



ISO 9001  
SAI Global



## TECHNICAL BULLETIN # 56

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# SAMiflex CRS HR

## High Binder Content Emulsions for Sprayed Sealing Applications

### Description

SAMiflex CRS HR is a cationic high residue bitumen emulsion for sprayed sealing applications and used as an alternative to conventional bitumen or polymer modified binders.

The solids content is normally in the range of 67% to 78%. Specific site requirements will determine the degree of polymer modification required.

### Features and Benefits

Offers the advantages of:

- No heat degradation during transport or storage of the binder
- Improved aggregate embedment and adhesion
- Can be applied all year round, even in cool, damp conditions
- Lower spray temperatures (80°C - 95°C)
- Doesn't require adhesion agents or diluents
- Elimination of fuming

### Applications

- New seals over properly prepared surfaces
- Reseals over pavements exhibiting surface cracking
- Pavements with high deflections
- Where waterproofing of the surface is necessary

The binder residue of the SAMiflex CRS HR - Unmodified high residue emulsion may be specified in terms of the National or State specification e.g. AS 1160 for the appropriate Sprayed Sealing Grade.

Where SAMiflex CRS HR is chosen due to cold or poor weather conditions, it is recommended that SAMiflex E30LX be used instead since the latter offers better protection against possible traffic damage at the early stages of curing and overnight trafficking. The presence of polymer greatly assists with aggregate adhesion and retention in these early critical stages of the curing process and aggregate embedment.

### Availability

SAMiflex CRS HR is available ex plant (Sydney, Brisbane, Perth and Melbourne locations) in minimum 8000 litre bulk quantities. All SAMiflex CRS HR is manufactured to order and each batch can be tailor made to suit individual requirements.

### Delivery and Transportation

The proper handling of SAMiflex CRS HR post manufacture is very important. The following should be used as a guide.

## Tankering

- Only transport in tankers that have been properly cleaned and flushed to avoid contamination or the possible breaking of the emulsion during transit. The heat from the emulsion at 95°C is not sufficient to free blocked valves or lines
- No heat should be applied to the product until the nominated delivery site has been reached. Ensure sufficient time is allowed for at the destination, to heat the product up to a temperature of 90°- 95°C prior to discharging into the sprayer. Heating and circulation must be kept to a minimum and should be done just prior to the time requested on site
- Do not heat at a rate greater than 10°C per hour, or above 95°C
- During heating, commence slow circulation once the product temperature is above 70°C
- Do not circulate, pump or transfer product until at least 70°- 80°C
- When transferring product into the sprayer by suction then ensure the tanker is circulating the product during the transfer. When transferring product by pumping then have the sprayer circulating the product. This will assist with the re-blending of any “skin” that may have formed during transportation.
- During transportation there will be some evaporation of water from the product depending on the amount of ullage in the tank. This will cause a “skin” to form on the surface of the product within the tank, which is normal. After transferring the product there may be some binder residue (skin) left in the bottom of the tank, which can be easily removed by flushing the tank as per normal practice

## Sprayer

- Ensure that the sprayer and spray bar have been thoroughly flushed prior to loading the SAMIflex CRS HR and the manifold and valves are free and clear
- Once loaded, commence heating to spraying temperature (85°- 95°C). Circulate slowly during heating
- Do not circulate, pump or transfer product unless the product temperature is greater than 70°C
- Do not heat at a rate greater than 10°C per hour, or above 95°C
- Where a damp pavement is to be sealed, the spray temperature of the product should be around 95°C to assist with the “breaking” process

## Storage

- SAMIflex CRS HR can be stored for up to 3 weeks provided storage tanks are cleaned prior to use and have adequate heating capability
- Once SAMIflex CRS HR is in storage allow the product to cool to ambient temperature and only re-heat just prior to use
- Slow circulation is necessary when re-heating provided the temperature is above 70°C.
- The tankers must be able to heat the product at a rate not greater than 10°C per hour without localised heating.

**NOTE:** *Whilst every care is taken in the preparation of this data sheet, no responsibility is accepted for the interpretation of information contained herein, nor is any warranty expressed or implied for the suitability of the material for a particular application.*