

## Product sheet – Chrysal LeafShine & Seal

### General

- For a natural shine of leaves of plants, cut flowers and cut foliage.
- Increases sales by improved shelf presentation as plants are looking healthy and fresh.
- Reduces transpiration by a total coating that increases the resistance of the stomata in the leaves. Still allowing plant respiration.
- No phytotoxic effect on leaves or flowers.
- Odourless, water based product, no chill damage risk.
- Available in 1 L, 5 L and 200 L sizes.
- Effects last for up to a month.

### Shine effects

- Provides an even coating on the leaves without drops and spots.
- Makes dust, residue, white lime and mildew spots invisible.
- Levels of gloss can be adjusted dependant on dosage.
- Improves colour contrast between leaves and flowers.

### Seal effects

- Increases shelf life by 1-3 days, depending on the transpiration rate of the plant.
- Reduces transpiration by partly sealing plants' stomata without causing any damage to the plant.
- Plants need watering less frequently during the retail stage.
- Prevents premature wilting of individual plants in arrangements.

### Applications

- For use by growers, exporters and packers.
- Apply through plant sprayer, backpack sprayer, spray boom, spray tunnel or atomizer. When pressure sprayers are used, set pressure at 2 bar.
- A protective film appears after application, once the water has evaporated (drying time depends on the humidity, but can take up to 4 hours).
- Plants can be sleeved or packed into boxes immediately after Chrysal LeafShine & Seal application without the risk of residue drop formation or fungal diseases.
- Solution can be re-used / stored for a maximum of 1 week.
- For more information see page 3 for dosage and crop list.
- We advise small scale tests prior to large scale application of the product. For test protocol see page 5.

### Savings / sales effect

- 10% average waste reduction.
- Improved sales and better margins.



### Recommendations

- No need to clean the plants beforehand.
- Spray both upper and lower leaf surfaces for best anti-transparent effect.
- Avoid accumulation of spray mist in the heart of plants.
- Plants should not be placed in direct sunlight whilst being sprayed or before completely dry.
- Spraying on Impatiens is not recommended.
- Do not mix residual solutions with freshly made ones.
- Avoid spraying furniture, walls and floors to prevent stains and the risk of slipping. Use a waterproof mat to avoid spray residue on floors.
- Chrysal recommends to clean all equipment immediately after use with a detergent / soap solution.
- If re-using the product a filter is necessary. Use a fine filter  $\pm 50\mu\text{m}$  (e.g. Mahle amaFlow).

### Shelf life

- Store in a dark and dry place, preferably between 5°C and 15°C.
- Shelf life: 18 months, stored under the right conditions.
- The concentrate should look milky / white (see picture below, bottle 1). If a clear layers of liquid are visible in the concentrate (bottles 2, 3 and 4), the concentrate has separated and the product is no longer effective. A small amount (<5%) clear liquid under the milky concentrate is not an issue. In case the product has separated, please contact your local Chrysal sales representative.



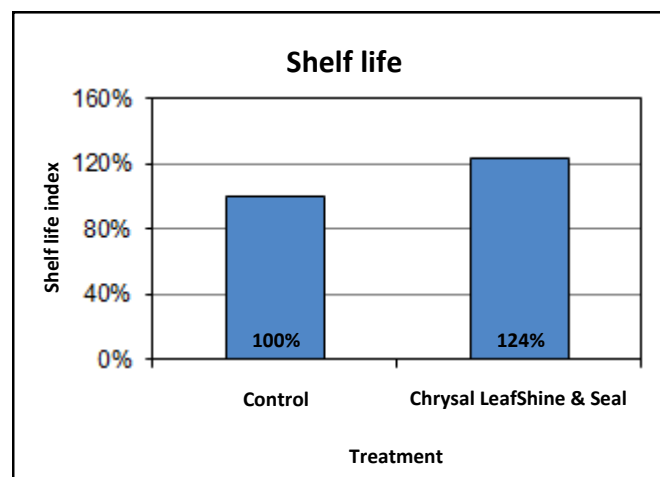
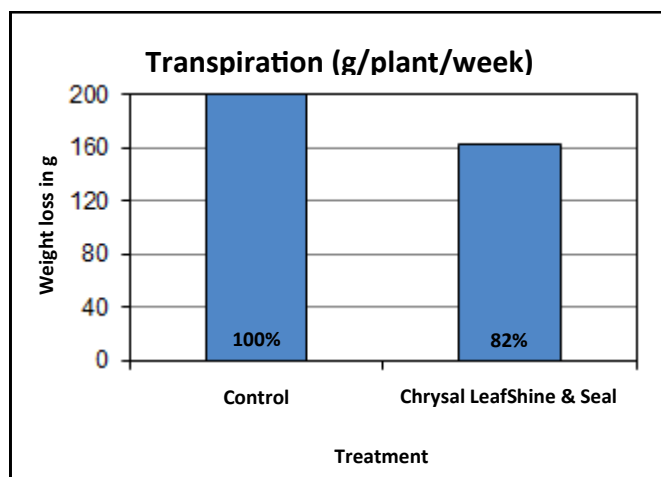
## Dosage

Dilute concentrate with tap water to get the required effect. Shake or stir well both concentrate and ready-to-use solution before use.

Dosage	SHINE effect <i>Spray upper leaf surface Fine mist</i>	SEAL effect <i>Spray upper and lower leaf surface Small droplets till run off</i>
1:20 (50 ml/l)	High-gloss	Plant with high transpiration e.g. Hydrangea, Lavandula
1:40 (25 ml/l)	Gloss	Most plants
1:100 (10 ml/l)	Silk-gloss	Not advised

## Test Results

The following graphs show the effect of Chrysal LeafShine & Seal on transpiration and shelf life of potted plants compared to no treatment at all.



## Crop list

Tests show a positive effect of Chrysal LeafShine & Seal on the following plants:

Anthurium	Cupressus	Hydrangea	Rhododendron
Areca	Dieffenbachia	Jasminium	Rosa
Aster	Dipladenia	Lavandula	Schefflera
Azalea	Dracaena	Lilium	Spathiphyllum
Beaucarnia (Nolina)	Ficus	Nephrolepis	Stephanotis
Begonia	Gardenia	Olea	Tagetes
Bougainvillea *buttiana	Gerbera	Pachira	Thuja
Calathea	Hebe	Pelargonium (Geranium)	Viburnum
Campanula	Hedera	Petunia	Vinca minor
Celosia	Helianthus	Phaleanopsis	Yucca
Chamaecyparis	Helleborus	Picea	Zamioculcas
Chrysanthemum	Hibiscus rosa-sinensis	Pinus	
Citrofortunella	Howea	Primula	

### Spathiphyllum 'Chopin'



Control  
Photo taken: day 8



Treatment: Chrysal LeafShine & Seal  
Photo taken: day 8

### Chrysanthemum 'Classic Yellow'



Control  
Photo taken: day 14



Treatment: Chrysal LeafShine & Seal  
Photo taken: day 14

### Monstera deliciosa



Untreated

Silk gloss / cleaner  
10 ml/l

Gloss  
25 ml/l

High gloss  
50 ml/l

## Chrysal LeafShine & Seal – Test Protocol

**Want to test the effects of Chrysal LeafShine & Seal for yourself?**

**With this test protocol we will guide you.**

In order to compare, the test should always contain treated and control plants. Select plants that are uniform in stage of development. Use at least 6-10 plants per treatment.

Test procedure:

1. Fully saturate the soil with water and number each plant related to a treatment.
2. Shake concentrate well before preparing the solution.
3. Prepare the solutions in a plastic bottle or measuring cup and shake/stir well before spraying. Dosage: 25 ml/l or 50 ml/l.
4. Spray the solution on the plants until run-off, spray upper and lower leaf surfaces.
5. Place plants in a room with a stable climate and make sure that the plants on each treatment stand in similar conditions to be able to make comparisons.
6. Do not re-water the plants.
7. Weigh the plants each day.

Example observations:

- Record the weight loss in grams in the first 7 days:

	Weight of the plant (g)		
	Day 1	Day 3 / 4	Day 7
Control	505	460	380
Chrysal LeafShine & Seal	505	490	445

- Record the time (in days) till wilting:

	Wilting of the plant (day)						
	Plant 1	Plant 2	Plant 3	Plant 4	Plant 5	Plant 6	Average shelf life
Control	5	6	6	7	5	7	6
Chrysal LeafShine & Seal	8	7	8	9	7	9	8

- Take pictures to record the effects you have seen.

### Calculate use

In case there is a need to calculate the use of Chrysal LeafShine & Seal this is possible by dividing the amount of product used by the number of plants.

Example: Start                      1000 ml  
 Remaining                      340 ml  
 Used RTU                      660 ml per 45 plants -> 15 ml / plant

Chrysal has a ROI model to calculate the cost of the concentrate in total. Please contact your local Chrysal sales representative for this.