

Technical Datasheet

Description

REFLOMAX GLODIAN™ CS-310 & 320 is flexible, highly reflective, weatherproof, self-adhesive films with excellent corrosion and solvent resistance. The product was specifically developed for the manufacture of traffic control and guidance signs, warning, construction/work zone and information signs, which are intended for medium-term outdoor use.

Color

REFLOMAX GLODIAN™ CS-310 & 320 is available as rolls in white.

Front Material

CS-310™ PVC / CS-320™ : PC

Reflective

REFLOMAX GLODIAN™ CS-310™ & 320™ complies with the requirements in EN13422, AS/NZS 1906.1:2017 Class 400T and ASTM D4956

Daytime Color

REFLOMAX GLODIANTM CS™ meets the applicable daytime color requirements for ASTM D4956

Adhesive

CS-320™ : The adhesive consists of a solvent polyacrylate, permanent pressure sensitive adhesive specially formulated for the application to metallic surfaces such as aluminium and zinc coated steel plate. The adhesive is protected by a release liner made of polypropylene film, silicone coated on one side, 0.075 mm [0.003"] thickness.

Impact Resistance

Ambient Temperature: After conditioning a sample for 24 hours at 23°C (73°F) ± 2°C (3°F) and 50% relative humidity, subject the sheeting to an impact of a 1.82 kg (4 lb) weight with a 16 mm (5/8") rounded tip dropped from a 100 in-lb (11.3 N-m) setting on a Gardner variable impact tester, IG-1120, as per ASTM D4956, section S2.2.1. The sheeting shall show no cracking or delamination outside the actual area of impact.

Weatherability

REFLOMAX GLODIAN™ CS-310 & 320 series has a 1 year warranty under vertical outdoor exposure (color fastness).

Application / Processing

CS-310™ & 320™ was especially developed for traffic control applications. Surfaces to which the material will be applied must be thoroughly cleaned from dust, grease or any contamination which could affect the adhesion of the material. Freshly lacquered or painted surfaces should be completely cured. The compatibility of selected lacquers and paints should be tested by the user, prior to application of the material.

For other applications than mentioned in this data sheet, the user is fully responsible for evaluating the suitability of the product, and for any risks associated with that use.

Table 1, Minimum Coefficient of Retroreflection

COLOR :	WHITE			
Observation Angle:	0.2°		0.5°	
Entrance Angle (β1):	-4°	30°	-4°	30°
CS-310(D.B)	500	300	300	100
CS-320	500	300	300	100
SPEC.	360	170	150	72

*all values have units of cd/ft² (cd/lx/m²)

Table 2, Color Specification Limits (Daytime)

COLOR	1		2		3		4		Daytime Luminance Limit(Y)	
	x	y	x	y	x	y	x	y	Min	Max
White	0.303	0.300	0.368	0.366	0.340	0.393	0.274	0.329	27	

Pattern



CS-310



CS-320

Application Instruction

Processing instructions for REFLOMAX GLODIAN™ CS-310™ & 320™

The information within this document is based on our knowledge, experience and application tests. Its purpose is to provide suggestions and support to practitioners. REFLOMAX GLODIAN™ CS-310™ & 320™ is product of Micro-Prism type Retro-Reflective Material. Micro-Prism Type Material is consisting of millions of durable micro-prisms formed on flexible, UV-stabilized glossy polymeric film.

Size & Packing

Cone Sleeve Size: Customized

Storage and Transportation

Product material should be stored in the original carton.

Store in a cool dry area, preferably at 18°C (64.4°F) -28°C(82.4°F), 30-60% relative humidity and use within 1 year after date of receipt. Partially used product should be returned to their shipping carton.

Instruction

Application

- REFLOMAX GLODIAN™ CS-310™ & 320™ should be applied at room temperature 18°C (64.4°F) ~ 25°C(77°F)
- REFLOMAX GLODIAN™ CS-320™ should be stick on and finished in over wrapping at least 2cm from the starter point in the correct position (no longer narrow and wider than its position).

GLODIAN™ CS-320™ is suitable to be attached onto aluminum, iron, stainless, polar polymer (PVC, TPU), not onto non-polar polymer (PP, PE).

The recommendable outdoor temperature range is -15°C ~70°C.

- The suitability of the intended care process must be determined by the end user.

IMPORTANT NOTICE

Durability

The durability of REFLOMAX GLODIAN™ CS-310™ & 320™ series and finished product using them will depend upon substrate selection and preparation, compliance with recommended application procedures, geographic area, exposure conditions, and maintenance.

Maximum durability of series REFLOMAX GLODIAN™ CS-310™ & 320™ can be expected in applications subject to vertical exposure on stationary objects when processed and applied to properly prepared aluminum according to REFLOMAX's recommendations. Periodic sign inspection and regular sign replacement are strongly recommended in order for sign owners to establish their own effective service life expectation beyond any durability warranty, if provided.

Substrate

The user must determine the suitability of any nonmetallic sign backing for its intended use. Applications to unprimed, excessively rough or non-weather resistant surfaces can shorten the performance of such applications.

Exposure

Exposure to severe or unusual conditions can shorten the performance of such applications. Signs in mountainous areas that are covered by snow for prolonged periods may also have reduced durability. Atmospheric conditions in certain geographic areas may result in reduced durability.

Warranty

No warranty is given for purposes other than those listed in the Technical Datasheet or which are not processed according to REFLOMAX's processing and handling instructions. The durability of the signs will depend on a variety of factors, including but not limited to substrate selection and preparation, compliance with recommended application guidelines, geographic area, exposure conditions and maintenance of the product and finished sign. Sign failures caused by the substrate or improper surface preparations are not the responsibility of Reflomap. Please refer to the full warranty document available at www.reflomap.com for detailed information.

GLODIAN™ is a registered trademark of REFLOMAX CO., LTD

REFLOMAX CO., LTD.

All rights reserved.

Reflomap reserves the right to make changes in specifications and/or to discontinue any product at any time without notice or obligation and will not be liable for any consequences resulting from the use of this publication.