## Kao Industrial (Thailand) Co., Ltd.



15th Fl., Wave Place Bldg., 55 Wireless Rd., Pathumwan, Bangkok, 10330 Thailand

Tel : +66 (0) 2655-4433 Fax : +66 (0) 2655-4333~5

#### **Product Information**

# ASFIER S-106LN

#### Emulsifier for cationic asphalt emulsion

Description and Typical Application

ASFIER S-106LN is a liquid type cationic emulsifier for slow-set (CSS) based on modified tallow polyamine developed by Kao Corporation, Japan and Kao Industrial (Thailand) Co., Ltd.

#### Characteristics

Emulsions made with ASFIER S-106LN provide:

- 1. High mixing ability of asphalt emulsion with aggregate.
  - 1-1. Can be compatible for variety of aggregate.
  - 1-2. Can be mixed with aggregates even without adding filler (cement).
    - In case of the mixing time is relatively short, addition of cement would extend the mixing time.
  - 1-3. Can be used at wide range of temperature.
- 2. Passing the cement mix test.

## **Applications**

ASFIER S-106LN is a cationic emulsifier for slow setting emulsions used in plant mix and mixed in suite with dense graded aggregate and slurry seals.

## Typical Properties

Appearance : Dark Brownish Liquid

pH :  $10 \sim 13 (5\% \text{ sol.})$ 

Specific Gravity : 1.055 ~ 1.095 (25°C)

Solubility in Water : Soluble

Pour Point : > 7°C

Flash point : None

### Standard Dosage

The dosage of ASFIER S-106LN is as belows :-

16 - 17 kgs per ton of emulsion for CSS-1h.

14 - 17 kgs per ton of emulsion for CSS-1.

#### The attention in case of use

pH of soap water must be adjusted to 2.0 by HCl and it is able to add salts to soap solution. The typical temperature of soap solution and asphalt are each Ambient 45°C and around 135 -145°C.

## Instance of emulsion test by ASTM

ASFIER S-106LN in the case of CSS-1h.

Viscosity, Saybolt Furol at 25°C
Storage Stability, 24hr
Particle Charge
Sieve Test
Cement Mixing Test
Residue from Distillation

21sec
0.5%
positive
0.01%
0.0%

Test on Residue

Penetration, 25°C, 100g 5s 76 x 0.1 mm

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Ductility, 25°C, 5cm/min >100 Solubility in Trichloroethylene 98.5%

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# Safety Precaution

ASFIER S-106LN is an organic base, for this reason it has irritative actions for skin and eyes. Any contact with the skin, eyes and clothes should be avoided.

#### FIRST AIDS

Exposure Media	Procedures
Inhalation	Remove victim to fresh air and keep warm. Give oxygen or artificial respiration as needed. Obtain medical attention promptly.
Skin Contact	Remove all contaminated clothes. Wash affected body areas with large amounts of water for at least 15 minutes. Get medical attention promptly.
Eye Contact	Flush eyes immediately with large amounts of water for at least 15 minutes, lifting upper and lower lids occasionally. Obtain medical attention promptly.
Swallowing	If victim is conscious, give at least two glasses of water to dilute. Do not induce vomiting, this is an acid and corrosive compound. Obtain medical attention promptly.

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