



Sikament[®] HE200

Super Plasticiser/Accelerator

Technical Data Sheet

DESCRIPTION

Sikament HE200 is a super plasticising and accelerating concrete admixture based on Melamine-Formaldehyde. **Sikament HE200** is manufactured in the UK by Sika under strict quality control.

Sikament HE200 can be used to either produce 'flowing concrete' or enable large water reductions to be made for the same workability. **Sikament HE200**, however, has the advantage of producing very high early strengths and thus makes the material suitable for use in pre-cast concrete applications and in areas where higher workability concrete and fast shutter stripping is required.

ADVANTAGES

Sikament HE200 provides the following benefits:–

- * As a superplasticiser:
 - * Substantial improvements in workability without increased water or the risk of segregation
 - * Reversion from high workability within 1–2 hours
 - * Improved concrete density and surface finish

- * As a water reducer:
 - * Up to 30% water reducing. 40% increase in 28 day strengths are possible
 - * High strength between 4 hours and 24 hours can be obtained
 - * Increases frost and water resistant properties of the concrete because of reduced water content and low permeability
 - * Extremely high workability
 - * Little vibration required
 - * Can replace steam curing
 - * Faster mould turn round
 - * Higher strength at all ages
 - * High durability concrete
 - * Ultra-high strength concrete
 - * *Ideal* for power trowelled floors

Technical Data (typical)

| | |
|--|--|
| Form: | Liquid |
| Colour: | Brown |
| Specific Gravity: | 1.2 |
| Chloride Content % w/w: | Nil (ie less than 0.2% w/w) |
| Equivalent Sodium Oxide as % Na₂O: | 10.9% w/w as Na ₂ O (typical) |
| Effect on Setting: | The concrete will set and lose workability quicker |
| Freezing Point °C: | -5°C |
| Storage: | Protect from frost |
| Suitability: | All Portland Cement including SRC |

All above values are approximate.



METHOD OF USE

For more information on Sika visit www.barbourproductsearch.info

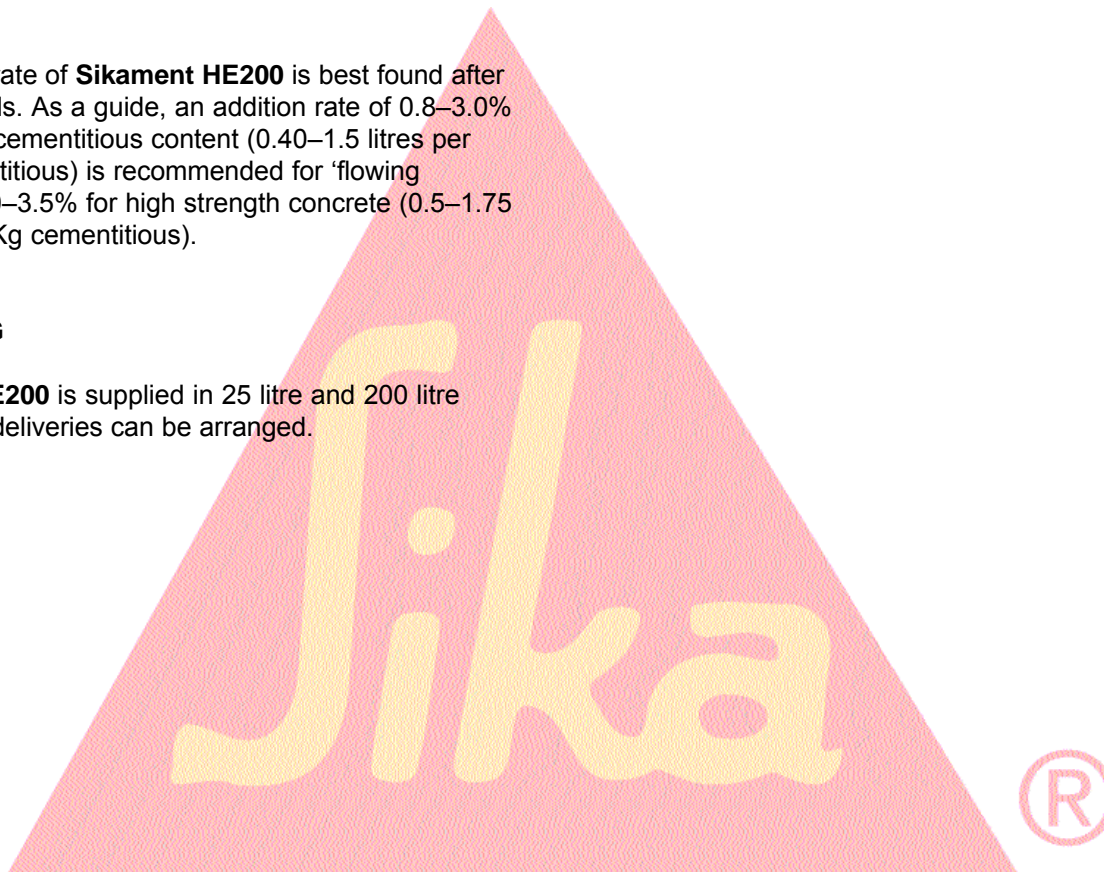
In order to obtain the best results, **Sikament HE200** must be used with specially designed mixes designed for the particular requirements of strength, cost saving or flowing concrete. For maximum dispersion **Sikament HE200** should be added with the mixing water. On no account should it be added to the dry cement. **Sikament HE200** can be added at the plant or on site, when added at site the mixer trucks should rotate their drums at maximum revolutions until a uniform mix is achieved.

DOSAGE

The dosage rate of **Sikament HE200** is best found after initial site trials. As a guide, an addition rate of 0.8–3.0% by weight of cementitious content (0.40–1.5 litres per 50 Kg cementitious) is recommended for 'flowing concrete', 1.0–3.5% for high strength concrete (0.5–1.75 litres per 50 Kg cementitious).

PACKAGING

Sikament HE200 is supplied in 25 litre and 200 litre drums. Bulk deliveries can be arranged.



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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Sikament[®] HE300

Super Plasticiser/Accelerator

Technical Data Sheet

DESCRIPTION

Sikament HE300 is a super plasticising and accelerating concrete admixture based on Napthalene-Formaldehyde. **Sikament HE300** is manufactured in the UK by Sika under strict quality control.

Sikament HE300 can be used to either produce 'flowing concrete' or enable large water reductions to be made for the same workability. **Sikament HE300**, however, has the advantage of producing very high early strengths and thus makes the material suitable for use in pre-cast concrete applications and in areas where higher workability concrete and fast shutter stripping is required.

ADVANTAGES

Sikament HE300 provides the following benefits:-

- * As a superplasticiser:
 - * Substantial improvements in workability without increased water or the risk of segregation
 - * Reversion from high workability within 1-2 hours
 - * Improved concrete density and surface finish

- * As a water reducer:
 - * Up to 30% water reducing. 40% increase in 28 day strengths are possible
 - * High strength between 4 hours and 24 hours can be obtained
 - * Increases frost and water resistant properties of the concrete because of reduced water content and low permeability
 - * Extremely high workability
 - * Little vibration required
 - * Can replace steam curing
 - * Faster mould turn round
 - * Higher strength at all ages
 - * High durability concrete
 - * Ultra-high strength concrete
 - * *Ideal* for power trowelled floors

Technical Data (typical)

| | |
|--|--|
| Form: | Liquid |
| Colour: | Brown |
| Specific Gravity: | 1.2 |
| Chloride Content % w/w: | Nil (ie less than 0.2% w/w) |
| Equivalent Sodium Oxide as % Na₂O: | 10.9% w/w as Na ₂ O (typical) |
| Effect on Setting: | The concrete will set and lose workability quicker |
| Freezing Point °C: | -5°C |
| Suitability: | All Portland Cement including SRC |

All above values are approximate.



METHOD OF USE

In order to obtain the best results, **Sikament HE300** must be used with specially designed mixes designed for the particular requirements of strength, cost saving or flowing concrete. For maximum dispersion **Sikament HE300** should be added with the mixing water. On no account should it be added to the dry cement. **Sikament HE300** can be added at the plant or on site, when added at site the mixer trucks should rotate their drums at maximum revolutions until a uniform mix is achieved.

DOSAGE

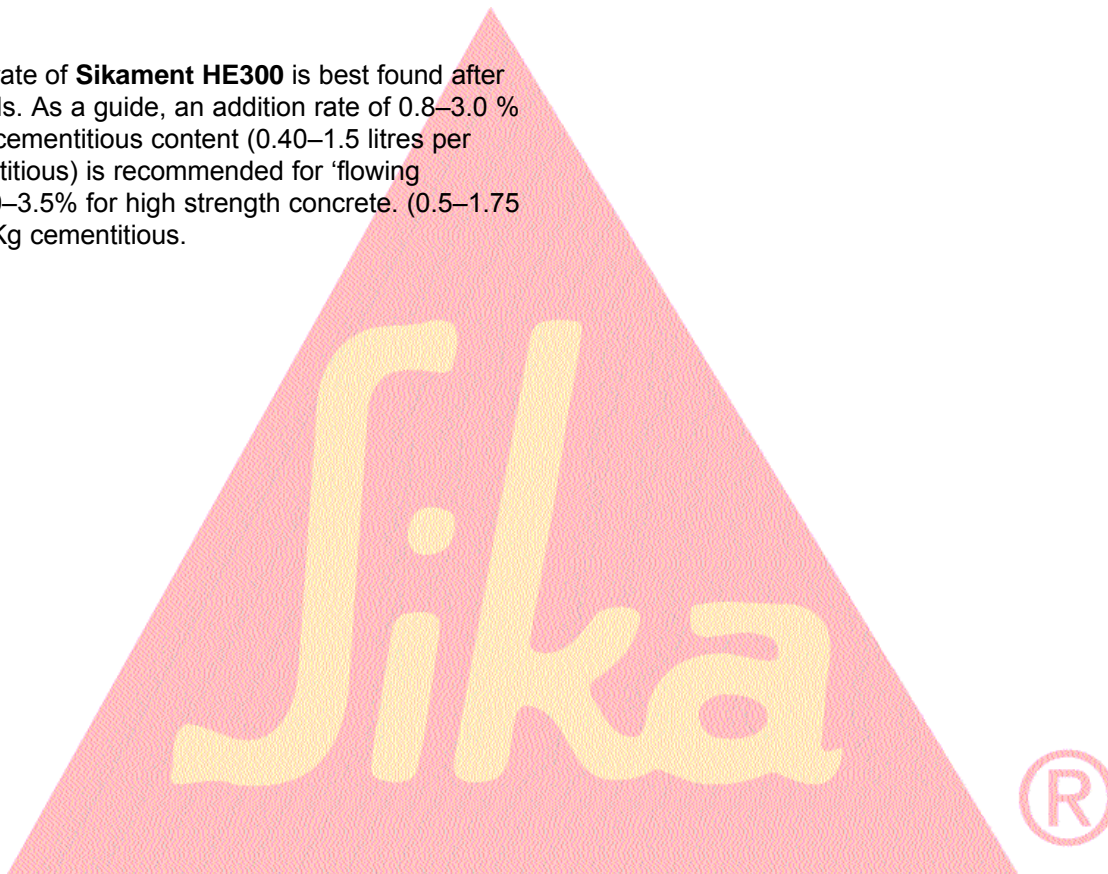
The dosage rate of **Sikament HE300** is best found after initial site trials. As a guide, an addition rate of 0.8–3.0 % by weight of cementitious content (0.40–1.5 litres per 50 Kg cementitious) is recommended for 'flowing concrete', 1.0–3.5% for high strength concrete. (0.5–1.75 litres per 50 Kg cementitious).

PACKAGING

Sikament HE300 is supplied in 25 litre and 200 litre drums. Bulk deliveries can be arranged.

STORAGE AND SHELF LIFE

Minimum 1 year in sealed containers stored in dry warehouse condition (+5°C – +25°C). Protect from frost.



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

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Sika® Rapid 1

Hardening Accelerator

Technical Data Sheet

DESCRIPTION

Sika Rapid 1 is a new generation hardening accelerator for concrete and mortar. It increases the early strengths of concrete without negatively influencing the final strength.

USES

- * **Sika Rapid 1** is used to achieve high early strengths at 6-24 hours. It is used in conjunction with a powerful water reducing admixture from the **Sikament** range.
- * **Sika Rapid 1** does not contain any chlorides and can, therefore, be used without any reservations for reinforced concrete.

ADVANTAGES

Sika Rapid 1 substantially increases early strengths and provides the following benefits:

- * **TIME** - with **Sika Rapid 1** fast track production deadlines can be met with confidence
- * **ENERGY** - **Sika Rapid 1** can reduce the requirement for external heating thus reducing energy costs
- * **MONEY** - by reducing production time and labour overtime **Sika Rapid 1** increases productivity thus saving money.

Technical Data (typical)

| | |
|----------------------------------|-------------|
| Colour: | Pale Red |
| Density: | 1.17 kg/ltr |
| Dosage % by wt of cement: | 1.0 - 3.0 |

All above values are approximate.



CONCRETE PLACING

Sika Rapid 1 along with the **Sikament Super Plasticiser** can be added at the batching plant, or alternatively the **Sikament Super Plasticiser** can be added at the batching plant and the **Sika Rapid 1** at site.

CONCRETE PRACTICE

It is important that the temperature of the concrete is at least 23°C prior to placement. The use of hot water or steam may be appropriate.

CONCRETE CURING

To ensure maximum strength gain the use of insulated forms coupled with thermal blankets may be appropriate.

CONCRETE MONITORING

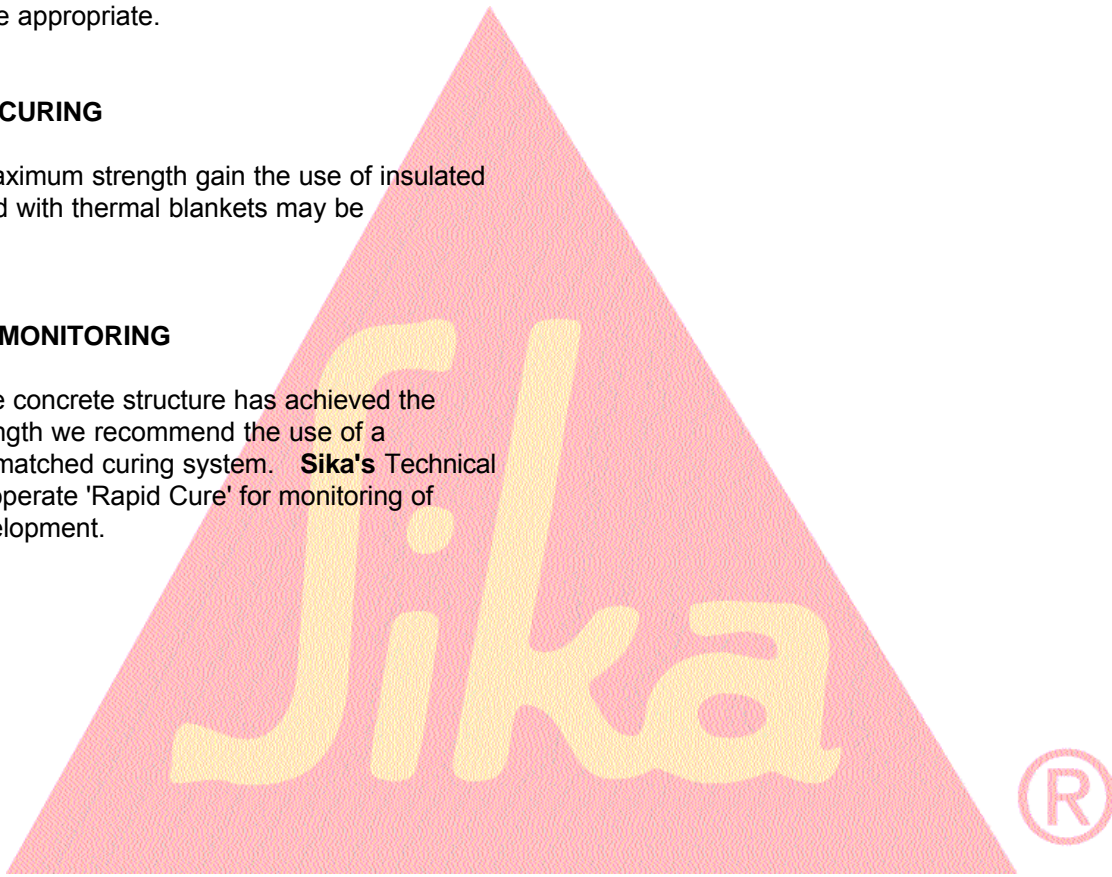
To ensure the concrete structure has achieved the required strength we recommend the use of a temperature matched curing system. **Sika's** Technical Department operate 'Rapid Cure' for monitoring of strength development.

PACKAGING

Sika Rapid 1 is supplied in 200 litre containers. Bulk deliveries can be arranged.

STORAGE AND SHELF LIFE

Sika Rapid 1 should be stored in sealed containers between 5°C and 30°C and protected from frost. Under these conditions the shelf life is 1 year minimum.



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

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Sika® Rapid 2

Low Alkali Hardening Accelerator

Technical Data Sheet

DESCRIPTION

Sika Rapid 2 is a new generation low alkali hardening accelerator for concrete and mortar. It increases the early strengths of concrete without negatively influencing the final strength.

USES

- * **Sika Rapid 2** is used to achieve high early strengths at 6-24 hours. It is used in conjunction with a powerful water reducing admixture from the **Sikament** range.
- * **Sika Rapid 2** does not contain any chlorides and can, therefore, be used without any reservations for reinforced concrete.

ADVANTAGES

Sika Rapid 2 substantially increases early strengths and provides the following benefits:

- * Recycle forms faster.
- * Increased production.
- * Maintains cost effective production cycles in colder weather.
- * Reduce or eliminate steam curing or external heat.
- * Reduce safety hazards caused by condensed steam.

Technical Data (typical)

| | |
|----------------------------------|-------------|
| Colour: | Yellow |
| Density: | 1.40 kg/ltr |
| Dosage % by wt of cement: | 1.0 - 3.0 |

All above values are approximate.



CONCRETE PLACING

Sika Rapid 2 along with the **Sikament Super Plasticiser** can be added at the batching plant, or alternatively the **Sikament Super Plasticiser** can be added at the batching plant and the **Sika Rapid 2** at site.

CONCRETE PRACTICE

It is important that the temperature of the concrete is at least 23°C prior to placement. The use of hot water or steam may be appropriate.

CONCRETE CURING

To ensure maximum strength gain the use of insulated forms coupled with thermal blankets may be appropriate.

CONCRETE MONITORING

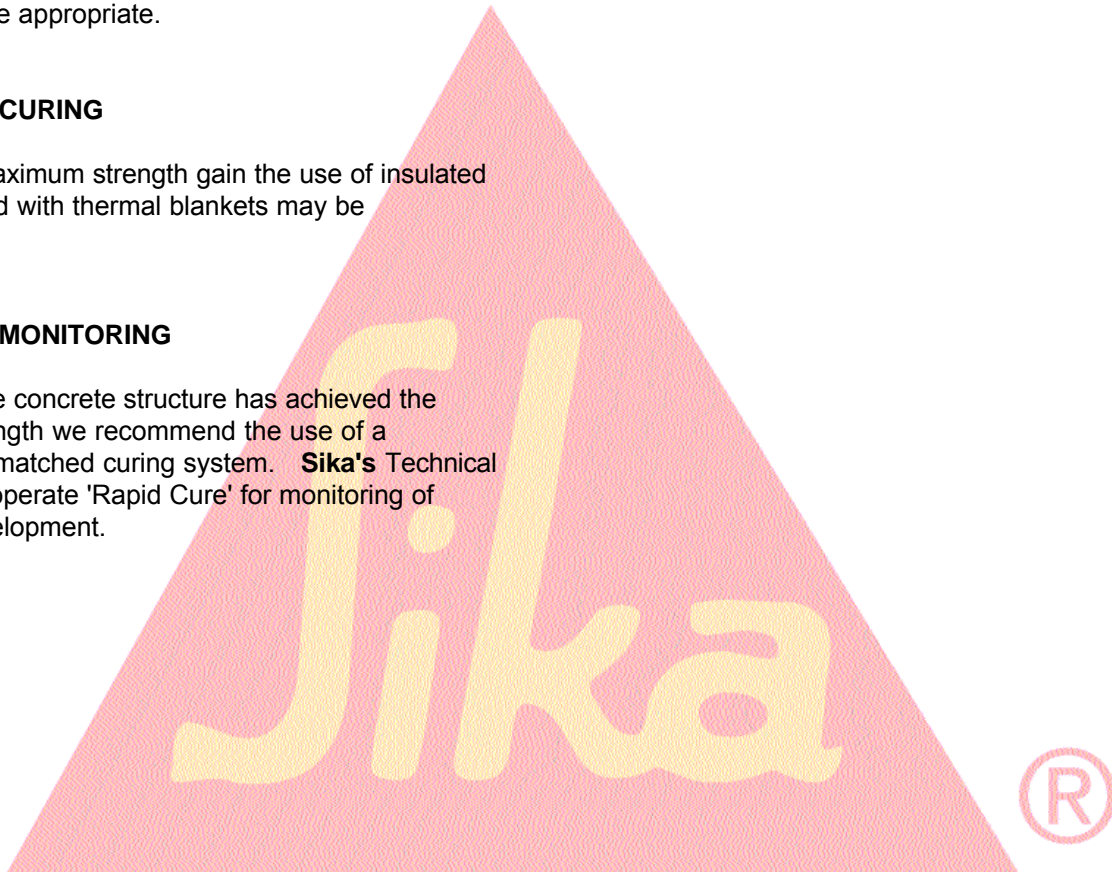
To ensure the concrete structure has achieved the required strength we recommend the use of a temperature matched curing system. **Sika's** Technical Department operate 'Rapid Cure' for monitoring of strength development.

PACKAGING

Sika Rapid 2 is supplied in 200 litre containers. Bulk deliveries can be arranged.

STORAGE AND SHELF LIFE

Sika Rapid 2 should be stored in sealed containers between 5°C and 30°C and protected from frost. Under these conditions the shelf life is 1 year minimum.



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.

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Sikaset[®] CF1

Chloride Free Accelerator

Technical Data Sheet

DESCRIPTION

Sikaset CF1 is a plasticising and accelerating concrete admixture. **Sikaset CF1** is manufactured in the UK by **Sika** under strict quality control.

Sikaset CF1 can be used to enable significant water reductions to be made for the same workability. **Sikaset CF1**, however, has the advantage of protecting the concrete when plastic and in the early stages of hardening down to -5C air temperature. To provide additional antifreeze protection, the dosage can be increased to 2% by weight of cement.

ADVANTAGES

Sikaset CF1 provides the following benefits:-

As a plasticiser:

- * Significant improvements in workability without increased water or the risk of segregation
- * Higher early strengths are obtained without increase of cement content
- * Improved concrete density and surface finish
- * Up to 10% water reducing. 15% increase in 28 day strengths are possible
- * Higher strengths between 12 hours and 24 hours are obtained
- * Increases the resistance to freeze thaw cycle properties of the concrete because of reduced water contents and low permeability
- * Higher workability possible
- * Less vibration required
- * Higher strength at all ages
- * More durable concrete

Technical Data (typical)

| | |
|-------------------------------------|---|
| Form: | Liquid |
| Colour: | Brown |
| Chloride content: % w/w: | Nil (ie less than 0.2% w/w) |
| Effect on setting: | The concrete will set and lose workability quicker. |
| Freezing point °C: | -10°C |

All above values are approximate.



METHOD OF USE

In order to obtain the best results, **Sikaset CF1** must be used with specially designed mixes designed for the particular requirements of strength and weather conditions. For maximum dispersion **Sikaset CF1** should be added with the mixing water. On no account should it be added to the dry cement. **Sikaset CF1** can be added at the plant or on site, when added at site the mixer trucks should rotate their drums at maximum revolutions, until a uniform mix is achieved.

DOSAGE

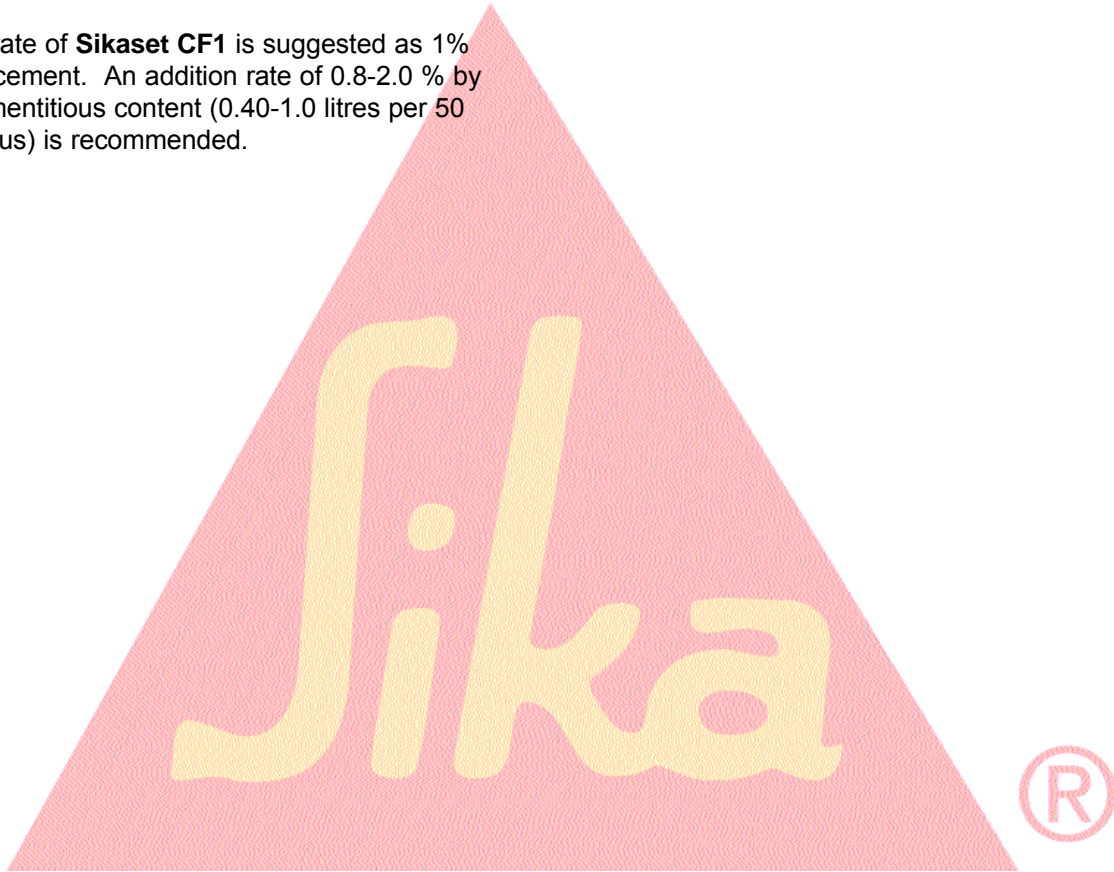
The dosage rate of **Sikaset CF1** is suggested as 1% by weight of cement. An addition rate of 0.8-2.0 % by weight of cementitious content (0.40-1.0 litres per 50 kg cementitious) is recommended.

PACKAGING

Sikaset CF1 is supplied in 25 litre tubs and 200 litre drums. Bulk deliveries can be arranged.

STORAGE AND SHELF LIFE

Sikaset CF1 should be stored in sealed containers between 5°C and 30°C and protected from frost. Under these conditions the shelf life is 1 year minimum.



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.

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Sikaset[®] N

Rapid Hardening Admixture

Technical Data Sheet

DESCRIPTION

Sikaset N is an accelerating concrete admixture.

Sikaset N is manufactured in the UK by **Sika** under strict quality control.

Sikaset N is a concentrated calcium chloride based liquid admixture for concrete and mortar, which rapidly accelerates the setting and hardening times of Portland cement concrete mixes. Its use can enable concreting and bricklaying to continue at low temperatures.

Sikaset N conforms to BS5075 Part 1 1982 for accelerating admixtures. Its use is not suitable in reinforced concrete.

ADVANTAGES

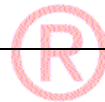
Sikaset N provides the following benefits:-

- * Higher early strengths are obtained without increase of cement content.
- * Used in mass concrete for roads, floor toppings etc.
- * Allows early stripping of road forms, shuttering etc.
- * Higher strengths between 12 hours and 24 hours are obtained.
- * Allows construction work to continue down to -5°C.

Technical Data (typical)

| | |
|-------------------------------------|---------------------------------|
| Form: | Liquid |
| Colour: | Clear/Light brown |
| Specific gravity: | 1.35 |
| Chloride content: % w/w: | 22% |
| Effect on setting: | Early strengths are accelerated |
| Freezing point °C: | -5°C |

All above values are approximate.



METHOD OF USE

In order to obtain the best results, **Sikaset N** must be used with specially designed mixes designed for the particular requirements of strength and weather conditions. For maximum dispersion **Sikaset N** should be added with the mixing water. On no account should it be added to the dry cement. **Sikaset N** can be added at the plant or on site, when added at site the mixer trucks should rotate their drums at maximum revolutions until a uniform mix is achieved..

DOSAGE

The dosage rate of **Sikaset N** is suggested as 1% by weight of cement. An addition rate of 0.8-2.0 % by weight of cementitious content (0.40-1.0 litres per 50 kg cementitious) is recommended.

COMPATIBILITY

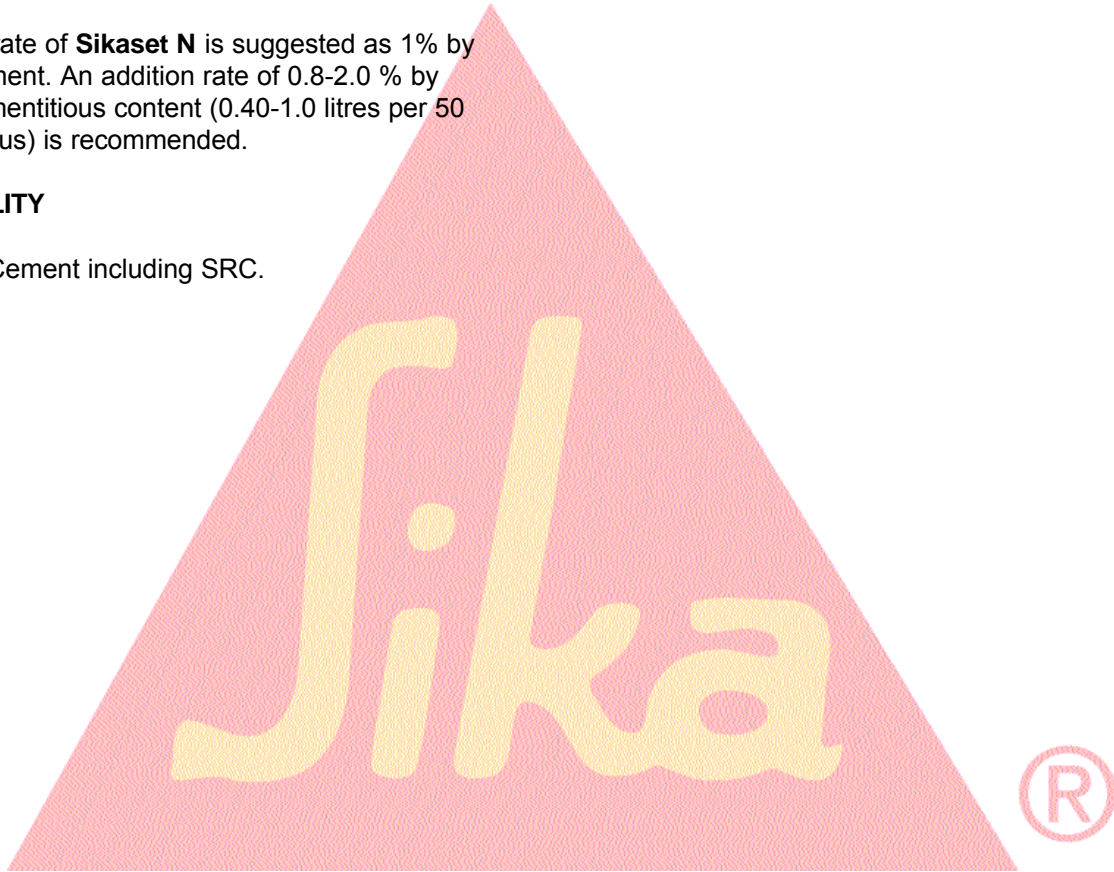
All Portland Cement including SRC.

PACKAGING

Sikaset N is supplied in 25 litre and 200 litre containers . Bulk deliveries can be arranged.

STORAGE AND SHELF LIFE

Sikaset N should be stored in sealed containers between 5°C and 30°C and protected from frost. Under these conditions the shelf life is 1 year minimum.



Handling Precautions

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