



# IRUV CUT COAT

## Technical Data Sheet

### ■Heat insulation

『IRUV CUT COAT test report-001』

NSG Techno-Research Corporation June 2003.

“Optical properties and thermal characterization of coated glass”

Visible light transmission	transmittance sunshine	Solar reflectance	Solar radiation Absorption rate	UV transmittance	Solar heat gain rate		Shading coefficient	
					Summer	Winter	Summer	Winter
68.0%	39.9%	5.0%	55.1%	0.33%	0.59	0.56	0.67	0.63

### ■Heat resistant cracking

『IRUV CUT COAT test report-001』

NSG Techno-Research Corporation June 2003.

“Thermal cracking test”

Direction	East		Southeast		South		Southwest		West	
Thermal cracking judgment	OK		OK		OK		OK		OK	
Season	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter
Temperature of central portion 「℃」	44	4	46	24	36	26	47	26	47	18
Sash temperature 「℃」	25	-10	27	7	27	7	28	7	28	4
Thermal stress occurs 「kg/cm <sup>2</sup> 」	125	89	125	125	54	125	125	125	125	90
Allowable thermal stress 「kg/cm <sup>2</sup> 」	180	180	180	180	180	180	180	180	180	180
Heat stress difference 「kg/cm <sup>2</sup> 」	44	91	55	55	126	55	55	55	55	90



## ■Durability

『IRUV CUT COAT test report-002』 『IRUV CUT COAT test report-003』

KOKANKYO Engineering Co., Ltd. in April 2006

"Weather resistant coating agent test report"

Tested by a xenon lamp weather over (equivalent to approximately 10 years) 2580 hours

Test Result	The change is not accepted by a color, a film.
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March, 2008 DAINICHISEIKA Color & Chemicals Mfg. Co., Ltd.

Super UV irradiation testing and pencil hardness test

Yellowing, cloudiness and evaluation

	Blank	100 hour	200 hour
Sample①	○	○	○
Sample②	○	○	○

Pencil hardness test (JIS K5400)

	Blank	100 hour	200 hour
Sample①	4H	4H	4H
Sample②	4H	4H	4H

## ■Adhesion

『IRUV CUT COAT test report-002』

KOKANKYO Engineering Co., Ltd. in April 2006

"Weather resistant coating agent test report"

Item	Method	Result	Standard
Boiling water resistance	1hour boiling water immersion	○	
Gasoline resistance	Gasoline rubbing 200	○	
Solvent resistance	Xylene rubbing 200	○	
	0.1 sodium hydroxide	○	
Chemical resistance	5% sodium hydroxide	×	
	10% nitric acid	○	
	10% sulfuric acid	○	
Scratch hardness	Pencil method	9H	JIS K5400
Adhesion	Cross-cut adhesion test	100/100	JIS K5400



## ■ Safety

- Volatile Organic Compounds (VOC)

『IRUV CUT COAT test report-004』

Japan Food Research Laboratories Co., Ltd. in August 2006

“Formaldehyde test”

Analysis of test items	Test result	Detection limit	※Note 1	Method
Formaldehyde emission	0.12mg/L			Absorption spectrophotometry

※ Note 1. JIS K5601-4-1 : 2003

- Combustion test

『IRUV CUT COAT test report-005』

Japan Railway Rolling Stock & Machinery Association in October 2004

Test number 16-526K

During combustion of alcohol		After combustion of alcohol	
Ignition	No	After flame	—
Wear flame	No	Residual dust	—
Smoke	No	Carbonization	60mm discoloration
Force of flame	—	Deformation	No
Remarks			
Assessment		Non-combustible	

Tested with No.151-83 Ordinance of the “Ministry of Land, Infrastructure, Transport and Tourism”