

Precede Canola on Wheat / Barley / Oats - G3 Applicator**Applied @ 300 mL/100 kg Seed****D8 Disc / #25 Core / 16 Mesh Strainer**

Apr. 29, 2013

Wheat - @ 81.6 mL / bu (300 mL / 100 kg)		G3 calibration - Precede Canola on Wheat		
		D8 Disc / #25 Core		
		Wheat	Chemical Flow	
bu / min	mL / min		Pressure	D8 Disc / #25 Core
		bu / min	p.s.i.	mL / min
12	979	14.0	10	1144
14	1142	16.8	15	1367
16	1306	19.2	20	1564
18	1469	20.7	25	1693
20	1632	22.6	30	1845
22	1795			

Recommended wheat seed flow range - 17 to 21 bushels per minute

Barley @ 65.3 mL / bu (300 mL / 100 kg)		G3 calibration - Precede Canola on Barley		
		D8 Disc / #25 Core		
		Barley	Chemical Flow	
bu / min	mL / min		Pressure	D8 Disc / #25 Core
		bu / min	p.s.i.	mL / min
16	1045	17.5	10	1144
18	1175	20.9	15	1367
20	1306	24.0	20	1564
22	1437	25.9	25	1693
24	1567	28.3	30	1845
26	1698			
28	1828			

Recommended barley seed flow range - 18 to 24 bushels per minute

Oats @ 46.3 mL / bu (300 mL / 100 kg)		G3 calibration - Precede Canola on Oats		
		D8 Disc / #25 Core		
		Oats	Chemical Flow	
bu / min	mL / min		Pressure	D8 Disc / #25 Core
		bu / min	p.s.i.	mL / min
22	1019	24.7	10	1144
24	1111	29.5	15	1367
26	1204	33.8	20	1564
28	1296			
30	1389			
32	1482			
34	1700			

Notes**Check with your product supplier for chemical compatibility or crop suitability.**Thoroughly agitate **Precede Canola** using a slurry mixer or by circulating before applying.

Settling can occur between uses.

Make sure nozzle used is - D8 Disc / #25 Core / 16 Mesh Strainer

Close shutoff valves and keep air out of system between applications.

Vibrance XL mixed with PreCede Cereal on Wheat / Barley

Calibration for Wheat / Barley - G40 Applicator

Nozzle used - D16 Disc / #45 Core / 16 Mesh Strainer

Mix component application rates

Applied Slurry volumes

Mar. 25, 2014

Vibrance XL - 180 mL / 100 Kg

Wheat - 131 mL / bu

PreCede Cereal - 300 mL / 100 Kg

Barley - 105 mL / bu

Total Slurry - 480 mL / 100 Kg

Slurry Mix Chart

Component Volumes Required			Bushels Treated	
Vibrance XL	PreCede Cereal	Slurry	Wheat	Barley
Liters	Liters	Liters	bu	bu
5.54	9.2	14.8	113	141
11.08	18.5	29.5	225	281
16.62	27.7	44.3	338	422
22.16	36.9	59.1	451	563
27.70	46.1	73.8	564	703
33.24	55.4	88.6	676	844
38.78	64.6	103.4	789	985
44.32	73.8	118.2	902	1125
49.86	83.1	132.9	1015	1266
55.40	92.3	147.7	1127	1407

G40 Pressure Calibration Table

G40 Pressure Calibration Table

Vibrance XL + PreCede Cereal on Wheat

Vibrance XL + PreCede Cereal on Barley

D16 Disc / #45 Core / 16 Mesh Strainer

D16 Disc / #45 Core / 16 Mesh Strainer

Seed Rate	Slurry		Seed Rate	Slurry	
	Pressure	Volume		Pressure	Volume
bu / min	p.s.i.	mL / min	bu / min	p.s.i.	mL / min
14.5	10	1898	18.1	10	1898
20.0	15	2619	24.9	15	2619
24.3	20	3184	30.3	20	3184
28.0	25	3667	34.9	25	3667
31.4	30	4111	39.2	30	4111
34.0	35	4451	42.4	35	4451
36.6	40	4793	45.6	40	4793

Wheat - 131 mL/bu slurry volume

Barley - 105 mL/bu slurry volume

Notes

This mixture was tested for flow calibration only.

Check with your product supplier for chemical compatibility or crop suitability.

Thoroughly agitate slurry before pumping; settling can occur between uses.

Close shutoff valves and keep air out of system between applications.

Make sure nozzle used is - D16 Disc / #45 Core / 16 Mesh Strainer

Flows will vary depending on temperature, and the size and length of the discharge tubing.

Clean up with water after extended use.

Trilex Evergol mixed with PreCede Pulse

Calibration for Pulse Seed - G40 Applicator

Nozzle used - D10 Disc / #45 Core / 16 Mesh Strainer (G40 Standard Nozzle Kit)

Mix Component Application Rates	Applied Slurry Volumes	Mar. 25, 2014
PreCede Pulse - 300 mL / 100 Kg	Pulse Seed - 92.8 mL / bu	
Component A - 25 mL / 100 Kg		
Component B - 16 mL / 100 Kg		
Total Slurry - 341 mL / 100 Kg		

Slurry Mix Chart

Component Volumes Required				Bushels Treated		
PreCede Pulse	Component A	Component B	Slurry		Pulse Seed	
Liters					bu	
10	0.83	0.53	11.4		122	
20	1.7	1.06	22.7		245	
30	2.5	1.59	34.1		367	
40	3.3	2.12	45.4		490	
50	4.2	2.65	56.8		612	
60	5.0	3.18	68.2		734	
70	5.8	3.71	79.5		857	
80	6.6	4.24	90.9		979	
90	7.5	4.77	102.2		1102	
100	8.3	5.30	113.6		1224	

G40 Pressure Calibration Table

Trilex Evergol + PreCede Pulse

D10 Disc / #45 Core / 16 Mesh Strainer

Seed	Slurry				
Rate	Pressure	Volume			
bu / min	p.s.i.	mL / min			
21.3	10	1977			
25.7	15	2386			
30.0	20	2783			
34.1	25	3166			
37.5	30	3476			
40.4	35	3746			
43.1	40	3998			

Pulse Seed - 92.8 mL/bu slurry volume

Notes

- Make sure nozzle assembly is D10 Disc / #45 Core / 16 mesh strainer.**
- Thoroughly agitate using a slurry mixer or by circulating before applying.**
- Settling can occur between uses.**
- Close shutoff valves and keep air out of system between applications.**
- Clean up with water after extended use.**

Raxil PRO mixed with PreCede Cereal on Wheat / Barley**Calibration for Wheat / Barley - G40 Applicator****Nozzle used - D16 Disc / #45 Core / 16 Mesh Strainer**

Mix component application rates	Applied Slurry volumes	Mar. 24, 2014
Raxil PRO - 325 mL / 100 Kg	Wheat - 170 mL / bu	
PreCede Cereal - 300 mL / 100 Kg	Barley - 136 mL / bu	
Total Slurry - 625 mL / 100 Kg		

Slurry Mix Chart

Component Volumes Required			Bushels Treated	
Raxil PRO	PreCede Cereal	Slurry	Wheat	Barley
Liters	Liters	Liters	bu	bu
10.0	9.2	19.2	113	141
20.0	18.5	38.5	226	283
30.0	27.7	57.7	339	424
40.0	36.9	76.9	452	566
50.0	46.2	96.2	566	707
60.0	55.4	115.4	679	848
70.0	64.6	134.6	792	990
80.0	73.8	153.8	905	1131
90.0	83.1	173.1	1018	1273
100.0	92.3	192.3	1131	1414

G40 Pressure Calibration Table**G40 Pressure Calibration Table**

Raxil PRO + PreCede Cereal on Wheat

Raxil PRO + PreCede Cereal on Barley

D16 Disc / #45 Core / 16 Mesh Strainer**D16 Disc / #45 Core / 16 Mesh Strainer**

Seed	Slurry		Seed	Slurry	
Rate	Pressure	Volume	Rate	Pressure	Volume
bu / min	p.s.i.	mL / min	bu / min	p.s.i.	mL / min
15.9	10	2696	19.8	10	2696
19.7	15	3354	24.7	15	3354
22.7	20	3867	28.4	20	3867
25.3	25	4308	31.7	25	4308
28.2	30	4792	35.2	30	4792
30.4	35	5175	38.1	35	5175
32.7	40	5554	40.8	40	5554

Wheat - 170 mL/bu slurry volume

Barley - 136 mL/bu slurry volume

Notes**This mixture was tested for flow calibration only.****Check with your product supplier for chemical compatibility or crop suitability.**

Thoroughly agitate slurry before pumping; settling can occur between uses.

Close shutoff valves and keep air out of system between applications.

Make sure nozzle used is - D16 Disc / #45 Core / 16 Mesh Strainer**Flows will vary depending on temperature, and the size and length of the discharge tubing.**

Clean up with water after extended use.

PreCede Cereal (2014) on Wheat / Barley / Oats - G40 Applicator**Applied @ 300 mL/100 kg Seed****D10 Disc / #45 Core / 16 Mesh Strainer (G40 Standard Nozzle Kit)**

Mar. 24, 2014

Wheat - @ 81.6 mL / bu (300 mL / 100 kg)		G40 calibration - PreCede Cereal on Wheat		
		D10 Disc / #45 Core		
		Wheat	Chemical Flow	
bu / min	mL / min		Pressure	D10 Disc / #45 Core
		bu / min	p.s.i.	mL / min
22	1795	23.1	10	1884
26	2122	28.0	15	2286
30	2448	32.4	20	2641
34	2774	36.1	25	2946
38	3101	39.3	30	3207
42	3427	41.9	35	3420
46	3754	44.4	40	3623

Barley @ 65.3 mL / bu (300 mL / 100 kg)		G40 calibration - PreCede Cereal on Barley		
		D10 Disc / #45 Core		
		Barley	Chemical Flow	
bu / min	mL / min		Pressure	D10 Disc / #45 Core
		bu / min	p.s.i.	mL / min
26	1698	28.9	10	1884
30	1959	35.0	15	2286
34	2220	40.4	20	2641
38	2481	45.1	25	2946
42	2743	49.1	30	3207
46	3004	52.4	35	3420
50	3265	55.5	40	3623
54	3526			

Oats @ 46.3 mL / bu (300 mL / 100 kg)		G40 calibration - PreCede Cereal on Oats		
		D10 Disc / #45 Core		
		Oats	Chemical Flow	
bu / min	mL / min		Pressure	D10 Disc / #45 Core
		bu / min	p.s.i.	mL / min
38	1759	40.7	10	1884
42	1945	49.4	15	2286
46	2130	57.0	20	2641
50	2315	63.6	25	2946
54	2500	69.3	30	3207
58	2685			
62	2871			
66	3056			

Notes**Check with your product supplier for chemical compatibility or crop suitability.****Thoroughly agitate PreCede Cereal using a slurry mixer or by circulating before applying.****Settling can occur between uses.****Make sure nozzle used is - D10 Disc / #45 Core / 16 Mesh Strainer****Close shutoff valves and keep air out of system between applications.**

Apron Maxx RTA mixed with PreCede Pulse

Calibration for Pulse Seed - G40 Applicator

Nozzle used - D16 Disc / #45 Core / 16 Mesh Strainer

Mix Component Application Rates	Applied Slurry Volumes	Mar. 25, 2014
Apron Maxx RTA - 325 mL / 100 Kg	Pulse Seed - 170 mL / bu	
PreCede Pulse - 300 mL / 100 Kg		
Total Slurry - 625 mL / 100 Kg		

Slurry Mix Chart

Component Volumes Required			Bushels Treated	
Apron Maxx RTA	PreCede Pulse	Slurry		Pulse Seed
Liters				bu
10	9.23	19.2		113
20	18.46	38.5		226
30	27.69	57.7		339
40	36.92	76.9		452
50	46.15	96.2		566
60	55.38	115.4		679
70	64.61	134.6		792
80	73.84	153.8		905
90	83.07	173.1		1018
100	92.30	192.3		1131

G40 Pressure Calibration Table

Apron Maxx RTA + PreCede Pulse

D16 Disc / #45 Core / 16 Mesh Strainer

Seed Rate	Slurry	
	Pressure	Volume
bu / min	p.s.i.	mL / min
17.1	10	2913
21.2	15	3609
24.7	20	4199
27.7	25	4712
30.4	30	5174
32.7	35	5558
35.3	40	5997

Pulse Seed - 170 mL/bu slurry volume

Notes

Make sure nozzle assembly is D16 Disc / #45 Core / 16 mesh strainer.

Thoroughly agitate using a slurry mixer or by circulating before applying.

Settling can occur between uses.

Close shutoff valves and keep air out of system between applications.

Clean up with water after extended use.

Insure Seed Treatment mixed with Precede Cereal on Wheat / Barley

Calibration for Wheat / Barley - G3 Applicator

Nozzle used - D10 Disc / #45 Core / 16 Mesh Strainer

Mix component application rates	Applied Slurry volumes	Apr. 30, 2013
Insure Seed Treatment - 300 mL / 100 Kg	Wheat - 163 mL/bu	
Precede Corn - 300 mL / 100 Kg	Barley - 131 mL / bu	
Total Slurry - 600 mL / 100 Kg		

Slurry Mix Chart

Component Volumes Required			Bushels Treated		
Insure Seed Treatment	Precede Corn	Slurry	Wheat	Barley	
Liters	Liters	Liters	bu	bu	
10.0	10.0	20.0	123	153	
20.0	20.0	40.0	245	305	
30.0	30.0	60.0	368	458	
40.0	40.0	80.0	491	611	
50.0	50.0	100.0	613	763	
60.0	60.0	120.0	736	916	
70.0	70.0	140.0	859	1069	
80.0	80.0	160.0	982	1221	
90.0	90.0	180.0	1104	1374	
100.0	100.0	200.0	1227	1527	

G3 Pressure Calibration Table

G3 Pressure Calibration Table

Insure Seed Treatment + Precede Corn on Wheat

Insure Seed Treatment + Precede Corn on Barley

D10 Disc / #45 Core / 16 Mesh Strainer

D10 Disc / #45 Core / 16 Mesh Strainer

Seed Rate	Slurry		Seed Rate	Slurry	
	Pressure	Volume		Pressure	Volume
bu / min	p.s.i.	mL / min	bu / min	p.s.i.	mL / min
12.2	10	1996	15.2	10	1996
14.9	15	2435	18.6	15	2435
17.2	20	2805	21.4	20	2805
19.2	25	3130	23.9	25	3130
20.9	30	3411	26.0	30	3411
22.6	35	3679	28.1	35	3679
23.8	40	3878	29.6	40	3878

Wheat - 163 mL/bu slurry volume

Barley - 131 mL/bu slurry volume

Notes

This mixture was tested for flow calibration only.

Check with your product supplier for chemical compatibility or crop suitability.

Thoroughly agitate slurry before pumping; settling can occur between uses.

Close shutoff valves and keep air out of system between applications.

Make sure nozzle used is - D10 Disc / #45 Core / 16 Mesh Strainer

Flows will vary depending on temperature, and the size and length of the discharge tubing.

Clean up with water after extended use.