

TECHNICAL DATASHEET REDUHEAT



Product information

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| Category | Shading coating for greenhouses |
| Description | ReduHeat is a removable shading coating containing a pigment that transmits grow-light (PAR) while reflecting a larger part of the heat radiation. ReduHeat is normally applied in spring or early summer and will last until it is removed with ReduClean. |
| Properties | <ul style="list-style-type: none">• High level of grow-light (PAR) transmission• High reflection of heat radiation (infrared)• An evenly balanced climate without peaks• Highly wear-resistant• 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

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| Physical state | Liquid |
| Colour | Beige |
| Odour | Characteristic |
| pH | 9 |
| Flammability (solid, gas) | Non flammable |
| Density | 1,1 g/cm ³ |
| Viscosity | 7600 mPa.s Brookfield RV, spindle 5, 10 rpm, 20°C |
| Wear resistance | A higher concentration of ReduHeat 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

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| Packaging | 15 kg bucket (= 13,5 L) 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). |

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Instructions for use

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| Surface preparation | The surface must be clean and dry before the application of ReduHeat. A clean surface improves durability. Preferably close the irrigation basin during the application of ReduHeat. | |
| Weather conditions | <ul style="list-style-type: none"> An outside temperature of between 10 and 25 °C Wind speed of less than 2 m/s (7 km/h) | <ul style="list-style-type: none"> For fast drying: relative humidity (RH) < 80 % Do not apply ReduHeat to a wet surface or when rain is expected within 12 hours |
| Equipment | Application should be done by spraying the liquid on the surface: <ul style="list-style-type: none"> By spraying machine By hand with a spray gun By helicopter | |
| Personal protection | <ul style="list-style-type: none"> Safety glasses | <ul style="list-style-type: none"> Protective gloves |

| Quantity | | | | | | |
|----------------|------------|--------|-------------------------|-----|-------------------------|-----|
| | BUCKETS/HA | | GROSS SHADING | | NET SHADING | |
| | | | INCL. GLASS & STRUCTURE | | EXCL. GLASS & STRUCTURE | |
| | MACHINE | MANUAL | PAR | NIR | PAR | NIR |
| ReduHeat | 25 | 28 | 44% | 55% | 13% | 24% |
| 15 kg = 13,5 l | 20 | 22 | 41% | 50% | 10% | 19% |
| | 15 | 17 | 38% | 45% | 7% | 14% |

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| Dilution | Dilute ReduHeat with clean water to prepare your spray liquid: Machine application: 1,000 – 1,500 liter spray liquid per 10.000 m ² Manual application: 1,700 – 2,000 liter spray liquid per 10.000 m ² |
| 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 | ReduHeat 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 ReduHeat layer. Check if the waterways and surroundings are suitable for the inflow of ReduHeat. <i>Do not apply ReduClean on a wet surface or during rain. Use of roof-sprinklers for cooling can cause removal problems.</i> |

Effect on crops and environment

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| Tests | 2006 Mardenkro B.V. Environmental impact study: ReduHeat gives water a temporary white colour but settles quickly and becomes part of the soil structure in the water. 2014 Groen Agro Control. Effect on irrigation water: No signs of impact on plant growth or root development. |
| 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. |