



# Hydrophilic Modifier “ZEFFLE GH”

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# What is Rain-induced Soiling ?

Recently rainy stripe on building (is called Tiger stripe) is becoming a problem in Asia and EU.

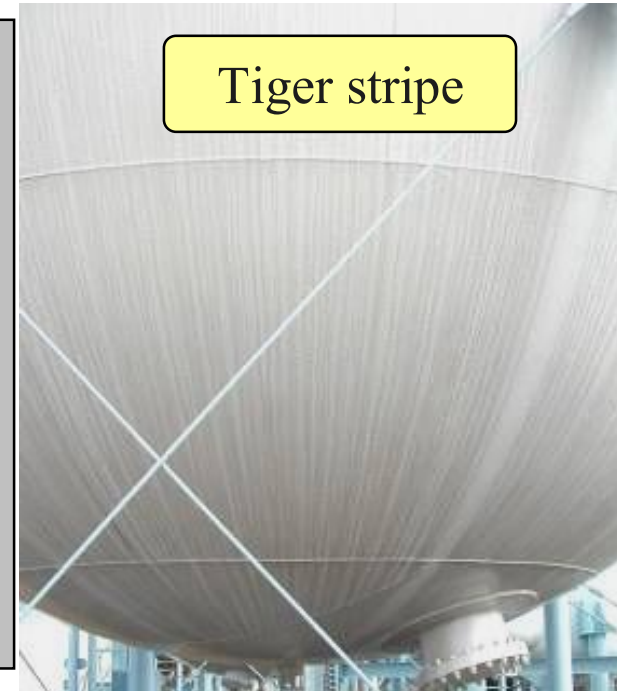
For this problem the trend is to change the paint surface from hydrophobic to hydrophilic.

Hydrophilic surface become familiar with rain water and washes hydrophobic soils.

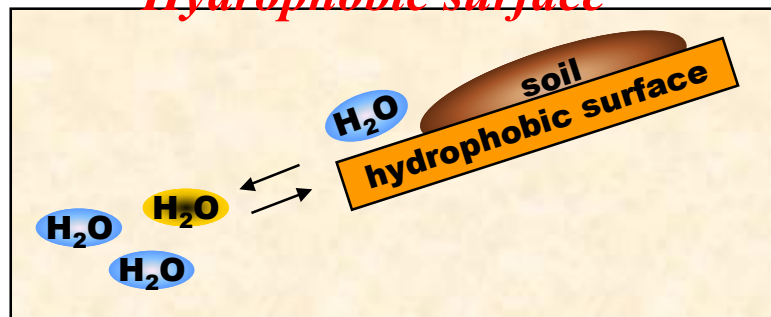
**ZEFFLE GH** is a hydrophilic modifier for solvent paint.

In Japan GH is used on site coating.

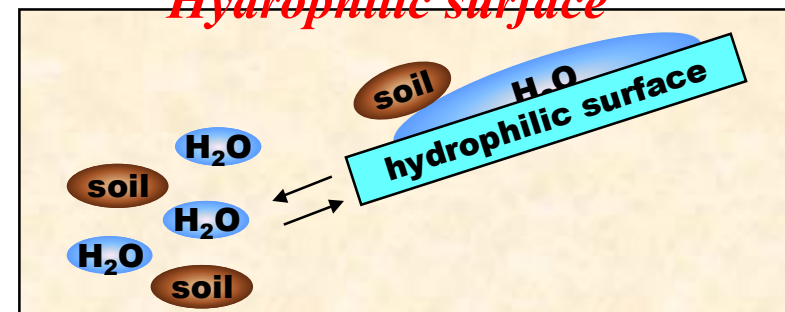
Tiger stripe



*Hydrophobic surface*

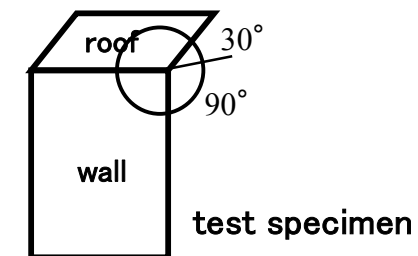
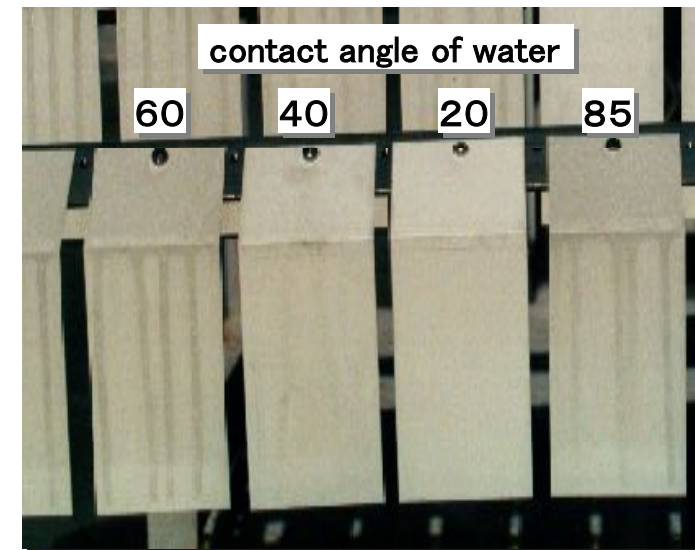
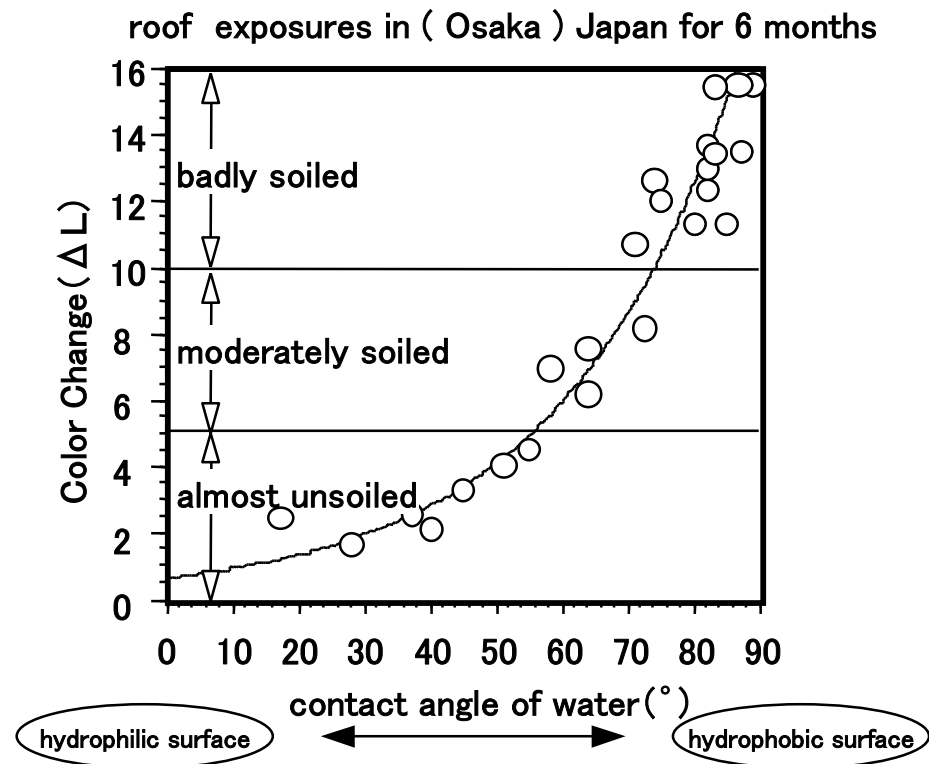


*Hydrophilic surface*

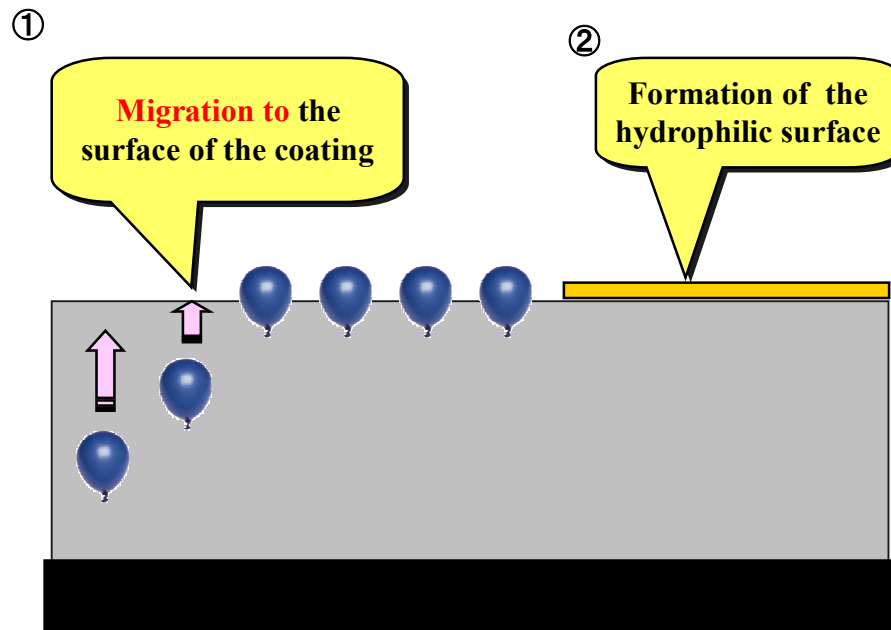


# Effect of Surface Energy on Rain-Induced Soiling

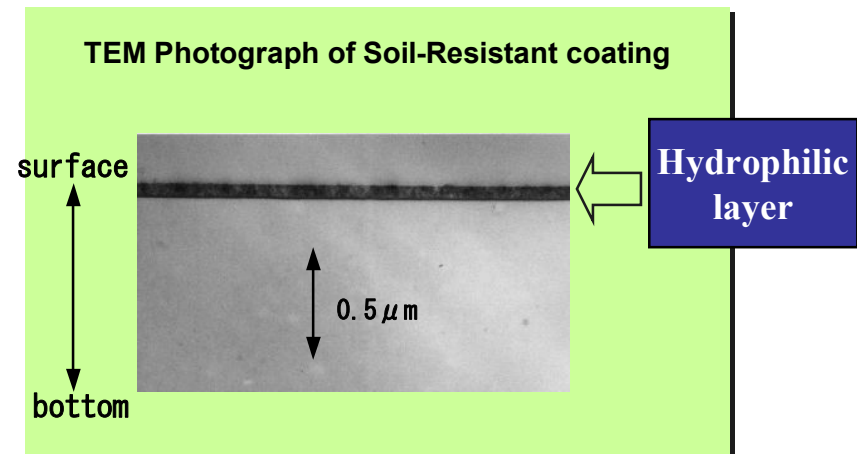
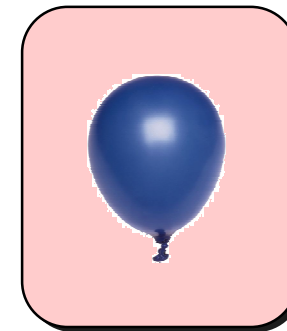
## Relationship between Surface Energy and Rain-Induced Soiling



# Mechanism of Hydrophilic Surface

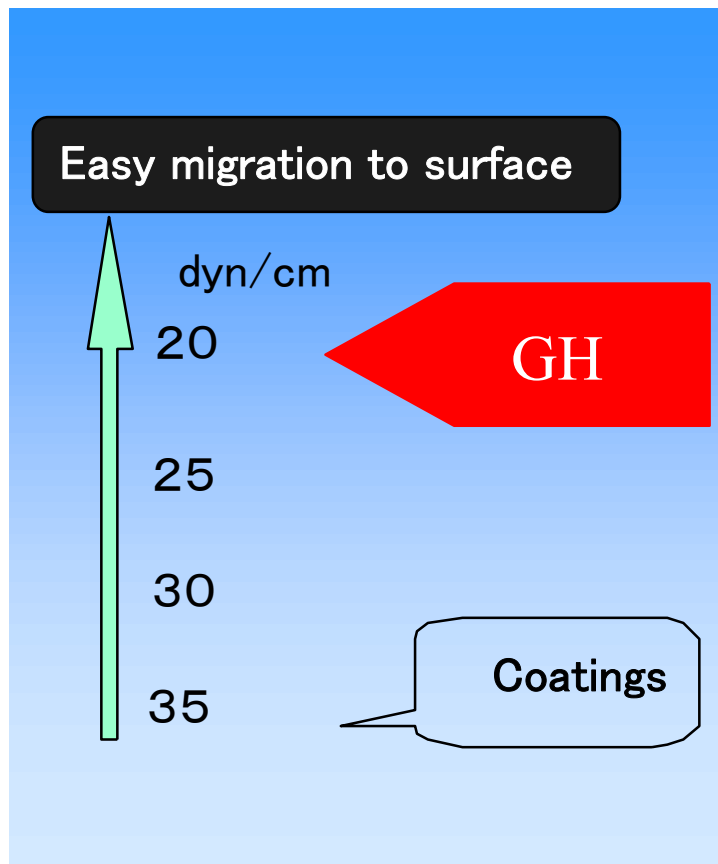


Hydrophilic Surface Modifier

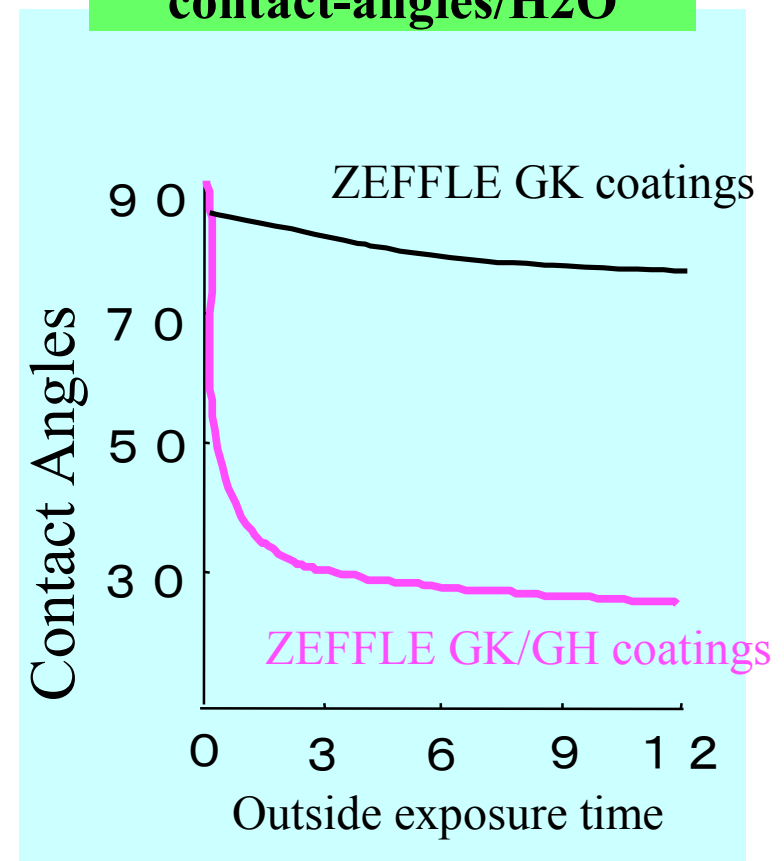


# Feature of ZEFFLE GH

## Surface Tension



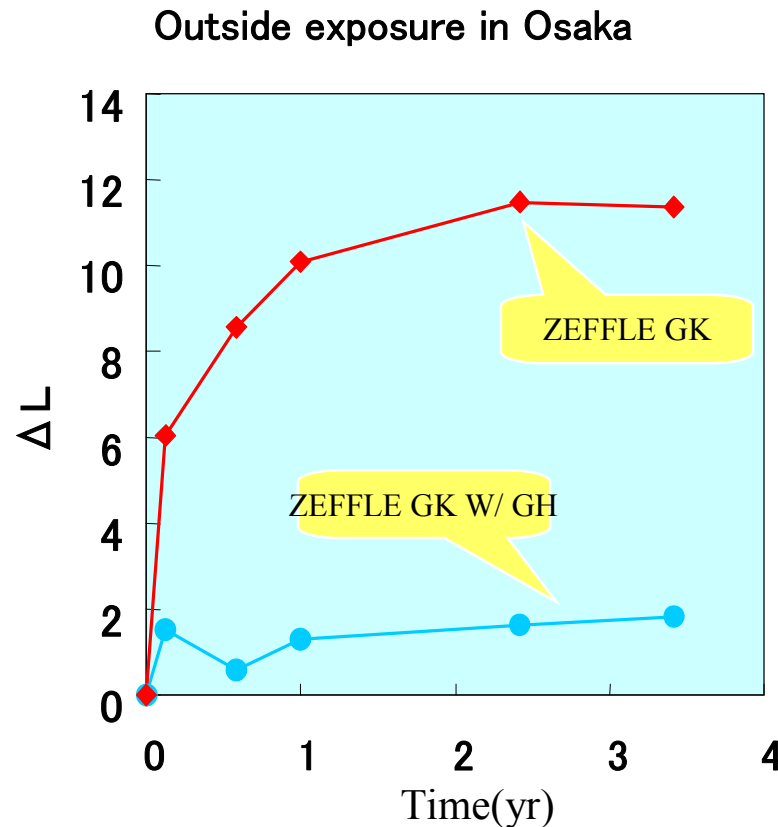
## Speed of changing surface contact-angles/H2O





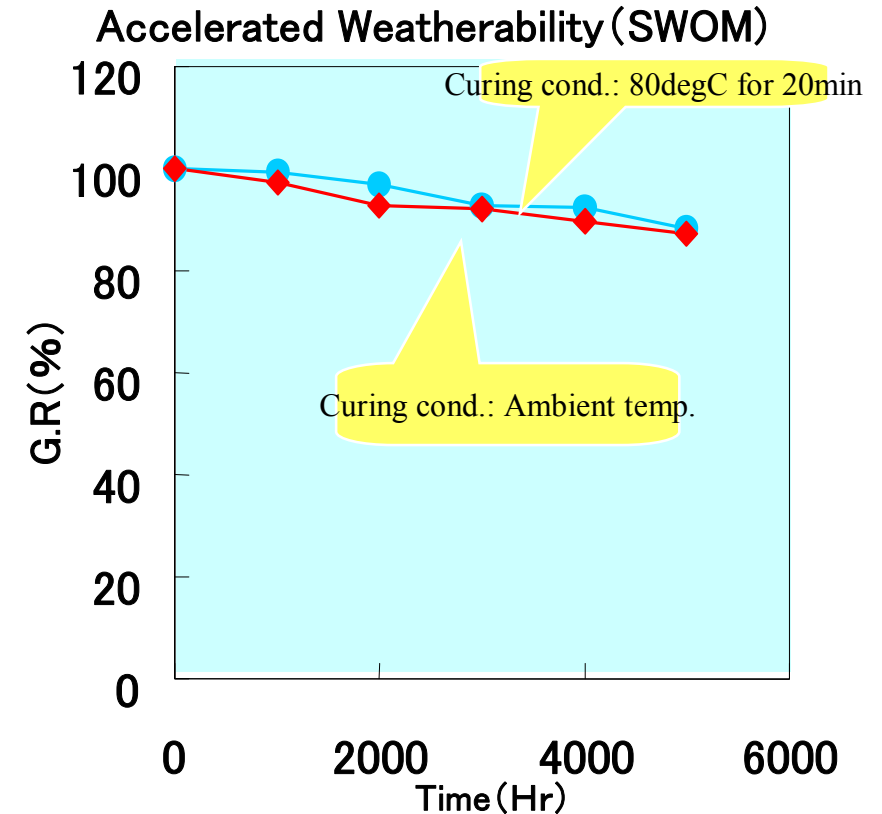
# Weatherability

## ZEFFLE GK White coatings(X-linker; Isocyanate)



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## Summery

### ***ZEFFLE GH:***

- *Hydrophilic modifier for solvent paint*
- *Easily Migration to the surface of the coating*
- *Formation of the hydrophilic surface*
  - ✧ *Show Very low contact angles*

**Chemical tank(after 4years)**



**ZEFFLE  
GK  
coating**

**ZEFFLE GK  
/GH  
coatings**