

# Syngenta Nozzle Range

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Operating data guidelines for the exclusive Syngenta range of nozzles



Syngenta Nozzles	Amistar In Furrow	Potato	Hawk	Air Induction 110025	Vegetable 65-06	Vegetable 65-08
<b>Target Crops and Pests</b>	Potato	Potatoes, Onions and Leeks	Onions, Leeks, Grass Weeds	Brassicac, Carrots and Lettuce	Brassicac, Carrots and Lettuce	Brassicac, Carrots and Lettuce
<b>Specifications</b>	Hollow cone 20-124 (front) Hollow cone 70-124 (rear)	XR11004	Variable pressure 11003	Variable pressure 110025	Flat Fan 65-06	Flat Fan 65-08
<b>Spray Angle</b>	20° spray pattern (front) 70° spray pattern (rear)	30° spray tip angle	40° spray tip angle	10° spray tip angle	65° spray pattern	65° spray pattern
<b>Fitting</b>	Standard hollow cone bayonet caps, 2 nozzles per row	Standard flat fan bayonet caps	Standard flat fan bayonet caps	Standard flat fan bayonet caps	Standard flat fan bayonet caps	Standard flat fan bayonet caps

Qty Required						

Please specify above your Syngenta nozzle preference and the quantity of nozzles required to fit your boom length.

BENEFITS					
AMISTAR in Furrow	Potato	Hawk	Air Induction 110025	Vegetable 65-06	Vegetable 65-08
Specifically designed for application of AMISTAR as an in furrow treatment in potato crops	To increase deposition on plants when nozzle direction alternated forward and backwards along the boom.	Angled tip to increase deposition on hard to hit targets.	Creates the most drops per litre of any Air Induction nozzle	Designed to apply water volumes of 300l/ha	Designed to apply water volumes of 400l/ha
Front and rear hollow cone nozzles are designed with different spray patterns to improve deposition of spray droplets for soil application	Angled nozzle tip to improve coverage on lower leaves	Provides up to 2 times the spray deposition of other nozzles	Angled tip to increase deposition of chemical on the target	Designed to slow down droplet speed and improve deposition on the target crop	Designed to slow down droplet speed and improve deposition on the target crop
Designed to be easily cleaned	Can also be inserted with angle facing forward to reduce the potential for drift	Can be inserted with angle facing forward to reduce the potential for drift	Ideal where low water volumes are required	Improved crop penetration to deliver enhanced disease and pest control.	
Reduced risk of blockages	Ideal where high water volumes are required	Ideal for grass selective herbicides			
Designed for use with the SC formulation of AMISTAR	Holds the pattern down to 1 bar	Holds the pattern down to 1 bar	Holds the pattern down to 1 bar		

There's a big plus in choosing Syngenta for your crop protection with Syngenta **PRODUCT PLUS**. Purchase specific Syngenta products and you can receive the latest technology in spray application to help you get the best results when applying the extensive range of Syngenta products.

An exciting part of PRODUCT PLUS is the Syngenta spray nozzle range. It is a result of extensive research and development in nozzle technology that compliments the Syngenta range of fungicides, insecticides and herbicides. Developed exclusively by Hypro EU Ltd (previously Lumark) for Syngenta UK and Australia under stringent quality standards.

You have trusted Syngenta products to deliver you a clean and healthy crop, now you have a specifically designed range of nozzles to help you improve the application of the Syngenta product range.

## Syngenta HAWK Nozzle

VP 11003

Nozzle tip is angled at 40°



## APPLICATION CHART

Pressure	Flow (L/min)	Application rate L/ha @ km/h (50 cm nozzle spacing)						
		5	6	8	10	12	14	
1	14.5	0.68	163	136	102	82	68	58
2	29	0.96	230	192	144	115	96	82
3	43.5	1.18	283	236	177	142	118	101
4	58	1.36	326	272	204	163	136	117
5	72.5	1.52	365	304	228	182	152	130

■ Ideal operating parameter ■ Good operating parameter

## Syngenta Air Induction 110025 Nozzle

VPAI 110025 (AI = Air Induction)

Nozzle tip is angled at 10°



## APPLICATION CHART

Pressure	Flow (L/min)	Application rate L/ha @ km/h (50 cm nozzle spacing)						
		5	6	8	10	12	14	
1	14.5	0.57	137	114	86	68	57	49
2	29	0.81	194	162	122	97	81	69
3	43.5	0.99	238	198	149	119	99	85
4	58	1.14	274	228	171	137	114	98
5	72.5	1.28	307	256	192	154	128	110

■ Ideal operating parameter ■ Good operating parameter

## Nozzle Benefits

- Creates the most drops per litre of any AI nozzle
- Holds the spray pattern down to 1 bar
- 10° spray tip angle to increase deposition of product on the target area
- Will fit in standard flat fan bayonet caps
- Ideal where low water volumes are required.

## Recommended Crops

- Vegetable crops including Brassicac, Carrots and Lettuce.

## Directions for use

For best results in the recommended vegetable crops mount the nozzles alternately forward and backward along the boom.

## Additional directions for Cabbages

- During the early stages of crop development, use low water volumes (100 l/ha) with the AI nozzle
- As the crop develops further, raise the water volume up to 800 L/ha using a vertical flat fan nozzle (110° or 65° work well).
- Using a nozzle spacing of 25cm enables volumes to be increased without using coarse jets

## Nozzle Benefits

- Holds the spray pattern down to 1 bar
- 40° spray tip angle to increase deposition of product on hard to hit target areas
- Will fit in standard flat fan bayonet caps
- Ideal for use with hard to hit grass weeds.
- Can also be used with pre emergent soil applied products with a cloddy seed bed.
- To reduce the potential for drift insert with the angle facing forward.

## Recommended Crops

- Vegetable crops including Onions and leeks plus grass weeds and pre emergent applications

## Directions for use

- For best results in the recommended vegetable crops mount the nozzles alternately forward and backward along the boom.
- Optimum working pressure 2.0 Bar
- Recommend a filter mesh size = 50
- Position the boom height 0.4 m above crop.

## Additional directions for Onions and Leeks

- During the early stages of crop development, use low water volumes (100 l/ha), alternating the HAWK nozzle forwards and backwards along the boom.

## Syngenta PRODUCT PLUS Request Form

Date: \_\_\_\_\_

Grower  Distributor  Distributor Agronomist  Crop Consultant Other (please specify): \_\_\_\_\_

Title: \_\_\_\_\_ First Name: \_\_\_\_\_ Last Name: \_\_\_\_\_

Job Title: \_\_\_\_\_ Company: \_\_\_\_\_

Address: \_\_\_\_\_

Town: \_\_\_\_\_ State: \_\_\_\_\_ Postcode: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ Mobile: \_\_\_\_\_

Email Address: \_\_\_\_\_  I agree that Syngenta can send me alerts via SMS  I agree that Syngenta can send me information via email

Crops grown: \_\_\_\_\_ Total hectares: \_\_\_\_\_

Preferred Distributor (if applicable): \_\_\_\_\_

Please return this completed Request Form along with your proof of purchase to the value of \$10,000 to your Territory Sales Manager, post or fax to Attn: Jan Venn-Brown, PRODUCT PLUS | Phone (02) 8876 8466 | Fax – 1800 654 095 Post: Reply Paid 886 NORTH RYDE BC NSW 1670

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## Syngenta Potato Nozzle

XR11004  
Nozzle tip is angled at 30°



### APPLICATION CHART

Pressure Bar	PSI	Flow (L/min)	Application rate L/ha @ km/h (50 cm nozzle spacing)					
			5	6	8	10	12	14
1	14.5	0.91	218	182	137	109	91	78
2	29	1.29	310	258	194	155	129	111
3	43.5	1.58	379	316	237	190	158	135
4	58	1.82	437	364	273	218	182	156
5	72.5	2.04	490	408	306	245	204	175

■ Ideal operating parameter ■ Good operating parameter

### Nozzle Benefits

- Ideal where high water volumes are required to improve coverage
- 30° spray tip angle designed to improve coverage on the lower leaves of the target crop, ie pre-row closure in potatoes
- Holds the spray pattern down to 1 bar
- Will fit in standard flat fan bayonet caps
- To reduce the potential for drift insert with the angle facing forward.

### Recommended Crops

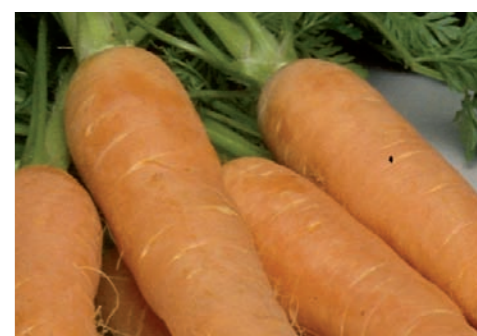
- Vegetable crops including Potatoes, Onions and Leeks.

### Directions for use

- For best results in the recommended vegetable crops mount the nozzles alternately forward and backward along the boom at 50 cm spacings
- Best performance will be obtained by applying products in 200 l/ha at 3 bar pressure under ideal conditions. Forward speed and pressure may be reduced for drift control in marginal conditions.
- Recommend a filter mesh size = 50
- Position the boom height 0.4 m above crop.

### Additional directions for Onions

- During the early stages of crop development, use low water volumes (100 l/ha), alternating the HAWK or Potato nozzle forwards and backwards along the boom.
- The Potato nozzle is recommended if higher water rates are required.



## Syngenta AMISTAR In-Furrow Nozzle Set

Hollow cone

: AZ IF 20-124 is a 20° spray angle (front)  
: AZ IF 70-124 is a 70° spray angle (rear)



### APPLICATION CHART

Pressure		Flow (L/min)
Bar	PSI	
1	14.5	0.286
2	29	0.405
3	43.5	0.496
4	58	0.573
5	72.5	0.641

■ Ideal operating parameter ■ Good operating parameter

### Nozzle Benefits

- Designed specifically for use with the SC formulation of AMISTAR
- Can be easily cleaned
- Designed to reduce the risk of blockages
- Will fit in standard hollow cone bayonet caps

### Recommended Crops

- AMISTAR In furrow soil application for Potato crops for the control of Black scurf (*Rhizoctonia solani*) and the suppression of Silver scurf.

### Directions for use

- The Syngenta AMISTAR In Furrow nozzle comes in a pack of two nozzles, for the best results the nozzles should be fitted to the potato planter in the following way:
  - Fit the longer 20° angle nozzle (AZ IF 20-124) to the front of the potato planter, to cover soil as the furrow is opened
  - The shorter 70° angle nozzle (AZ IF 70-124) should be fitted to the rear of the potato planter to spray soil as it falls back into the furrow.
- DO NOT fit nozzle filters to the nozzles

## Syngenta Vegetable 65-06 Nozzle

Flat Fan 65-06

Nozzle spray pattern at 65° C



### APPLICATION CHART

Pressure Bar	PSI	Flow (L/min)	Application rate L/ha @ km/h (50 cm nozzle spacing)					
			5	6	8	10	12	14
1	14.5	1.36	326	272	204	163	136	117
2	29	1.92	461	384	288	230	192	165
3	43.5	2.36	566	472	354	283	236	202
4	58	2.72	653	544	408	326	272	233
5	72.5	3.04	730	608	456	365	304	261

■ Ideal operating parameter ■ Good operating parameter

### Nozzle Benefits

- Designed to apply water volumes of 300 L/ha at 10 km/hr to improve coverage
- 65° spray pattern slows down the droplet speed to improve deposition into the crown of the crop
- Will fit in standard flat fan bayonet caps
- Can also be used for post emergent soil applied herbicides

### Recommended Crops

- Vegetable crops including Brassicas, Carrots and Lettuce crops

### Directions for use

- For best results in the recommended vegetable crops mount the nozzles alternatively forward and backward along the boom.
- Space the nozzles 50cm apart along the boom.
- When used for post emergent soil applied herbicides the narrow spray angle reduces the spray retained on the leaves and maximises the spray reaching the soil.

## Syngenta Vegetable 65-08 Nozzle

Flat Fan 65-08

Nozzle spray pattern at 65° C



### APPLICATION CHART

Pressure Bar	PSI	Flow (L/min)	Application rate L/ha @ km/h (50 cm nozzle spacing)					
			5	6	8	10	12	14
1	14.5	1.82	437	364	273	218	182	156
2	29	2.58	619	516	387	310	258	221
3	43.5	3.16	758	632	474	379	316	271
4	58	3.64	874	728	546	437	364	312
5	72.5	4.08	979	816	612	490	408	350

■ Ideal operating parameter ■ Good operating parameter

### Nozzle Benefits

- Designed to apply water volumes of 400 L/ha at 10 km/hr to improve coverage
- 65° spray pattern slows down the droplet speed to improve deposition into the crown of the crop
- Will fit in standard flat fan bayonet caps
- Can also be used for post emergent soil applied herbicides

### Recommended Crops

- Vegetable crops including Brassicas, Carrots and Lettuce crops

### Directions for use

- For best results in the recommended vegetable crops mount the nozzles alternately forward and backward along the boom.
- Space the nozzles 50cm apart along the boom.
- When used for post emergent soil applied herbicides the narrow spray angle reduces the spray retained on the leaves and maximises the spray reaching the soil.

To access the exclusive Syngenta nozzle range in the **PRODUCT PLUS** package please visit the Syngenta website at [www.syngenta.com.au](http://www.syngenta.com.au) and go to the **PRODUCT PLUS** page or contact your local Syngenta Territory Sales Manager.