

**CONTROL SOLAR RADIATION,
CLEAN EFFECTIVELY AND
PROVIDE OPTIMAL PROTECTION
WITH MARDENKRO**



Sunlight and solar heat in greenhouses must be regulated in order to optimise the growing conditions for your crop. Mardenkro is a specialist in this field. As a supplier of a wide range of environmentally safe liquid products, we are the specialist in greenhouse farming. Mardenkro also supplies other products for efficient use by greenhouse growers.

**MARDENKRO – EFFECTIVE PRODUCTS
WITH A RETURN ON INVESTMENT**

Mardenkro has been a supplier of highly effective products for almost 25 years. Using a customer-oriented approach, Mardenkro continuously develops new products that help to improve profitability in greenhouse farming.



GS-4[®]

THE CLEANER THAT MAKES YOUR GLASS CLEAR



Growth light is critical to your crop. Clean, clear glass will transmit more growth light into your greenhouse. Regular cleaning is a necessity. But what product should you use for cleaning? Conventional cleaning agents contain hydrogen fluoride gases that have a harmful vapour effect. GS-4 contains no hydrogen fluoride gases and has virtually no vapour effect. GS-4 is therefore safer for humans and crops. GS-4 is a glass cleaner developed specifically for glass greenhouse horticulture. It removes dirt such as soot, dust, rust and algae.

ADVANTAGES OF GS-4

- Suitable for use on the both the inside and the outside of the greenhouse.
- Will not roughen the glass.
- Contains no hydrogen fluoride gases and is therefore safer for humans and for the environment.

HOW TO USE IT

Depending upon the amount of dirt on the glass, one part of GS-4 should be diluted with 5 to 20 parts of clean water. Apply GS-4 to the glass by misting. Allow the product to act and then rinse with generous amounts of water. Do not let the product dry in on the glass. With a dilution ratio of 1:10, an amount of 200 litres will be sufficient for treating a 10,000 square metre surface.

GS-4 is available in 10 and 25 litre containers.

Do not use with fluoride-sensitive crops.



ReduCondens[®]

ELIMINATES LIGHT LOSS AND PREVENTS BOTRYTIS CAUSED BY CONDENSATION DROPLETS



Condensation droplets on acrylate, polycarbonate and inside plastic foil greenhouses are a nuisance. All those droplets combined may cause light loss of up to 25%! Moreover, condensation droplets may cause your crops to be affected by Botrytis. ReduCondens is the solution. Once dry, this product forms a coating that prevents the formation of droplets. Result: no more formation of droplets.

ADVANTAGES OF REDUCONDENS

- Suitable for use on acrylate, polycarbonate and inside plastic film greenhouses.
- Adheres to almost all types of plastic film.
- Water-based and safe to use.
- Easily miscible in water.
- Durable in use: once applied, ReduCondens will last for a whole season.

HOW TO USE IT

Apply ReduCondens to a clean, dry surface free of other substances. For one hectare, mix 30 litres of ReduCondens with approximately 1,000 litres of spraying liquid. Apply ReduCondens by spraying from the gutter to the ridge to ensure that the film is properly moistened. After applying, allow the treated surface to dry very thoroughly. The drying process may be accelerated by thoroughly ventilating the greenhouse. If applied properly, ReduCondens will remain effective all season.

ReduCondens is available in 1, 5 and 25 litre containers.



ReduPaint®

SOLVENT-FREE PAINT FOR HEATING PIPES TO PREVENT LIGHT LOSS



Premature corrosion of heating pipes can be prevented by painting them. Unfortunately, many products contain harmful solvents. ReduPaint is guaranteed solvent-free. It's the ideal water-based paint that effectively protects heating pipes against corrosion. ReduPaint is very white and therefore suitable for light reflection inside greenhouses, which has a positive effect on crop growth. The product is easy to apply, regardless of whether it is used for painting new pipes or repainting existing pipes.

ADVANTAGES OF REDUPAINT

- Excellent coverage, dries quickly and provides a non-insulating white coat of paint.
- Water-based paint.
- Harmless to crops.
- No vapour effect and therefore safer for humans and for the environment.
- Suitable for direct use on untreated materials.
- Saves on energy: it eliminates the need to turn up the heat inside the greenhouse after the paint has been applied.
- Resistant to wear.

HOW TO USE IT

Remove any loose rust and dirt from the surface to be painted. The contents of one 16 litre bucket are sufficient for painting approximately 1,200 metres of heating pipe (with a diameter of 5 cm). Apply ReduPaint with a paint glove or a paint roller. One application is usually sufficient.

ReduPaint is available in 16 litre buckets.



ReduCoat®

STRUCTURAL PAINT DESIGNED TO REDUCE WEAR ON PLASTIC FILM ON GREENHOUSES



In countries with high light intensities, the temperature of plastic film may increase significantly on surfaces where it comes into contact with the metal structure, causing the plastic film to wear prematurely. ReduCoat structural paint allows you to prevent wear effectively. It contains microscopically divided pigment that reflects solar radiation.

ADVANTAGES OF REDUCOAT

- Excellent coverage and great reflective power.
- Extremely UV-stable and therefore highly resistant to wear.
- Creates a flexible film.
- Water-based product.
- Will not affect the quality of plastic film.
- Safe for humans, animals and for the environment.

HOW TO USE IT

Apply ReduCoat undiluted in narrow bands to the plastic film or to the metal structure. One 16 litre bucket is sufficient for 250 to 300 square metres or for a band with a length of 2,500 to 3,000 metres and a width of 10 cm.

ReduCoat is available in 16 litre buckets.



SprayChalk

THE PRODUCT FOR TEMPORARY SHADING



Do you require incidental shading against excessive sunlight? Or do you require additional protection for your crop? SprayChalk was developed specifically for use during high solar radiation. The shading effect can be easily adjusted. Liquid SprayChalk is very easy to apply and is removed quickly by a few rain showers. SprayChalk can be used for temporary additional shading on ReduSol and ReduHeat.

ADVANTAGES OF LIQUID SPRAYCHALK

- Adjustable shading effects.
- Easy to mix with water.
- Prevents clogged nozzles.
- Spares the pump due to well-dispersed chalk.
- Can be removed quickly by a few rain showers.

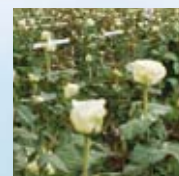
HOW TO USE IT

Depending upon the required shading effect, dilute SprayChalk with clean water. The number of buckets required when using 2,000 litres of spraying liquid (sufficient for a 10,000 square metre surface) is shown below.

DILUTION RATIO OF SPRAYCHALK : WATER	NUMBER OF BUCKETS OF SPRAYCHALK	SHADING EFFECT (%)
1:4	16	78
1:8	9	58

- The above values were measured under laboratory conditions and serve as an indication only.
- The shading effect includes greenhouse covering materials and structural components.

Liquid SprayChalk is available in 25 kg buckets.



PreTom[®]

THE IDEAL PROTECTION AGAINST TOMATO HANDS



Juices from tomato plants cause dirty hands. PreTom keeps your skin free from dirt. It eliminates the need to wear gloves, and thus allows the maximum use of your sense of touch when handling crops.

ADVANTAGES OF PRETOM

- Contains skin-friendly lanoline that prevents chapped hands.
- Scented in order to produce a pleasant smell.
- Economical in use.
- Easy to remove with water.

HOW TO USE IT

Apply PreTom undiluted to your hands. The liquid forms a thin film of wax on your skin. After finishing your work, you can easily remove PreTom from your hands by simply washing them with water. PreTom complies with applicable cosmetics regulations.

PreTom is available in 250 ml and 1 litre containers.



ReduSystems®

Removable greenhouse coatings

INNOVATIVE COATINGS FOR OPTIMISING SOLAR RADIATION AND HEAT



ReduSystems is a line of innovative, environmentally sound products with one common objective: the best possible greenhouse climate. The ReduSystems line includes liquid coatings that contain photoselective pigments or high-grade chalk.

ReduSystems coatings can manipulate solar radiation so that your crop will get the required amount of growth light. All liquid coatings of ReduSystems can be removed with a special cleaning product.



ReduSol®

**FOR A WEAR-RESISTANT,
REMOVABLE COATING WITH AN
ADJUSTABLE SHADING EFFECT**



A wear-resistant shading coat that can be removed after use provides you with possibilities to control your crop. ReduSol is the liquid shading product that you can use for applying a homogeneous, wear-resistant shading coat that protects against radiation. ReduSol can be applied in both thin and thick coats to glass, acrylate, polycarbonate and plastic foil. The greatest advantage of ReduSol is that it can be removed. You can start the shading season in the spring with a thin coat of ReduSol. A thicker coat can be easily achieved later in the season by applying an additional amount of ReduSol by spraying. ReduSol is highly wear-resistant and can be removed easily and safely with ReduClean after the season.

ADVANTAGES OF REDUSOL

- Easy to remove with ReduClean.
- Shading effects of up to 80% (depending upon the concentration).
- White, even shading coat for proper reflection.
- Easy to apply.
- Highly resistant to frost and rain.
- Increased light transmission during rain.
- Diffuses light.

ReduSol is available in 20 kg (approximately 15 litre) buckets.



ReduHeat®

OPTIMISED USE OF GROWTH LIGHT (PAR) AND SIGNIFICANT REDUCTION OF HEAT RADIATION

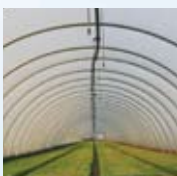


PAR (Photosynthetic Active Radiation) is considered to be the most critical type of light for crops. You want to provide shading against heat while retaining the light required for crop growth. ReduHeat sets itself apart from other, more traditional shading agents through a different ratio between light transmission and heat protection. ReduHeat is a coating that contains a special pigment. This pigment has the ability to transmit growth light (PAR) while increasing the reflection of heat radiation (NIR). Another major advantage of ReduHeat is the adjustable shading effect. It gives you more control over the climate inside your greenhouse.

ReduHeat is available in 15 kg (approximately 13 litre) buckets.

ADVANTAGES OF REDUHEAT

- Greater photosynthesis and therefore more growth.
- Improved light penetration due to diffuse light.
- Reduced use of shading cloths.
- ReduHeat is highly wear-resistant: one application is usually sufficient for the whole season.
- Easy to remove with ReduClean.
- Suitable for glass, acrylate, polycarbonate and plastic foil.
- Requires less ventilation, resulting in a higher CO₂ content inside the greenhouse.
- Improved water management, less water required.
- Additional cooling effect when combined with rooftop sprinklers.
- A more robust, healthier crop.
- Fewer fruits wasted due to blossom end rot or head - and star cracks.
- Retention of colour.
- A more balanced climate, no stress peaks.
- A more comfortable working climate.



ReduClean®

FOR EASY REMOVAL OF REDUSOL AND REDUHEAT FROM YOUR GREENHOUSE COVER



After having enjoyed the benefits of ReduSol or ReduHeat for a full season, it is time to remove the product from your greenhouse. You can do this with ReduClean.

ReduClean is a cleaning product specifically designed to remove ReduSol and ReduHeat.

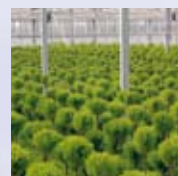
It can be easily applied to all greenhouse covering materials: glass, acrylate, polycarbonate and plastic foil.

Removal by rain after application is sufficient for a clean result. ReduClean is economical in use and safe for humans. The result: a clean greenhouse cover.

Note: ReduClean can only be used to remove ReduSol and ReduHeat.

ReduClean is available in 10 and 25 litre containers.

Ask for the ReduSystems brochure to learn more about ReduSol, ReduHeat or ReduClean.



MARDENKRO. INVENTING SOLUTIONS FOR A QUARTER OF A CENTURY



Mardenkro is a supplier for today's horticulture industry. As a specialist in solutions for regulating solar radiation and heat, our products ReduSol and ReduHeat have been the basis for our international reputation in more than 50 countries. With these ReduSystems products, Mardenkro offers growers throughout the world ways to optimise the regulation of climate conditions in their greenhouses. We also provide solutions for other greenhouse related issues with products that are both economical in use and highly profitable.

Mardenkro is a company that responds to the needs of its market. With our many years of experience, we know the kinds of requirements that products have to satisfy. These products are developed by interacting closely with the growers themselves.

Customised recommendations ensure the best possible application of products. As an involved partner for growers, Mardenkro makes a substantial contribution to the profitability of greenhouse horticulture. The company's main office is located in Baarle-Nassau, The Netherlands. This is also where the laboratory and its testing facilities are located along with the company's sales, storage and shipping departments. Mardenkro distributes its products globally via a network of distributors and branch locations in Canada, China, Japan and Kenya. Mardenkro is ISO 9001 certified. Mardenkro develops environmentally responsible products that are of excellent quality. To meet these criteria, all raw materials, semi-manufactured products and final products are subjected to thorough inspection previous to release.

Mardenkro b.v.
Geerstraat 8
5111 PS Baarle-Nassau (NL)
T +31-135077069
F +31-135077343
E info@mardenkro.com
I www.mardenkro.com



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about our products,
visit www.mardenkro.com**