TECHNICAL DATASHEET REDUCOMPACT



Product information

Category	Photo-selective coating for greenhouses
Description	ReduCompact is a removable photo-selective coating containing a pigment that transmits higher levels of blue light compared to red, to grow compact plants in greenhouses. ReduCompact is normally applied in spring or early summer and will last until it is removed with ReduClean. This leads to a reduction in the use of plant growth retardants.
Properties	• Higher levels of blue light compared to red • Reduction in the use of plant growth retardants for sustainable growth • Suppress the height of Pelargonium varieties • Highly wear-resistant • Increased blue light to grow compact plants • Easy to remove with ReduClean
Recommended use	For exterior greenhouse covers
Recommended surface	Suitable for glass, acrylate, polycarbonate and plastic film
Identified users	Industrial – for professional use only

Technical specifications

Physical state	Liquid
Colour	Blue
Odour	Characteristic
pH	7-8
Flammability (solid, gas)	Non flammable
Density	≈ 1.01 g/cm^3
Viscosity, dynamic	≈ 2000 mPa.s Brookfield RV, spindle 5, 10 rpm, 20°C
Wear resistance	A higher concentration of ReduCompact is more wear resistant than a lower concentration. Above average amount or intensity of precipitation will increase the wear of the layer.
More transparent when wet	Yes
Transport regulation (ADR, RID, IMDG, IATA, IDN)	No restrictions

Storage conditions

Packaging	15 kg bucket (=14,8L) 1 pallet contains 33 or 44 buckets
Shelf life	Unopened containers have a shelf life of 2 years. After one year, it is necessary to stir well before mixing with water. Keep only in the original container in a cool, well-ventilated place. Products should be protected against frost (below 0 °C) and 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

Surface preparation

The surface must be clean and dry before the application of ReduCompact. A clean surface improves durability.
Preferably close the irrigation basin during the application of ReduCompact.

Weather conditions

- On a dry and clean surface.
- Under fast-drying circumstances. (T>10°C + RH<80%)
- When rain is not expected during application or drying process

Equipment

Application should be done by spraying the liquid on the surface:

- By spraying machine
- By hand with a spray gun
- By helicopter
- By Drone

Personal protection

- Safety glasses
- Protective gloves

Quantity

Application instructions for 10,000m² (1 ha = 2,5 acre)

		MACHINE Spraying liquid 1200 L/ha 317 US gal/2,5 acre		**MANUAL** Spraying liquid 1500 L/ha 396 US gal/2,5 acre		
Dilution	**Buckets/ha**	**Water**	**Buckets/ha**	**Water**	**Blue to Red Ratio**	**Net Shading**
1:3	20	904 L/239 US gal	25	1130 L/298 US gal	3:2	25%
1:4	16	963 L/ 255 US gal	20	1204 L / 318 US gal	5:4	15%

The values mentioned are maximum shading values possible and applied in laboratory circumstances. Depending on the application technic, weather and greenhouse type, shading values in practice can differ.

Dilution

Dilute ReduCompact with clean water to prepare your spray liquid:
Machine application requires 1200 liters of spraying liquid per hectare (317 US gal/2,5 acre).
For manual application, 1500 liters of spraying liquid per hectare is required (396 US gal /2,5 acre). Spraying liquid = ReduCompact + water.

Drying time

Drying time depends on outside temperature, glass temperature and wind speed. The coating should be dry before nightfall because condensation may damage the layer.

Removal

ReduCompact is easy to remove with ReduClean. Spray at least 250 liters of ReduClean per hectare, diluted with 5-7 parts of clean water. Only apply ReduClean when a considerable amount of rain is expected within one week. The rain will wash of the ReduCompact layer. Check if the waterways and surroundings are suitable for the inflow of ReduCompact.
Do not apply ReduClean on a wet surface or during rain. Use of roof-sprinklers for cooling can cause removal problems.

Effect on crops and environment

Tests

ASTREDHOR AURA 2024 - Experimental Evaluation of ReduCompact on Ornamental Crops

Environmental precautions

Always dilute products with water in the right amount before use.
Dispose in a safe manner in accordance with local/national regulations.
If disposing in public water, dispose in a wide river with sufficient capacity.
Apply the coating by machine if possible, this gives a more uniform layer and less loss of product into the environment.
Discharging cleaning water into the watercourse without flow can give turbidity or cause whitening, ensure enough flow.

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