Cell-Tech®

Single-Action Legume Fertility

pea, lentil, soybean

W. CANADA

Single-action fertility

Cell-Tech® is a superior single-action inoculant that contains a naturally occurring bacteria that fixes nitrogen from the air, making it available for the plant to use. It is best used when nitrogen is required, but when phosphate levels are high and full starter phosphate fertilizer rates are still used. If a single-action inoculant is all that is needed, Cell-Tech is a wise choice.

If phosphate is limited, Cell-Tech can be applied at the same time as JumpStart®, the phosphate inoculant, for improved phosphate uptake.

Cell-Tech® is available in the following formulations

Crop	Inoculant species	Cell-Tech formulations available
Pea, lentil	*Rhizobium leguminosarum*	Peat, non-sterile peat and granular
Pea	*Rhizobium leguminosarum*	Liquid
Soybean	*Bradyrhizobium japonicum*	Liquid, peat and granular

Note: Cell-Tech peat, non-sterile peat and liquid inoculants are not registered or recommended for use on faba beans.

Cell-Tech® application

Peat application

Cell-Tech peat has its own sticker in the formulation so no additional stickers are required. Apply Cell-Tech dry or apply to premoistened seed, add water while applying Cell-Tech, or mix with cool, clean water and apply to seed as a slurry (refer to the peat application rates table). Make sure that the inoculated seed is evenly coated. Inoculate bare seed with Cell-Tech peat up to 48 hours before seeding depending on crop.

Peat application rates

Cell-Tech® peat	One 2.2 kg (4.8 lb) bag inoculates			Water
Crop	**Units**	**bu**	**lb**	**litres**
Pea	–	50	3,000	4.0
Lentil	–	30	1,800	2.5
	One 2.32 kg (5.1 lb) bag inoculates			
Soybean	30	25	1,500	

NS (non-sterile) peat application

Cell-Tech NS has its own sticker in the formulation. A separate sticker is not needed. Pour Cell-Tech NS on to seed in the drill box and mix thoroughly until uniformly coated. Layering seed and inoculant while mixing will provide thorough coating of all seeds. Inoculant bare seed with Cell-Tech NS peat up to 48 hours prior to seeding.

NS (non-sterile) peat application rates

Cell-Tech® NS peat	One 2.83 kg (6.2 lb) bag inoculates	
Crop	**bu**	**lb**
Pea	25	1,500
Lentil	25	1,500

Cell-Tech NS is sold in cases of 4 (4 x 2.83 kg bags). Each case treats 100 bushels of peas or lentils.

Liquid application

Pea

Cell-Tech liquid should be applied directly to pea seed at a rate of 2.5 fluid ounces per bushel (60 lb) of seed (75 ml/27 kg) or 2.1 fluid ounces per 50 pounds (63 ml/23 kg). The planting window for Cell-Tech liquid on bare pea seed is 48 hours.

Soybean

Cell-Tech liquid should be applied directly to soybean seed at a rate of 2.1 fluid ounces per 50 pounds (63 ml/23 kg) of seed. The planting window for Cell-Tech liquid on bare soybean seed is four days.

Cell-Tech liquid soybean can be applied in-furrow. Application rates vary according to row spacing. A 50 unit case will treat ~6.5 acres at a 30 inch row spacing.

Cell-Tech® liquid application rates

Cell-Tech® liquid	Bag size	One bag inoculates		
Crop	**litres**	**Units**	**bu**	**lb**
Pea	3.0	–	40.0	2,400
	9.8	–	130.0	7,840
Soybean	3.1	50	41.7	2,502
	12.5	200	167.0	10,000

Granular application

Cell-Tech granular should be applied directly with the seed in the seed row using a granular tank for application. Application rates vary according to row spacing (refer to granular application rates table). Fill the tank to match or slightly exceed seed requirements. Do not overfill the tank as to avoid compaction.

- Pour into tank through a screen
- If augering – please do so at low speeds to avoid damage to the granular products
- Do NOT mix Cell-Tech in the same tank with seed or fertilizer
- Do NOT leave Cell-Tech granular in the tank overnight as condensation can cause lumps to form

Cell-Tech® granular application rates

Crop type	Cell-Tech pea/lentil			Cell-Tech soybean		
Package size	**Rate**	**Acre treated/bag**		**Rate**	**Acre treated/bag**	
Row spacing	**lb/ac**	**18 kg**	**454 kg**	**lb/ac**	**18 kg**	**454 kg**
7 in	6.5	6.2	153.8	6.2	6.5	162.6
8 in				5.4	7.4	187.1
9 in	5.1	7.8	196.1	4.7	8.5	211.8
10 in				4.3	9.3	233.8
12 in	3.8	10.5	263.2	3.6	11.1	280.5
15 in	3.0	13.3	333.3	2.9	13.8	350.6
24 in				1.8	22.2	560.9
30 in				1.4	28.6	701.2

The bulk density of Cell-Tech pea/lentil granular is 38 lb/cu ft (0.6 g/cm^3).
The bulk density of Cell-Tech soybean granular is 43 lb/ft^3 (0.7g/cm^3).

Cell-Tech can be used with many different seed treatments, but planting windows may vary according to type of seed treated and seed treatment used.

Visit www.bioag.novozymes.com for the most up-to-date seed treatment compatibility information or call toll-free at 1-888-744-5662.

If you need more information or have questions regarding Cell-Tech, contact Novozymes BioAg toll-free at 1-888-744-5662 or visit our website at www.useCellTech.ca.

Novozymes is the world leader in bioinnovation. Together with customers across a broad array of industries we create tomorrow's industrial biosolutions, improving our customers' business and the use of our planet's resources. Read more at www.novozymes.com.

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