

## Proposal for pipe deterioration diagnosis



**Outdoor piping**

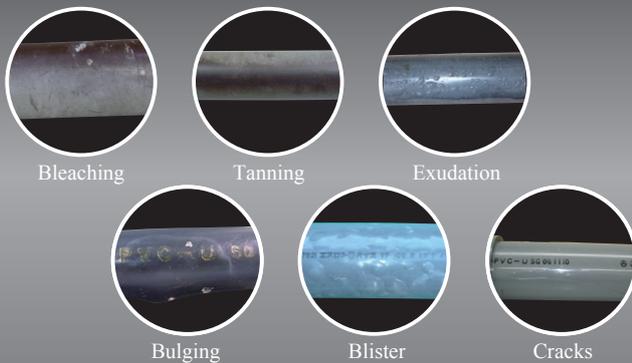
**Chemical process piping**

**Do you have any problems about the deterioration of industrial piping in the factory?**

SEKISUI CHEMICAL CO., LTD. conducts deterioration diagnosis based on the optimum method according to the piping situation.

# Deterioration of PVC piping is found in various ways.

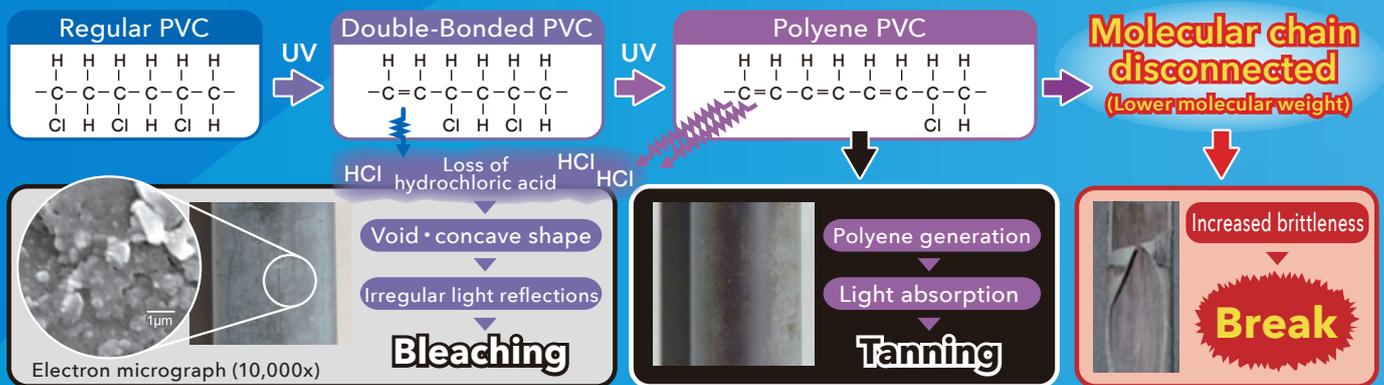
## Deteriorations from the outside



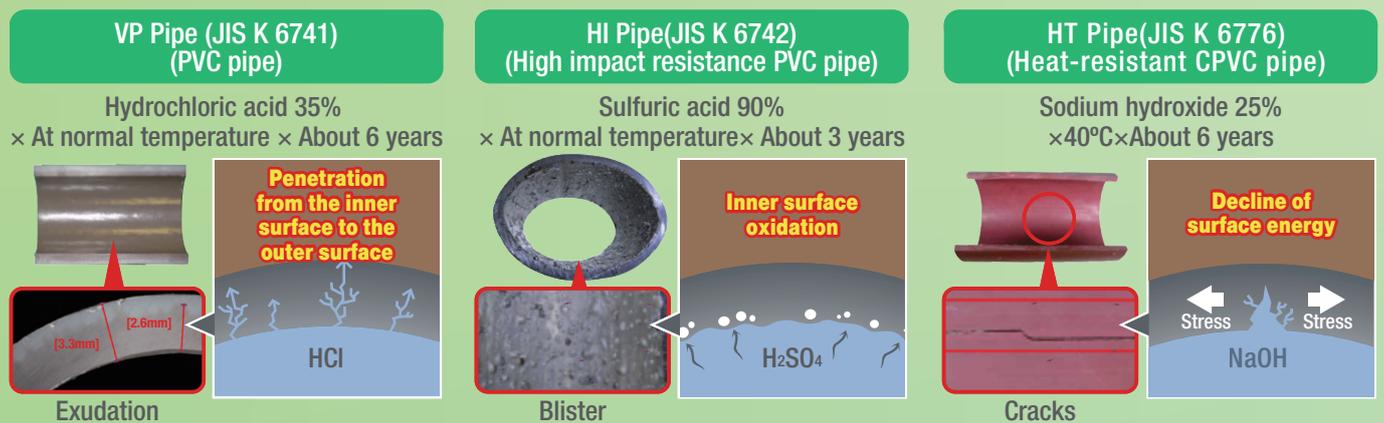
## Deteriorations from the inside



## Outdoor piping (UV degradation)



## Chemical piping (Chemical degradation)



Aged piping can cause **business loss** and **employee safety** due to various troubles.

Furthermore, in recent years, due to the growing **social responsibility of companies**, measures against aging pipes have been highlighted.

Please use our deterioration diagnosis, which is a top manufacturer of PVC piping in Japan, to **quickly detect deterioration of piping**, **predict risks**, and **preventive maintenance**.

# No need extubation because of scraping the surface layer.

## Diagnosis method

- ① Scrape off the surface layer. ② Send sample back to labo.



Required sample amount  
 Length : 30 mm or more  
 Width : 3 mm or more  
 Number : 3 or more  
 \* About 5mg  
 Diagnosable pipe type : PVC pipe

## Deterioration diagnosis method

### Surface deterioration degree measurement

Measuring the rate of change in the chemical structure of the surface layer due to ultraviolet rays



### Estimating strength reduction

Estimate the decrease in strength from our database of the surface deterioration degree

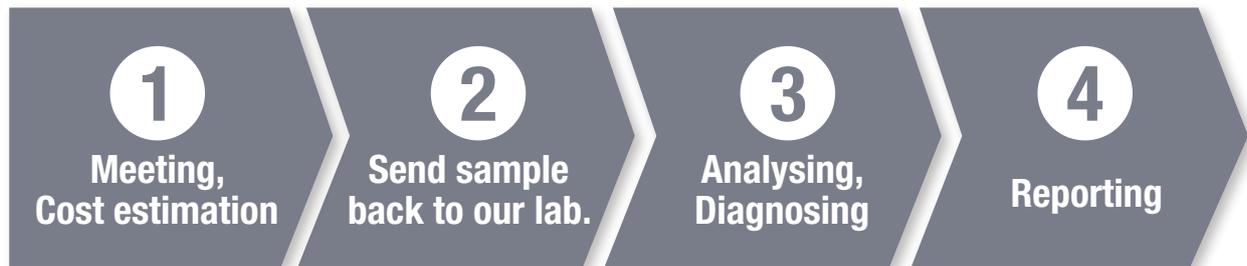


### Diagnosis\*

Level	Degraded conditions
<b>A</b>	No chemical deterioration requiring renewal consideration.
<b>B</b>	It is estimated that the strength has decreased. We recommend that you consider renewal within ● years.
<b>C</b>	It is estimated that the strength has significantly decreased. We recommend early renewal consideration.

\* Diagnosis is the result of the judgment based on our indicators based on the performance of the piping that has been removed and evaluated, and it is not intended to evaluate or guarantee the deterioration status and quality of the existing piping as a whole.

## Deterioration diagnosis method



\*Diagnosis fee is charged

# Extubation is needed, because of testing up to 7 tests.

## Diagnosis method

Please pull out the pipe of the specified length and send it to our labo.



### Diagnosable pipe type

Polyvinyl chloride pipes, High impact resistance Polyvinyl chloride pipes, Heat-resistant C-PVC pipes, PVC pipes reinforced with FRP  
 \* ~300A (Please contact us for the pipe types and size)

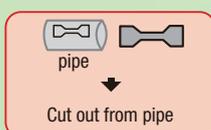
### Required sample length

13~40A : 700mm or more  
 50~300A : 500 mm or more

## Deterioration diagnosis method

### Sample preparation

Cut out to the specified dimensions according to the test item



### Testing based on Official standards

	Test items
1	Tensile yield strength
2	Elongation at break
3	Flattening
4	Impact test
5	Wall thicknesses measurement
6	Observation of inner surface
7	Observation of cross-section

### Diagnosis\*

Comprehensive judgment by our database

Level	Degraded conditions
<b>A</b>	Little deterioration or deterioration of performance.
<b>B</b>	Slight deterioration or deterioration of performance. Rediagnosis within 3 years is recommended.
<b>C</b>	Deterioration or deterioration of performance. It is recommended that the renewal be within two years.
<b>D</b>	Marked deterioration or deterioration of performance. We recommend early updates for safety.

\* The result of the deterioration level is the result of the judgment based on our indicators based on the performance of the piping that has been removed and evaluated, and it is not intended to evaluate or guarantee the deterioration status and quality of the existing piping as a whole.

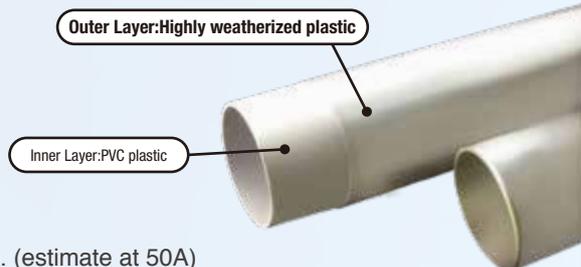
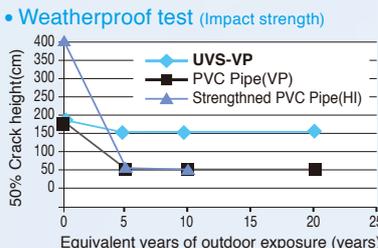
For UV resistance

# ESLON™ UVS-VP 20-200A

NETIS (CB-200003-A)

※DV fittings are not covered

Outer layer coated with UV resistant weatherproofed plastic achieves high weather resistance for outdoor use.



- Approximately 20% cost reduction compared to Normal VP pipes with painting. (estimate at 50A)
- It is possible to suppress the deterioration of physical properties due to ultraviolet rays and extend the life.

For Chemical resistance

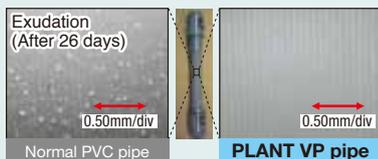
# ESLON™ PLANT VP PIPE 16-300A

JIS K 6741

PLANT VP pipe is specialized for chemicals, achieving an optimal composition that is highly resistant against corrosion and impact.

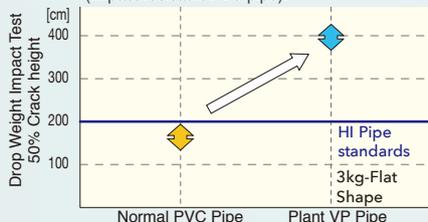
Permeation in pipes with hydrochloric acid is dramatically suppressed.

### Permeation test by hydrochloric acid



No exudation of hydrochloric acid (After 360 days)

**Impact strength**  
Impact resistance complies with that of HlVP pipe (impact resistant PVC pipe).



<Test method> Diameter Size: 50A, Weight: 3kg flat shape, Temperature: 0°C



For Pressure & Heat resistance

# ESLON™ VPFW · HTFW

The outside of the PVC pipe is reinforced with FRP, making for a highly pressure and heat resistant pipe.

VPFW(16-600A)



HTFW(16-300A)

# ESLON™ Sch80 PVC & CPVC piping systems 15-400(600)A

Industrial thick pipe that complies with the American ASTM standard.



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