

Nikkalite™ Brand Fleet Marking Grade Repositionable Retroreflective Sheeting

1. INTRODUCTION

Nikkalite™ Brand Fleet Marking Grade Repositionable Retroreflective Sheeting (R8512XP) was developed for vehicle graphics and high-resolution digital printing. R8512XP has a user-friendly repositionable feature, superior resolution with digital printing, excellent air bubble removability, and outstanding conformability over uneven surfaces. R8512XP is easy to handle and has a pressure sensitive adhesive with a removable liner.

2. AVAILABLE STANDARD WIDTH, LENGTH AND COLOR

Width: 48"
 Length: 50 Yards
 Color: White

3. PHOTOMETRIC PERFORMANCE

Typical coefficient of retroreflection R8512XP sheeting, when measured with the methods specified in ASTM

D4596, expressed in candlepower per lux per square meter. (Table 1)

Table 1 (cd/lux/m²)

Product Number	Color	Observation Angle/Entrance Angle
		0.2°/-4°
R8512XP	White	70

4. TECHNICAL DATA

Properties	Test Method	Results and others
Average Thickness (without liner)	Micrometer	146 µm (5-6 mil)
Average Gloss	Gloss-meter	80
Tensile Strength	Tensile tester at 30cm (12")/min.	25.5 N/25mm width
Elongation at Break	Tensile tester at 30cm (12")/min.	110 %
Min./Max. Application Temperature	Flat, smooth and uneven surfaces	15°C (59°F) - 25°C (77°F)

R8512XP sheeting applied onto an aluminum plate with a 2kg hand roller. (Results may vary depending on substrates used).

5. DURABILITY

R8512XP processed in accordance and applied with the manufacturer's instructions, HAS AN EXPECTED PERFORMANCE LIFE OF 7 YEARS when exposed vertically. The retroreflective sheeting shall be

considered as performing satisfactorily if the sheeting has not deteriorated due to natural causes. All inks and laminates must be tested by the end user ensure compatibility.

6. SUBSTATE TREATMENT

R8512XP may be applied on to flat or uneven surfaces. Surface should be cleaned prior to application. A neutral detergent solution or mild solvents should be

used to remove oil, stains, and other similar types of petroleum-based contaminants.

7. APPLICATION PROCESS

For best results, apply sheeting inside a facility. A minimum 24-hour curing period is needed to maximize adhesive strength. End-user should conduct your own adhesive tests on the surface as enamels vary from vehicle to vehicle. R8512XP has an initial low tack adhesive, which makes repositioning decals a simple

and faster process. A squeegee or hand roller is needed for consistent pressure. A heat gun can be used to give the sheeting greater flexibility. R8512XP should not be stretched, as it may result in color change, physical damage, and performance degradation.

8. CLEANING

Care must be taken during the cleaning process. A solution of a mild detergent in clean warm water is recommended for cleaning the sheeting surface. The detergent and cloth must be non-abrasive and free of strong aromatic solvents or alcohol. Rinse the area

thoroughly after washing with a low-pressure flow of water and allow to dry naturally or use a lint free cloth. Caution must be used with automatic car washes as strong solvents and hard brushes may be used.

9. STORAGE AND SHELF LIFE

R8512XP should be stored between 15°C and 25°C (59°F to 77°F) with a relative humidity of 30% to 60%, and out of direct sunlight. Rolls should be stored horizontally above the floor with proper suspensions.

Do not leave rolls resting on a hard surface as this may damage the sheeting. Do not stand full or partial rolls vertically. R8512XP has a 12-month shelf life.

10. RELIABILITY

All recommendations and technical information contained herein are based on experience and tests, which the manufacturer believes to be reliable. The

user is cautioned to undertake their own evaluation to determine the suitability of a particular product for the intended application.

11. WARRANTY

Nikkalite™ products are warranted to be free from defects in materials and workmanship at the time of their sale. Performance durability is warranted for

sheeting exposure less than 45°. Exposure angles exceeding 45° will reduce the durability proportionally.

12. CAUTION

Read through First Aid, Health Hazard and Precautionary statements mentioned in the Materials Safety Data Sheets (MSDS).