

# VAULT® NP Extender

## *Liquid Pre-Inoculant Extender for Soybeans*

VAULT® NP Extender is an easy-to-use additive formulated for use with VAULT NP soybean inoculant.

VAULT NP Extender should be applied with VAULT NP inoculant by a dealer/retailer through a commercial seed treater. It is not intended for on-farm application.

Apply VAULT NP inoculant and VAULT NP Extender before planting for the following advantages:

- Custom application of the inoculant adds convenience to growers.
- Eliminates expensive returns in season.
- Inoculating in advance aids inventory management at retail location.
- Custom application margins improve retailers' bottom line.
- Retailers can now apply both inoculant and fungicide treatment.
- Applying with various seed treatments extends time before planting.

### **Precautions**

Inoculants are live organisms. Store between 40°-77°F (4°-25°C), away from direct sunlight. Do not allow product to freeze. For more uniform temperature control, store at floor level. Ensure that inoculant is stored correctly in the field prior to use. Once opened, use within 24 hours. Plant seed immediately after inoculation. Protect inoculated seed from direct sunlight, high temperatures, and hot winds. Do not use inoculant that is past its expiration date or that has not been correctly stored. Unless otherwise directed, do not mix inoculant with fertilizers or pesticides. If soils are especially dry at planting, any risk of damage to the inoculant can be minimized through light irrigation, when available. Under adverse or stress planting conditions (hot, dry field conditions), it is suggested to increase the inoculant application rate.

### **Seed Treatment Compatibility**

Some seed treatments can be harmful to inoculants. Contact your dealer/manufacturer or visit our web site at [www.beckerunderwood.com](http://www.beckerunderwood.com) for details. Please observe planting window recommendations for optimal responses.

### **Direction for Use**

- 74 fl. oz. of VAULT NP Extender combined with 12.5 L of VAULT NP inoculant treats 10,000 lbs. of seed
- 18.4 fl. oz. of VAULT NP Extender combined with 3.11 L of inoculant treats 2,500 lbs. of seed
- The amount that is mixed together is limited only by the size of the treater's mix tank.
- Mix VAULT NP Extender with VAULT NP in the mix tank or any such container in which thorough mixing can be accomplished.
- Continued agitation is recommended during mixing and application.
- When water is used for dilution, always use chlorine free water.
- Wet Sequential: Seed treatment is applied to the seed and inoculant is applied immediately after the seed treatment before it dries.
- Dry Sequential: Seed treatment is applied to the seed and allowed to dry on the seed before the inoculant is applied to the seed.

*\*NOTE: If seed is not planted within the time frames above, the seed must be re-inoculated.*

## Directions for Use Continued

### • Bulk Seed Application

- If the VAULT NP inoculant is to be applied directly to soybeans from the bladder...
  1. Remove bladder from the original carton.
  2. Remove cap from bladder. Replace with applicator flow valve. Before inverting bladder, position flow valve to “off” position.
  3. Using the open “S” hook (included in applicator kit), suspend bladder above treating area so end of hose is just above the seed (ensure hose is straight when dispensing inoculant for accuracy). Refer to VAULT NP label for complete details.
- Adjust flow valve to match output of seed auger (see table below).
- To ensure adequate mixing of seed and inoculant it is recommended to run auger at 50% capacity.
- Assess the application rate several times during inoculation to ensure correct target flow rate.

VAULT NP Extender product (packaged and sold separately) can be used with VAULT NP inoculant to extend shelf life. ONLY use VAULT NP Extender with VAULT NP liquid soybean inoculant! USE PROPER APPLICATION EQUIPMENT. Contact your distributor/retailer for additional information.

- Use the calibration tube (found in VAULT NP case) to add 18.4 fl. oz. of VAULT NP Extender per 3.1 L (0.82 gal.) of VAULT NP inoculant. Add 73.6 fl. oz. when using 12.5 L (3.3 gal.) of VAULT NP inoculant. Mix products in a treater tank to achieve thorough mixing. Use a seed treater with adequate bypass agitation or mechanical agitation.
- Combine 3.1 L of VAULT NP with 18.4 fl. oz. of VAULT NP Extender to treat 2,500 lbs. of seed.
- Combine 12.5 L of VAULT NP with 73.6 fl. oz. of VAULT NP Extender to treat 10,000 lbs. of seed.
- The amount of VAULT NP and VAULT NP Extender that can be combined is limited only by the mix tank size. Mix only as much as can be used in one 24 hour period. Continuous agitation is recommended throughout the mixing and application process. Apply mixture to seed at the rate of 4.94 fl. oz./cwt. If applied with seed treatments, please refer to the seed treatment product manufacturer for appropriate application recommendations.

FLOW VALVE SETTING	FLOW RATE		APPROXIMATE SEED / AUGER FLOW RATE			
	mL / min.	fl. oz. / min.			Approximate Units	
			kg / min.	lbs. / min.	Bu / min.	50 lbs. / min.
1	360	12	131	286	5	6
2	860	29	313	690	11	14
3	1340	45	487	1071	18	21
4	1660	56	604	1333	22	27
5	1780	60	647	1428	24	28
6	2030	68	738	1619	27	32

FLOW VALVE SETTING	FLOW RATE		APPROXIMATE SEED / AUGER FLOW RATE			
	mL / min.	fl. oz. / min.			Approximate Units	
			kg / min.	lbs. / min.	Bu / min.	50 lbs. / min.
1	360	12	111	243	1	5
2	860	29	266	587	10	12
3	1340	45	414	911	15	18
4	1660	56	513	1133	19	22
5	1780	60	550	1214	20	24
6	2030	68	627	1376	23	27

### • In-Furrow Application

- The concentrate must be diluted with cool, clean, dechlorinated water and applied as indicated in the following instructions.
- Dilute in as much water as possible: 10-20 gal. per acre is recommended. Place diluted inoculant in seed furrow and cover.
- For guidance regarding specific application details and treatable areas, refer to the In-Furrow Application Table below.

ROW WIDTH	VAULT NP RATE		VAULT NP INOCULANT			
	fl. oz. / ac	mL / ha	3.1 L		12.5 L	
			acres	hectares	acres	hectares
15 in. (38 cm)	32	2560	3	1.2	12	4.8
20 in. (51 cm)	26	1900	4	1.6	16	6.5
30 in. (76 cm)	17	1240	6	2.4	24.1	9.7
36 in. (91 cm)	15	1100	7.2	2.9	28.9	11.7

1 oz. concentrate treats 1,000 linear ft of row

0.82 gal. = 105 fl. oz. = 3.1 L / 3.3 gal. = 422 fl. oz. = 12.5 L