TECHNICAL DATASHEET ANTIREFLECT



Product information

Category	Transmission increasing coating for greenhouse glass
Description	AntiReflect is an anti-reflection coating that can be used on existing glass greenhouses to increase the light transmission. The application of AntiReflect on the outside of existing greenhouse glass reduces the reflection from the glass so that more sunlight enters the greenhouse. This is particularly welcome in periods with low irradiation like autumn, winter and spring.
Properties	• Increases light transmission by 2.5 to 3% • Greenhouse cover stays cleaner • Combination with other ReduSystems coatings and ReduClean is possible. ReduClean does not compromise the AntiReflect coating layer. • Never use any non-ReduSystems products in combination with AntiReflect. • Only suitable for glass
Recommended use	For exterior greenhouses
Recommended surface	Glass
Identified users	For professional use only

Technical specifications

Physical state	Liquid
pH	10.2 - 10.7
Density	1.0 g/cm^3
Viscosity	3,86 mPa.s LV spindle ULA 100 rpm, T: 23°C
Wear resistance	A properly applied AntiReflect coating stays effective for two years.
Transport regulation (ADR, RID, IMDG, IATA, IDN)	No restrictions

Storage conditions

Packaging	1,000 liter IBC (on pallet) 20 liter can (1 pallet contains 48 cans)
Shelf life	Unopened IBC/can has a shelf life of maximum 12 months. Keep in a cool, well-ventilated place. AntiReflect must be stored at a temperature higher than 5 degrees Celsius and should be protected against overheating (above 35 °C).

This technical datasheet is based on many years of experience. We can not be held liable for any damages resulting from the use of this product or any damages beyond her control. The customer should check, using the means normally available to him, whether the products supplied are suitable for the planned application. If in doubt, consult our technical specialists via sales@redusystems.com.

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Instructions for use

Preparation	AntiReflect must be sprayed on a clean and dry greenhouse cover to avoid adhesion or wetting problems. The windows of the greenhouse must be totally closed when the product is applied. Shading screens should be opened for a minimum of one hour before application, so the glass is warmed up by the heat of the greenhouse. It is advised to stir at a small speed the product before use, especially if a small white deposit is visible at the bottom of the IBC/can.
Weather conditions	AntiReflect can only be applied under the ideal weather conditions: • An outside temperature of between 10 and 20 °C. • Wind speed of less than 2 m/s (7.2 km/h). A strong wind will cause product loss and a thinner layer than intended. • For fast drying: relative humidity (RH) < 80 %. • Do not apply AntiReflect to a wet surface or when rain is expected within 24 hours.
Dilution	AntiReflect is supplied in two convenient packagings: IBCs and 20 liter cans, both of which are ready-to-use (RTU) products. This means there's no need for dilution with water; you can spray it directly. The precise quantity of AntiReflect required is included, totaling 1200 liters per hectare. Additionally, an extra 100 liters are provided to accommodate hose filling and other potential losses. This ensures a straightforward application process
Personal protection	If skin contact or contamination of clothing is possible, protective clothing should be worn.
Equipment	• Machine: For precise and even AntiReflect application at a consistent rate of 1200 liters per hectare, utilize a spraying machine equipped with a computer. Opt for quality nozzles, such as the red ceramic Teejet XR slit caps (110-degree spray angle), to ensure uniform coatings. Before and after AntiReflect application clean the machine thoroughly to ensure optimal performance. • Manual Application: This versatile method is adaptable to various equipment configurations and offers flexibility in the application process, making it suitable for a range of setups. • Drone: Drones provide precise and consistent coating, particularly beneficial for difficult to spray greenhouses. ** Important note: regardless of the chosen equipment, achieving uniform coating is crucial for optimal effectiveness. Any deviation can result in reduced light gain. Application needs to be close to the stall point. This means as saturated as possible, so spray and stop just before the AntiReflect is running down from the roof to obtain the maximum antireflection effect.*
Drying time	To ensure the coating remains undamaged, apply it before nightfall and prior to the onset of condensation. The drying time, which typically takes about two hours, depends on factors like outside temperature, glass temperature, and wind speed.
Cleaning	To clean your greenhouse roof with AntiReflect already applied, consider the following: For periodic cleaning: • Brush with water: Recommended up to 10 times annually using only water and soft brushes. • Optionally, ReduClean can be used in combination with brushing for effective cleaning. • Cleaning after using Lumiforte coatings can be safely done by applying the recommended type and amount of cleaner. After the working time needed for the cleaner you can flush the coating + cleaner with a generous amount of water, wait for a good rain or clean with the machine with brushes. These steps ensure proper cleaning while maintaining the AntiReflect coating.
Removing	At the end of AntiReflect's useful life, it can be removed by using GS-4. We advise you not to dispose of the residue in the irrigation basin.

Environment

Environmental precautions	• Dispose in a safe manner in accordance with local/national regulations. Prevent entry to sewers and public waters. • We recommend that you do not let rinse water with AntiReflect flow into the water reservoir. • In case of contact with skin or eyes, rinse with water. If swallowed, consult a physician.

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