Conditioning

Product sheet – Chrysal Aqua Pad

General

- The Aqua Pad is a wood fibre mat to be placed between the plant's grower pot and cover pot, gift bag or ceramic pot.
- Creates a water reservoir, perfect for plants susceptible to dehydration issues, such as Azalea, Cyclamen, Phalaenopsis, Rosa.
- Absorbs and releases water easily; up to 20 times its own weight.
- 100% compostable according to the European standard for compostable products EN-13432.
- Available in hexagonal and wrapped sizes (see table on page 2). Other sizes on request.
- Easy to use.

Effects

- Increases sales; improved shelf presentation by healthy and fresh looking plants.
- Increases shelf life up to 30%.
- Reduces plant waste in the total supply chain.
- With Aqua Pad, plants need watering less frequently at the retail stage or by the consumer.
- No surplus water which prevents effect of excessive watering (root rot).
- The extra water reservoir can also be used to facilitate a longer logistic chain or for product to be produced in advance.

Benefits / return on investment

- 10% average plant waste reduction.
- Reduces handling costs.
- Improves sales and margin.

Applications

- To be used by plant growers, packers and retailers.
- To be used during transport and/or at retail level.
- Can be used in combination with Chrysal Aquastick to prevent free water in the reservoir.

Recommendations

- Store under dry conditions.
- The Aqua Pad has an unlimited shelf life if stored under the right conditions.
- Used pads can be discarded with other compostable waste.

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Hexagonal Aqua Pad (unwrapped)

- Ideal for automatic application.
- Fits pot perfectly.
- Instructions for use:
  1. Place the Aqua Pad in the cover pot or gift bag.
  2. Add the right amount of water to the Aqua Pad; see table below.
  3. Place the plant on top of the wetted Aqua Pad, without removing the grower pot. Make sure that Aqua Pad and soil stay in contact with each other.

Wrapped Aqua Pad

- Fast and easy to apply manually.
- Wrapped Aqua Pads can be submerged in water.
- The Aqua Pad is saturated in seconds. No need to measure the exact amount of water dosed.
- A wrapping holds the pad material together which prevents it from losing its shape if wetted.
- Instructions for use:
  1. Submerge the wrapped Aqua Pad in water.
  2. Place the Aqua Pad in the cover pot or gift bag.
  3. Place the plant on top of the wetted Aqua Pad, without removing the grower pot. Make sure that Aqua Pad and soil stay in contact with each other.

Aqua Pad type	Size	Pot size	Water dosage	Quantity per sales unit
Hexagonal	ø 3.4 cm	< 6 cm	15 - 20 ml	8,000
	ø 7 cm	9 cm	50 - 70 ml	2,000
	ø 9 cm	12 cm	110 - 130 ml	1,200
Wrapped	6.8 * 7.2 cm	9 cm	70 ml *	3,200
	9 * 9 cm	12 cm	110 ml *	1,700
	12 * 12 cm	14 cm	200 ml *	1,200
	14.4 * 14.4 cm	16 cm	290 ml *	600

* Submerge the pad a few seconds until it is saturated.

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Tests show positive effect on plants sensitive to wilting e.g.:

Allium	Curcuma	Hydrangea	Primula
Azalea	Cyclamen	Impatiens ‘New Guinea’	Rosa
Basilicum (Ocimum)	Cyperus	Lavandula	Rosemarinus
Beaucarnea (Nolina)	Dille (Anethum)	Melissa	Saintpaulia
Begonia	Dragon (Artemisia)	Mentha	Salvia
Bougainvillea	Fragaria	Origanum	Senecio
Calathea	Gerbera	Petroselinum	Spathiphyllum
Campanula	Hebe	Petunia	Tagetes
Capsicum	Helianthus	Phalaenopsis	Thymus
Celosia	Herbs	Platycodon	
Chrysanthemum	Hibiscus rosa-sinensis	Poinsettia (Euphorbia pulcherima)	
Coriandrum	Hyacinthus		

Shelf life Cyclamen persicum ‘Super Serie’ white

Control
Photo taken: day 10

Chrysal Aqua Pad
Photo taken: day 10

Shelf life Azalea ‘Inka’

Control
Photo taken: day 7

Chrysal Aqua Pad
Photo taken: day 7

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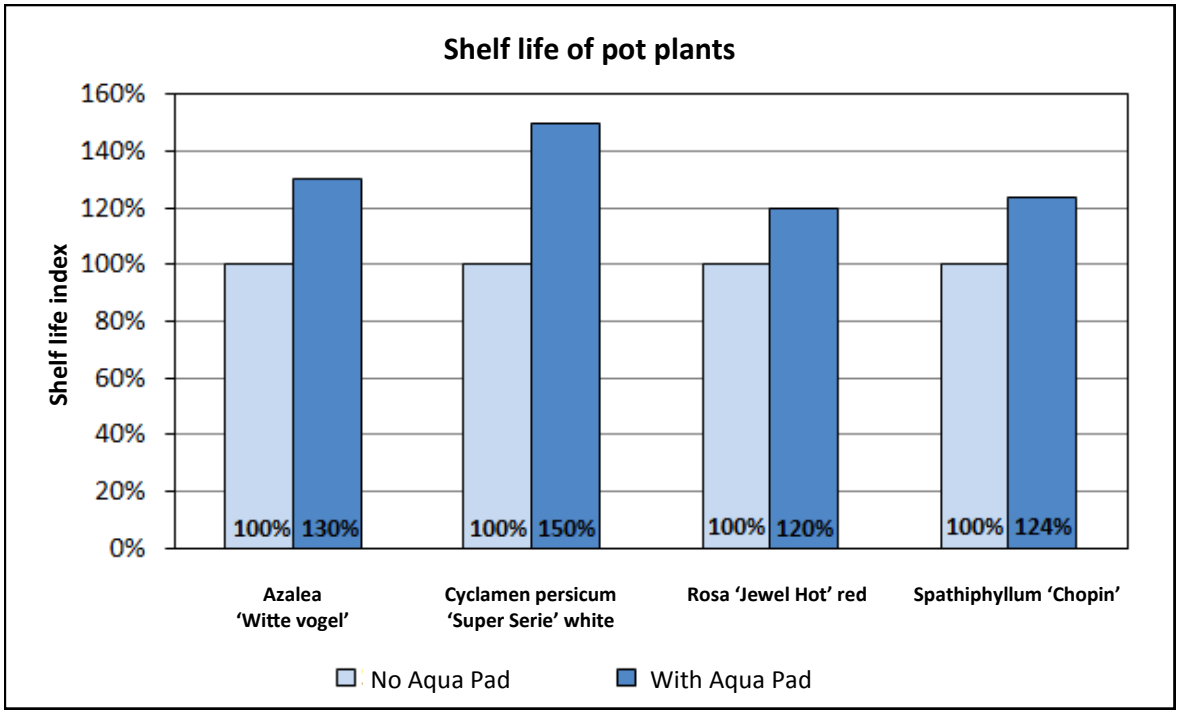
Test results

The following graph shows the effect of the Aqua Pad on the shelf life of pot plants.



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Conditioning

Chrysal Aqua Pad – Test Protocol

Do you want to test the effects of Chrysal Aqua Pad 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 of stage and development. Use at least 6 plants per treatment.

Place the plants in a room with a stable climate (ideally ± 20°C and ± 60% relative humidity) and make sure that the plants of each treatment are in similar conditions (light, airflow), to be able to make good comparisons.

Requirements for the test

- Chrysal Aqua Pads
- Cover pot
- Plants with grower pot
- Measurement cup
- Balance (optional)

The following test scheme can be used.

Plant group	Treatment
1	None (control)
2	Chrysal Aqua Pad

Test procedure

1. Fully saturate the soil/substrate with water and number each plant related to a treatment.
2. Place the Chrysal Aqua Pad in the cover pot.
3. Add water in the cover pot depending on the size of the pot and the Chrysal Aqua Pad (see appendix).
4. Place the plants in the cover pot and make sure that Aqua Pad and soil are in contact with each other.
5. Also use a cover pot on the control plants for uniformity.
6. Observe and write down the first day of wilting of each plant.
7. Weigh the plant (including cover pots with water) each day. (optional)

Example observations

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

	Weight of the plant (g)		
	Day 1	Day 3	Day 7
Control	500	440	360
Chrysal Aqua Pad hexagonal Ø 9cm	610	550	470

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- 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	6	8	8	7	6	7	7
Aqua Pad hexagonal Ø 9cm	10	12	14	12	12	12	12

- Take pictures to record the effects you have seen.

Calculate water evaporation

It is also possible to calculate and compare evaporation per day.

- The weight at the start minus the weight at day 3 divided by 3 days gives the evaporation per day.

  Example: Day 0 500 g
  Day 3 440 g
  Evaporation 60 g (20 ml per day; 60 g / 3 days)

- Compare the evaporation per day between the treatments and over time.

	Evaporation of the plant (g)	
	After 3 days	After 7 days
Control	20 ml / day	20 ml / day
Chrysal Aqua Pad hexagonal Ø 9cm	20 ml / day	20 ml / day

- In total 110 ml of water was added. If we divide the total amount of water added by the evaporation per day, we get the predicted added shelf life with the Aqua Pad. 110 ml water / 20 ml evaporation a day = 5.5 days extra shelf life in theory.

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