

## RECOFAL S-100P

### 1. DESCRIPTION

High performance pigmentable synthetic binder for use in manufacturing hot mixes, in granular form.

### 2. TECHNICAL CHARACTERISTICS

CHARACTERISTICS	UNIT	TESTING METHOD	SPECIFICATION
Density	g/cm <sup>3</sup>	EN 15326	0.95-1.15
Penetration at 25°C	0.1 mm	EN 1426	20-50
Softening Point	°C	EN 1427	≥ 85
Resistance to hardening			
• <i>Retained penetration</i>	%	EN12607-1	≥ 80
• <i>Softening Point Increase</i>	°C		≤10
• <i>Change in mass (absolute value)</i>	%		≤1.5
Brookfield viscosity at 160 °C	cP	EN 13303	≥ 400
Fraass Breaking Point	°C	EN 12593	≤-20

### 3. PROPERTIES OF THE PRODUCT

- Recofal S-100P is a pigmentable synthetic binder presented in granular form as pellets, so it can be measured out directly into the manufacturing plant's mixer.
- It can be stored and handled in its solid state at room temperature. It is possible to use the exact necessary, with no need for prior temperature control. Softening and loss of the product's viscosity occur during the moment of contact with hot aggregates in the manufacturing plant's mixer.

- For easy handling and measuring, it is supplied in 20 kg hotmelt bags, which are introduced directly into the plant's mixer. Packing into 500 kg Big Bag facilitates handling when the manufacturing plant has silo or screw dispenser hopper-type machines.
- Recofal S-100P has a neutral colour, allowing for the option of using pigments to make coloured mixes.
- The Recofal S-100P formulation has been especially designed to resist UV radiation, in order to minimise any possible changes in colouring.
- The synthetic binder is pelletized using dusty material. This material gives the product anti-sticking properties that allow their use and handling at room temperature.
- To quality control tests and specifications of the base binder and /or pelletized product, shall be required to request sample Comercial Rlesa Asphalt Department.
- The Recofal S-100P synthetic binder is suitable for use in pigmentable mixes, allowing any type of temperature-resistant pigment to be used. The family of high-quality pigments includes the "High-performance Nosbur COLOR+ pigment granules", which allows maximum performance and an optimum colour to be obtained, especially recommended in mixes produced from Recofal S-100P synthetic binder.
- Pigment dosing generally varies between 1.0 and 2.0% by total mix weight.

## 4. CONDITIONS OF USE

- All the safety precautions and recommendations included in the Safety Data Sheet must be complied with.
- Recofal S-100P must be dosed directly into the mix over the mixing element in the asphalt mixing plant.
- There are two main requirements to consider when dosing a **AC D** pigmentable mix type:
  - o The mineral dust/ binder weight ratio must not be higher than 1.1; calculating, if applicable, the pigment used as mineral dust.
  - o The minimum binder content must be 5,5% by total mix weight.

- There are two main requirements to consider when dosing a **SMA** pigmentable mix type:
  - o The mineral dust/ binder weight ratio must not be higher than 1,25; calculating, if applicable, the pigment used as mineral dust.
  - o The minimum binder content must be 7,15% by total mix weight.
  
- There are two main requirements to consider when dosing a **BBTM A** pigmentable mix type:
  - o The mineral dust/ binder weight ratio must be between 1.2 and 1.6; calculating, if applicable, the pigment used as mineral dust.
  - o The minimum binder content must be 5,75% by total mix weight.
  
- There are two main requirements to consider when dosing a **BBTM B** pigmentable mix type:
  - o The mineral dust/ binder weight ratio must be between 1.0 and 1.2; calculating, if applicable, the pigment used as mineral dust.
  - o The minimum binder content must be 5,25% by total mix weight.
  
- There are two main requirements to consider when dosing a **PA** pigmentable mix type:
  - o The mineral dust/ binder weight ratio must be between 0.9 and 1.1; calculating, if applicable, the pigment used as mineral dust.
  - o The minimum binder content must be 4,75% by total mix weight.
  
- To achieve a homogenous pigmented mix the binder and the pigment must be introduced into the mixer as soon as the hot aggregate begins to enter the mixer. Adding the binder and the pigment, if applicable, must not take longer than 50 seconds. A minimum time of 20 seconds is recommended for mixing in all the components. Under no circumstances must the total mixing time exceed 90 seconds. It is recommended that industrial tests are carried out to adapt these parameters to each individual manufacturing plant.
  
- Using an unsuitable pigment can cause unexpected effects when finally applying the mix which are totally unrelated to Recofal S-100P.
  
- Mixes will be adjusted to 75% of the maximum capacity of the mixing unit.

- Applying and compacting the pigmentable binder must be done using the same criteria as for the bituminous equivalent, following the same guidelines for use.
- All the elements involved in the manufacturing, application and compaction processes must be kept in optimally clean conditions, in order to avoid unwanted contamination or possible changes in the mix's colouring.
- Working temperatures of Recofal S-100P are as follows:

<b>Aggregate temperature</b>	Max. 180°C
<b>Compaction temperature</b>	Min. 135°C

## 5. STORAGE CONDITIONS

- Bags of Recofal S-100P are supplied on pallets, wrapped in protective film. It is also possible to supply Recofal S-100P in Big Bag format.
- When storing for long periods of time outside, extra protection such as covering with tarpaulins or plastic is recommended.
- Storing at temperatures above 40°C is not recommended. It is advisable to keep the product protected from potential prolonged exposure to sunlight.