

## Nikkalite® Engineering grade 8100 series retroreflective sheeting

### Description

Nikkalite® 8100 series Engineering grade is an enclosed lens retroreflective sheeting manufactured by Nippon Carbide Industries (NCI) which renders retroreflectivity at night. The sheeting is designed for use on permanent traffic signs and is coated with a permanent adhesive protected by a removable liner.

### Physical & visual performance

Nikkalite® 8100 series Engineering grade is certified to class RA1 of EN 12899-1; 2007 Fixed, vertical road traffic signs. Certificate number 0760-CPD-R09001. Further details can be provided on request.

### Daylight chromaticity & luminance factor

Satisfies the requirements for CR1.

### Minimum coefficient of retroreflectivity; RA1

Obs' angle	Ent angle	White 8112	Yellow 8104	Red 8105	Blue 8106	Orange 8107	Green 8108
12'	+5°	70	50	14,5	4	25	
	+30°	30	22	6	1,7	10	45
	+40°	10	7	2	0,5	2,2	25
20'	+5°	50	35	10	2	20	12
	+30°	24	16	4	1	8	21
	+40°	9	6	1,8	#	2,2	12
2°	+5°	5	3	1	#	1,2	11
	+30°	2,5	1,5	0,5	#	0,5	0,5
	+40°	1,5	1,0	0,5	#	#	0,3

# indicates "Value greater than zero but not significant or applicable".

### Processing information

The sheeting can be processed by the following methods;

- Screenprinted with N3600 inks
- Digitally printed on Mutoh Zephyr TS UVIJ printer

Further details can be provided on request.

### For further technical information refer to;

- Sign shop processing instructions
- On site storage instructions
- Sign cleaning procedures

### Health & Safety (COSHH)

Although the adhesive contains a small amount of solvent, it is almost certain that this solvent will not be emitted from the sheeting. For further information contact Rennicks UK for a MSDS data sheet.

### Durability

When processed and applied in line with NCI instructions, Nikkalite® 8100 Engineering grade sheeting when exposed vertically under normal weathering conditions in the UK or Ireland can be expected to have a useful performance life as shown in the table below.

Actual performance depends greatly on type and treatment of substrate and on weathering conditions.

Product code	Effective life UK & Ireland
8112 White	7 years
8104 Yellow	7 years
8105 Red	7 years
8106 Blue	7 years
8107 Orange	3 years
8108 Green	7 years

### Reliability of information

All recommendations and technical information contained herein are based on experience and tests, which the manufacturer believes to be reliable, but their accuracy and completion are not warranted.

The user is cautioned to undertake tests to determine the suitability of a particular product for the intended application.

### Warranty

Nikkalite® products are warranted to be free from defects in materials and workmanship at the time of their sale. Subject to paragraph two hereof, Nikkalite® products are sold without any warranty whatsoever, including warranties of merchantability or fitness for a particular purpose. The sole remedy for failure of Nikkalite® products to conform to said warranty is the replacement of the defective products; neither the manufacturer nor the seller shall be liable for any loss, damage or injury, direct or indirect, consequential or incidental, arising from the use of or inability to use said products.

Nikkalite® products sold in the United Kingdom are sold with a warranty subject to the Road Traffic Sign Warranty agreement between Rennicks (UK) Limited, Nippon Carbide Industries Inc., and the Traffic Sign Manufacturer.