# Sumikaflex 465HQ

Type: Ethylene Vinyl acetate Copolymer Emulsion

Properties: Sumikaflex 465HQ is a high solid type emulsion improved grade

of cohesion for S-467HQ. Similar to S-467HQ, it excels adhesive for each base materials, initial adhesive, water resistance, and heat resistance creep. It is also promising to have various usages

to exploit high cohesion.

Main Adhesives for all application: Cement modifier

Paint vehicle

Physical properties:

Appearance Milky white

Solid (%)  $65 \pm 1$ 

Viscosity  $(mPa \cdot s)$  300 - 3000

pH 4 – 7

Ave. Particle size (µm) 1.0

Density (g/cm³) 1.08 MFT (°C) 0

Particle charge Nonionic

Machine stability Good

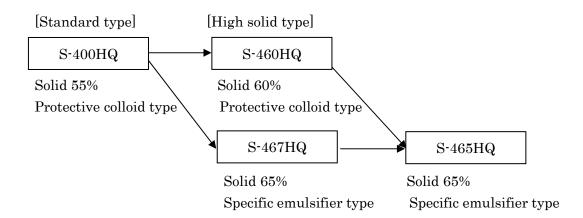
Tg (°C) 0

Film strength (MPa) 9.6

Film elongation (%) 750

# < Technical Information of Sumikaflex 465HQ >

# 1. Grade positioning



## 2. Emulsion properties

		S-465HQ	S-467HQ
Appearance		Milky white	Milky white
Solid content	(%)	$65 \pm 1$	$65 \pm 1$
Viscosity	(mPa·s)	300 - 3000	2000 - 6000
pН		4 - 7	4 - 7
Ave. particle size	(µm)	1.0	0.8
Density	(g/cm <sup>3</sup> )	1.08	1.08
MFT	(°C)	0	0
Particle charge		Nonionic	Nonionic
Mechanical stability		Good	Good
Tg	(°C)	0	0

## 3. Film properties

# (1) Film tensile strength

Item		S-465HQ	S-467HQ
Dry	Elongation (%)	750	790
	Strength (MPa)	9.6	5.8
Wet	Elongation (%)	1000	840
	Strength (MPa)	2.0	2.0

## Test method

Thickness of film : 0.15 mm

Shape of film : Dumbbell No.3

Dry film strength  $23^{\circ}\text{C} \times 65\%\text{RH}$ , measured after dried for 7 days

Wet film strength : Dipped film in water for 24 hr at 23°C,

measured at wet condition

Measurement speed : 500 mm/min

### (2) Film water drop test

	S-465HQ	S-467HQ
Whitening point (min)	6	> 120

### Test method

Foam film (thickness is 0.15 mm) on the slide glass at room temperature (Dried under condition at  $23^{\circ}\text{C} \times 65\%\text{RH}$ ). The slide glass is on the 8 point Chinese character of newspaper. Measure the time till that character can't be read when puts one drop of water on the film.

#### (3) Film water resistance

		S-465HQ	S-467HQ
Water	Elusion (%)	3	1
resistance	Absorption (%)	15	12

### Test method

Thickness of film: 0.15 mm

Water resistance: Dipped film in water for 4 days at 23°C

## (4) Polymer thermal flow property

