- \* Semi-dry concrete

#### ADVANTAGES

- \* Improved workability/reduces w/c ratio
- \* Flexible degree of retardation
- \* High resistance to segregation/reduces bleeding
- \* Improved surface finish
- \* Reduces shrinkage cracking potential
- \* Higher initial and ultimate compressive strengths
- \* Higher durability concrete

#### Technical Data (typical)

<b>Form:</b>	Liquid
<b>Colour:</b>	Clear
<b>Specific gravity:</b>	1.17 @ 20°C
<b>Air entrainment:</b>	Minimal increase
<b>Chloride content % w/w:</b>	Nil (to BS5075)
<b>Effect on setting:</b>	Retardation to required level
<b>Freezing point °C:</b>	-1°C
<b>Equivalent Sodium Oxide:</b>	0.35% w/w
<b>MIX</b>	
<b>Cement content (kg/m<sup>3</sup>):</b>	300
<b>Coarse aggregate source (limestone) A/C Ratio:</b>	6.37:1
<b>% Fines:</b>	42.9

All above values are approximate.

## METHOD OF USE

For maximum dispersion **Plastiment VZ** should be added with the mixing water, on no account should it be added to the dry cement. Where concrete is being mixed by ready mixed trucks, **Plastiment VZ** can be added at the batching plant but the trucks must rotate their drums until a uniform mix is achieved. To produce flowing concrete a well proportioned pump mix should be used.

## DOSAGE

The dosage rate of **Plastiment VZ** is best found after initial site trials, which will take into consideration the best performance/dosage rate. As a guide an addition rate of between 0.1-0.5% by weight of cement is recommended (i.e. 0.05-0.25 litres per 50kg).

## COMPATIBILITY

Can be used with all types of Portland Cements and **Sika** Admixtures. It is recommended that admixtures are added to the concrete separately

## COMPRESSIVE STRENGTH RESULTS (typical):

Admixture	Dose (M1/50kg Cement)	w/c ratio	Slump (mm)	Air Cont %	28 day Compressive Strength N/mm <sup>2</sup>
Control	None	0.69	85	0.5	48.0
Plastiment VZ	200	0.57	95	0.7	63.0

## EFFECT ON WORKABILITY (typical):

Admixture	Dose (M1/50kg Cement)	w/c ratio	Slump (mm)	Air Cont %	28 day Compressive Strength N/mm <sup>2</sup>
Control	None	0.60	75	0.5	48.0
Plastiment VZ	200	0.60	Collapsed	1.7	49.0

### Handling Precautions

Sika products are generally harmless provided that certain precautions normally taken when handling chemicals are observed. The materials must not, for instance, be allowed to come in contact with foodstuffs or food utensils and measures should also be taken to prevent the uncured materials from coming in contact with the skin, since people with particularly sensitive skin may be affected. The use of protective clothing, goggles, barrier creams and rubber gloves is required. The skin should be thoroughly cleaned at the end of each working period either by washing with soap and warm water or by using a resin-removing cream - the use of powerful solvents is to be avoided. Disposable paper towels - not cloth towels - should be used to dry the skin. Adequate ventilation of the working area is recommended. In case of accidental eye or mouth contact, flush with water - consult a doctor immediately. Health and Safety information on Sika Products is available and we strongly advise that this is read prior to their use. Sika products are for professional use and should be stored in sealed containers away from the reach of children.

### Important Note

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users should always refer to the most recent issue of the Technical Data Sheet for the product concerned, copies of which will be supplied on request.

Please consult our Technical Sales Department for further information

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## PACKAGING

**Plastiment VZ** is supplied in 25 litre, 200 litre and 1000 litre containers. Bulk deliveries can be arranged.

## STORAGE AND SHELF LIFE

The product should be stored away from extremes of temperature and should be protected from frost. Storage life 12 months minimum from delivery.