



Seed treatment compatibility and planting window guide

Note to commercial seed treaters

Please use the treatment date and planting window (days on seed) information in this guide to determine the appropriate “not claimed effective after” date to include on the seed bag tag. The planting window is not impacted by the expiration date of the bio-enhancer, as long as the bio-enhancer is applied on or before its expiration or “treat by” date.

Definitions

Expiration date

Some products have an expiration date on the outside of the product package. This is the “treat by” date that applicators use to determine if they should apply a product. The expiration date does not change the planting window dates for a product. Example: A product has an expiration date of “March 2020”. This product may be applied any time before the last day of March 2020 and the product will remain viable on seed for a period of time known as the planting window.

Planting window

The maximum amount of time that can elapse between the date the seed was treated with a bio-enhancer and when it can be planted with an expectation that the bio-enhancer will remain viable.

Simultaneous application

The application of a bio-enhancer and a chemical seed treatment product, commonly fungicides and insecticides, applied at the same time. When using simultaneous application, the products come into contact with each other only at the moment of application to the seeds.

Sequential application

The application of a bio-enhancer to seeds that have been previously treated with a chemical seed treatment product that is allowed to dry prior to the application of the bio-enhancer.

Tank mix application

The application of a mixture of a bio-enhancer and chemical seed treatment product after they are mixed in a common tank. This is the least preferred method because it may result in prolonged exposure of living organisms in the bio-enhancer to the chemical seed treatment product in the mix tank, which can negatively impact the viability of the bio-enhancer.

Seed labels/Seed bag tags

Information that is provided to the end user of seeds treated with a biological product. Seed labels and bag tags contain information required by Federal and state laws and may also contain other information to aid farmers in making decisions. An example of required labeling would be a statement such as “not claimed effective after”, followed by a specific date.



Corn			
JumpStart®	Planting Window		
	Sequential	Simultaneous	Tank mix
Advanced Coating® Zn	30 days	30 days	Not Tested
Advanced Coating® Zn + Flo-Rite 1085	30 days	Not Tested	14 days
Apron XL® LS	30 days	Not Tested	Not Tested
Ascend®	60 days	60 days	Not Tested
Avicta® 500FS	60 days	60 days	Not Tested
Avipel®	3 days	3 days	Not Tested
Concur®	30 days	Not Tested	Not Tested
Cruiser® Extreme® Pak	30 days	Not Tested	Not Tested
Cruiser® 5FS (low)	60 days	Not Tested	Not Tested
Cruiser® 5FS (high)	30 days	Not Tested	Not Tested
Dynasty®	30 days	Not Tested	Not Tested
Graphite	2 days	Not Tested	Not Tested
Kernel Guard® Supreme	30 days	Not Tested	Not Tested
Latitude®	30 days	Not Tested	Not Tested
Macho® 600 ST	20 days	15 days	Not Tested
Maxim® XL	30 days	Not Tested	Not Tested
Maxim® XL & Poncho® 250	30 days	Not Tested	Not Tested
Maxim® XL & Poncho® 1250	30 days	Not Tested	Not Tested
Maxim® XL & Cruiser® 5FS (low)	30 days	Not Tested	Not Tested
Maxim® XL & Cruiser® 5FS (high)	30 days	Not Tested	Not Tested
Maxim® XL & Apron XL® LS	30 days	Not Tested	Not Tested
Nitro Shield®	30 days	Not Tested	Not Tested
Poncho® 250	60 days	Not Tested	Not Tested
Poncho® 500	30 days	Not Tested	Not Tested
Poncho® 1250	30 days	Not Tested	Not Tested
Prevail®	30 days	Not Tested	Not Tested
Regent® TS	30 days	Not Tested	Not Tested
Senator® 600 FS	30 days	30 days	Not Tested
Stamina®	30 days	21 days	Not Tested
Stamina® F3 HL	30 days	30 days	Not Tested
Talc	2 days	Not Tested	Not Tested
Trilex® FL	30 days	Not Tested	Not Tested
Vitaflo® 280	4 days	Not Tested	Not Tested
Bare seed		60 days	

Corn			
QuickRoots® Wettable Powder	Planting window (days after application)		
	Sequential application	Simultaneous application	Tank mix
Acceleron™ Seed Applied Solutions for corn (clothianidin rate of 0.25mg / seed)	510 days	510 days	510 days
Acceleron™ Seed Applied Solutions for corn with Poncho®/VOTiVO® (clothianidin rate of 0.50mg / seed)	510 days	510 days	510 days
Acceleron™ Seed Applied Solutions for corn with Poncho®/VOTiVO® 1250 (clothianidin rate of 1.25mg / seed)	540 days	540 days	540 days
CruiserMaxx® Corn 250	400 days	400 days	400 days
Stamina®	350 days	350 days	350 days
Bare seed	540 days		

Application of QuickRoots® Wettable Powder

Do not confuse “Planting window” with “Application Window”. QuickRoots® Wettable Powder is intended to be applied after it has been mixed with a liquid product, either seed treatment chemistry or water alone. Once the powder has been mixed with a liquid, the mixture must be applied to seeds within two hours after a liquid was introduced to the wettable powder. This is the Application Window. Once the treated seeds have dried, the Planting window days begins.

If mixed slurries containing QuickRoots® Wettable Powder are allowed to remain in a mix tank longer than two hours, the remaining mixture should not be used. It is recommended to mix small batches that can easily be used within the two-hour Application Window.

Corn		
QuickRoots® Dry Planter Box	Planting window (days after application)	
	Sequential application	Simultaneous application
Acceleron™ Seed Applied Solutions for corn (clothianidin rate of 0.25mg / seed)	540 days	Not Tested
Acceleron™ Seed Applied Solutions for corn with Poncho®/VOTiVO® (clothianidin rate of 0.50mg / seed)	540 days	Not Tested
Acceleron™ Seed Applied Solutions for corn with Poncho®/VOTiVO® 1250 (clothianidin rate of 1.25mg / seed)	540 days	Not Tested
Bare seed	540 days	

Peanut	
Optimize®	Planting window
	Tank mix
Abound	12 hours
ACA Plus® only	12 hours
Admire® Pro	12 hours
Asset®	12 hours
Asset® NH3	12 hours
Asset® PPS	12 hours
Asset® RS	12 hours
Asset® RTU (1pt – 1qt)	48 hours
Asset® RTU	12 hours
BioMax™ O.C.	48 hours
Black Label® Zn + 10-34-0	8 hours
Energy Max	12 hours
Green Sol GS-48	12 hours
Kickstand® PGR (6oz/ac)	48 hours
Liberate® Ca	12 hours
Loveland Radiant®	48 hours
Radiate®	48 hours
Micro Amp	48 hours
Miller Fertilizer (C.A.F.L.A) 3.0 fl oz	48 hours
Miller Fertilizer (C.A.F.L.A) 6.0 fl oz	Not Recommended
Miller Fertilizer (C.A.F.L.A) 10.0 fl oz	7 hours
NACHURS® imPulse® (10-18-4)	8 hours
NACHURS® 4-13-17-1	48 hours
NACHURS® 6-24-6	48 hours
NACHURS® 9-18-9-1 (0.5 gal)	48 hours
NACHURS® 9-18-9-1 (1.0 gal)	7 hours
NACHURS® 6-22-6-1	48 hours
NutrAsyst® Concentrate only	12 hours
Orthene®	12 hours
PGR IVTM	12 hours
Proline® 480 SC	12 hours
Receptor™ (0.5-1pt/ac)	48 hours
Stimupro	12 hours
Velum® Total	48 hours
Wrangler®	12 hours

Peanut**TagTeam® LCO Peanut Liquid Inoculant**

Velum® Total

48 hours

Recommendation of compatibility made on the basis of product formulation at the time of testing – user assumes all risk. Water used for dilution of Optimize® or preparation of an Optimize® tank mix must be non-chlorinated. Tank mixes with Optimize® must be used within 12 hours. Do not hold tank-mixed materials for later use. Mix only what will be used within a 12-hour time period. Products listed were tested as individual combinations with Optimize®. Multiple product tank mixes are not recommended. Failure to follow these guidelines will invalidate the Optimize® product warranty. A compatible recommendation indicates that the viability of the rhizobia in Optimize® product will not be affected. Compatibility recommendations are based on dilution with water to a minimum of 5 gallon/acre total liquid application rate. Dilution of Optimize® and in-furrow chemicals to less than a 5 gallon/acre rate can lead to incompatibility, and is not recommended.



Pulse crops - chickpea			
JumpStart®	Planting window		
	Sequential	Simultaneous	Tank mix
ApronMaxx® RTA®	30 days	30 days	30 days
Apron® FL	20 days	20 days	Not Tested
Apron XL® LS	7 days	7 days	Not Tested
Crown® & Apron® FL	3 days	3 days	Not Tested
Maxim® 480 FS	15 days	15 days	Not Tested
Stamina®	30 days	30 days	Not Tested
Trilex® AL	30 days	30 days	Not Tested
Bare seed		30 days	

Pulse crops - chickpea			
TagTeam® Peat	Planting window		
	Sequential	Simultaneous	Tank mix
Allegiance® FL	6 hours	6 hours	Not Tested
Allegiance® FL/Crown	6 hours	4 hours	Not Tested
ApronMaxx® RFC	6 hours	6 hours	Not Tested
ApronMaxx® RTA®	6 hours	6 hours	Not Tested
Apron XL® LS	6 hours	Not recommended	Not Tested
Crown®	6 hours	6 hours	Not Tested
CruiserMaxx® Beans	6 hours	6 hours	Not Tested
CruiserMaxx® Vibrance® Pulses	6 hours	6 hours	Not Tested
Intego® Solo + (CruiserMaxx® Vibrance® Pulses)	6 hours	6 hours	Not recommended
Intego® Solo + (ApronMaxx® RTA®)	6 hours	6 hours	Not recommended
Maxim® 4FS	6 hours	6 hours	Not Tested
Mertect® 340-F	4 hours	4 hours	Not Tested
Stamina®	6 hours	6 hours	Not Tested
Trebuset™	6 hours	6 hours	Not Tested
Trilex® AL	4 hours	4 hours	Not Tested
Trilex® AL Concentrate	6 hours	6 hours	Not Tested
Vibrance® Maxx Pulses RTA	6 hours	6 hours	Not Tested
Vibrance® Maxx Pulses RTA + Trebuset™	6 hours	6 hours	Not Tested
Bare seed		6 hours	

Pulse crops - lentil			
Cell-Tech® Liquid	Planting window		
	Sequential	Simultaneous	Tank mix
Allegiance® FL	6 hours	Not Tested	Not Tested
Apron XL® LS	6 hours	6 hours	Not Tested
ApronMaxx® RTA®	4 hours	Not Recommended	Not Tested
CruiserMaxx® Vibrance® Pulses + Trebuset™	48 hours	48 hours	Not Tested
Gaicho® 480	6 hours	6 hours	Not Tested
Intego® Solo + CruiserMaxx® Vibrance® Pulses	Not Recommended	15 days	Not Tested
Maxim® 4FS	6 hours	4 hours	Not Tested
Trebuset™	48 hours	48 hours	Not Tested
Trilex® AL	4 hours	Not Recommended	Not Tested
Vibrance® Maxx Pulses RTA	48 hours	48 hours	Not Tested
Vibrance® Maxx Pulses RTA + Trebuset™	24 hours	24 hours	Not Tested
Bare seed		6 hours	

Pulse crops - lentil			
Cell-Tech® NS Peat	Planting window		
	Sequential	Simultaneous	Tank mix
Intego® Solo + ApronMaxx® RTA®	48 hours	48 hours	Not Tested
Intego® Solo + CruiserMaxx® Vibrance® Pulses	6 hours	4 hours	Not Tested
Intego® Solo + Trilex® EverGol®	48 hours	48 hours	Not Recommended
Allegiance® FL	48 hours	24 hours	Not Tested
Apron XL® LS	6 hours	Not Recommended	Not Tested
Apron XL® LS & Maxim® 4FS	6 hours	Not Recommended	Not Tested
ApronMaxx® RTA®	6 hours	Not Recommended	Not Tested
Cruiser® 5FS	24 hours	24 hours	Not Tested
CruiserMaxx® Vibrance® Pulses + Trebuset™	48 hours	48 hours	Not Tested
Evergol® Energy	24 hours	24 hours	Not Tested
Gaicho® 480	6 hours	Not Recommended	Not Tested
Intego® Solo + CruiserMaxx® Vibrance® Pulses	4 hours	4 hours	Not Tested
Intego® Solo + Trilex® EverGol®	48 hours	48 hours	Not Tested
Maxim® 4FS	24 hours	6 hours	Not Tested
Trebuset™	48 hours	48 hours	Not Tested
Trilex® AL	24 hours	6 hours	Not Tested
Trilex® AL Concentrate	30 hours	Not Recommended	Not Tested
Vibrance® Maxx Pulses RTA + Trebuset™	48 hours	48 hours	Not Tested
Vibrance® Maxx Pulses RTA + Trebuset™ + Cruiser® 5FS	48 hours	48 hours	Not Tested
Vitaflo® 280	48 hours	Not Recommended	Not Tested
Bare seed		48 hours	

Pulse crops - lentil			
JumpStart®	Planting window		
	Sequential	Simultaneous	Tank mix
ApronMaxx® RTA®	3 days	3 days	Not Tested
Crown®	24 hours	12 hours	Not Recommended
Nitro Shield®	3 days	3 days	Not Tested
Thiram 75WP	3 days	3 days	Not Tested
Trilex® AL	30 days	30 days	Not Tested
Bare seed		30 days	

Pulse crops - lentil			
TagTeam® Peat	Planting window		
	Sequential	Simultaneous	Tank mix
Allegiance® FL	48 hours	24 hours	Not Tested
Apron XL® LS	6 hours	Not Recommended	Not Tested
Apron XL® LS & Maxim® 4FS	6 hours	Not Recommended	Not Tested
ApronMaxx® RFC	6 hours	Not Recommended	Not Tested
ApronMaxx® RTA®	48 hours	Not Recommended	Not Tested
CruiserMaxx® Vibrance® Pulses + Trebuset™	48 hours	48 hours	Not Tested
Gaucho® 480	6 hours	6 hours	Not Tested
Intego® Solo + (ApronMaxx® RTA®)	48 hours	Not Recommended	Not Recommended
Intego® Solo + (CruiserMaxx® Vibrance® Pulses)	48 hours	48 hours	Not Recommended
Intego® Solo + (Trilex® EverGol®)	48 hours	48 hours	Not Recommended
Macho® 600 ST	24 hours	6 hours	Not Tested
Maxim® 4FS	24 hours	6 hours	Not Tested
Mertect® 340-F	6 hours	4 hours	Not Tested
Trebuset™	48 hours	48 hours	Not Tested
Trilex® AL	24 hours	6 hours	Not Tested
Trilex® AL Concentrate	30 hours	Not Recommended	Not Tested
Vibrance® Maxx Pulses RTA	48 hours	48 hours	Not Tested
Vibrance® MaxxPulses RTA + Trebuset™	48 hours	48 hours	Not Tested
Vitaflo® 280	24 hours	Not Recommended	Not Tested
Bare seed		48 hours	

Pulse crops - lentil			
QuickRoots® Wettable Powder	Planting window (days after application)		
	Sequential application	Simultaneous application	Tank mix
Insure® Pulse	Not Recommended	Not Recommended	Not Recommended
EverGol® Energy	120 days	120 days	Not Tested
Bare seed		150 days	

Pulse crops - pea			
JumpStart®	Planting window		
	Sequential	Simultaneous	Tank mix
Allegiance® FL	15 days	15 days	Not Tested
Apron® FL	5 days	5 days	Not Tested
ApronMaxx® RTA®	20 days	15 days	Not Tested
Apron XL® LS	10 days	7 days	Not Tested
Apron XL® LS & Maxim® 480FS	10 days	7 days	5 days
Captan®	24 hours	24 days	Not Recommended
Crown®	24 hours	12 days	Not Recommended
Macho® 600 ST	Not Recommended		
Maxim® 4FS	20 days	15 days	Not Tested
Nitro Shield®	30 days	30 days	Not Tested
Senator® 600 FS	15 days	15 days	Not Tested
Stamina®	28 days	28 days	Not Tested
Thiram 75WP	3 days	3 days	Not Tested
Trilex® AL	2 days	2 days	Not Tested
Vitaflo® 280	7 days	7 days	Not Tested
Bare seed		30 days	

Pulse crops - pea			
TagTeam® Liquid	Planting window		
	Sequential	Simultaneous	Tank mix
Vibrance® Maxx Pulses RTA	48 hours	48 hours	Not Tested
Bare seed		30 days	

Pulse crops - pea			
TagTeam® Peat	Planting window		
	Sequential	Simultaneous	Tank mix
Allegiance® FL	24 hours	12 hours	6 hours
Apron XL® LS	24 hours	Not Recommended	Not Tested
Apron XL® LS & Maxim® 4FS	24 hours	Not Recommended	Not Tested
ApronMaxx® RFC	48 hours	48 hours	Not Tested
ApronMaxx® RTA®	24 hours	6 hours	6 hours
CruiserMaxx® Beans	6 hours	6 hours	Not Tested
CruiserMaxx® Vibrance® Pulses + Trebuset™	48 hours	48 hours	Not Tested
Gauche® 480	6 hours	6 hours	Not Tested
Intego® Solo + ApronMaxx® RTA®	48 hours	48 hours	48 hours
Intego® Solo + CruiserMaxx® Vibrance® Pulses	48 hours	48 hours	48 hours
Intego® Solo + Trilex® EverGol®	48 hours	48 hours	48 hours
Macho® 600 ST	6 hours	6 hours	Not Tested
Maxim® 4FS	24 hours	24 hours	Not Tested
Senator® 600 FS	48 hours	24 hours	Not Tested
Trebuset™	48 hours	48 hours	Not Tested
Trilex® AL	30 hours	24 hours	Not Recommended
Trilex® AL Concentrate	30 hours	24 hours	Not Tested
Trilex® AL + Sodium Molybdate		Not Recommended	
Vibrance® Maxx Pulses RTA	48 hours	48 hours	Not Tested
Vibrance® Maxx Pulses RTA + Trebuset™	48 hours	48 hours	Not Tested
VitaFlo® 280		Not Recommended	
Bare seed		48 hours	

Pulse crops - pea			
Cell-Tech® NS Peat	Planting window		
	Sequential	Simultaneous	Tank mix
Cruiser® 5FS	24 hours	24 hours	Not Tested
CruiserMaxx® Vibrance® Pulses + Trebuset™	48 hours	48 hours	Not Tested
EverGol® Energy	24 hours	24 hours	Not Tested
Intego® Solo + ApronMaxx® RTA®	48 hours	48 hours	Not Tested
Intego® Solo + CruiserMaxx® Vibrance® Pulses	48 hours	48 hours	Not Tested
Intego® Solo + Trilex® EverGol®	48 hours	48 hours	Not Recommended
Trebuset™	48 hours	48 hours	Not Tested
Vibrance® Maxx Pulses RTA + Trebuset™	48 hours	48 hours	Not Tested
Vibrance® Maxx Pulses RTA + Trebuset™ + Cruiser® 5FS	48 hours	48 hours	Not Tested
Bare seed		48 hours	

Pulse crops - pea			
Cell-Tech® Liquid	Planting window		
	Sequential	Simultaneous	Tank mix
Allegiance® FL		Not Recommended	
Apron XL® LS		Not Recommended	
ApronMaxx® RTA®		Not Recommended	
Intego® Solo + CruiserMaxx® Vibrance® Pulses		Not Recommended	
Gauche® 480	Not Recommended	4 hours	Not Tested
Maxim® 4FS	8 hours	8 hours	Not Tested
Trilex® AL	24 hours	24 hours	Not Tested
Bare seed		6 hours	

Pulse crops - pea			
QuickRoots® Wettable Powder	Planting window (days after application)		
	Sequential application	Simultaneous application	Tank mix
Cruiser® 5FS	120 days	120 days	Not Tested
EverGol® Energy	Not Recommended	Not Recommended	Not Recommended
Intego® Solo + ApronMaxx® RTA®	Not Tested	Not Tested	60 days
Bare seed		48 hours	



Soybean			
TagTeam® LCO XC	Planting window		
	Sequential	Simultaneous	Tank mix
Acceleron™ Seed Applied Solutions BASIC	120 days	120 days	Not Recommended
Acceleron™ Seed Applied Solutions BASIC + Poncho®/VOTiVO®	120 days	120 days	Not Recommended
Acceleron™ Seed Applied Solutions STANDARD	120 days	120 days	Not Recommended
ApronMaxx®RTA®	20 days	20 days	Not Recommended
Clariva® Complete Beans	90 days	90 days	Not Recommended
Clariva® Elite Beans	Not Tested	120 days	Not Tested
Clariva® Elite Beans + Saltro®	Not Tested	120 days	Not Tested
Clariva® Elite Beans + Mertect® 340-F	Not Tested	120 days	Not Tested
CruiserMaxx® Advanced with Vibrance®	120 days	120 days	Not Recommended
CruiserMaxx® Vibrance® Beans	120 days	120 days	Not Recommended
CruiserMaxx® Vibrance® Beans + Saltro®	Not Tested	120 days	Not Tested
EverGol® Energy	120 days	120 days	Not Recommended
EverGol® Energy + Stress Shield	120 days	120 days	Not Recommended
ILeVO®	40 days	40 days	Not Recommended
Inovate®	Not Tested	120 days	Not Recommended
Poncho®/ VOTiVO®	Not Tested	120 days	Not Recommended
PPST 2030	Not Tested	120 days	Not Recommended
Seed Shield® Beans	120 days	120 days	Not Recommended
Seed Shield® Max Beans	Not Tested	120 days	Not Tested
Vibrance® Trio	Not Tested	120 days	Not Tested
Bare seed		120 days	



Soybean			
Optimize® XC	Planting window		
	Sequential	Simultaneous	Tank mix
Acceleron™ Seed Applied Solutions STANDARD	120 days	120 days	Not Tested
Acceleron™ Seed Applied Solutions BASIC	120 days	120 days	Not Tested
Acceleron™ Seed Applied Solutions BASIC + Poncho®/VOTiVO®	120 days	120 days	Not Recommended
ApronMaxx® RTA®	120 days	120 days	Not Tested
CruiserMaxx Beans + Vibrance®	120 days	Not Tested	Not Tested
CruiserMaxx Vibrance®	120 days	120 days	Not Tested
CruiserMaxx® Advanced with Vibrance®	120 days	120 days	Not Tested
CruiserMaxx® Vibrance® Beans + Saltro®	Not Tested	120 days	Not Tested
Clariva® Complete Beans	90 days	90 days	Not Tested
Clariva® Elite Beans	Not Tested	120 days	Not Tested
Clariva® Elite Beans + Mertect® 340-F	Not Tested	120 days	Not Tested
Clariva® Elite Beans + Saltro®	Not Tested	120 days	Not Tested
Evergol® Energy	120 days	120 days	Not Tested
Evergol® Energy + Gaucho® 600	120 days	Not tested	Not Tested
ILeVO®	40 days	40 days	Not Tested
INOVATE®	120 days	120 days	Not Tested
Intego® Solo	120 days	120 days	Not Tested
Integral®	120 days	120 days	Not Tested
Poncho®/ VOTiVO®	120 days	120 days	Not Tested
PPST 2030	90 days	90 days	Not Tested
Seed Shield® Beans	120 days	120 days	120 days
Seed Shield® Max Beans	Not Tested	120 days	Not Tested
Vibrance® Trio	Not Tested	120 days	Not Tested
Bare seed		120 days	

Optimize treated seed is tested at storage temperatures consistent with the conditions it will encounter in the field. We determine and verify our 120-day compatibility with replicated tests.

Soybean			
Cell-Tech® NS Peat	Planting window (days after application)		
	Sequential	Simultaneous	Tank mix
Acceleron™ Seed Applied Solutions STANDARD	48 hours	48 hours	Not Tested
Acceleron™ Seed Applied Solutions BASIC	48 hours	48 hours	48 hours
Acceleron™ Seed Applied Solutions BASIC + Poncho®/VOTiVO®	48 hours	48 hours	Not Tested
ApronMaxx® RFC	48 hours	48 hours	48 hours
ApronMaxx®RTA®	48 hours	48 hours	48 hours
Avicta® and Avicta® Complete Beans with CruiserMaxx®	48 hours	48 hours	Not Tested
CruiserMaxx® Beans	48 hours	48 hours	48 hours
CruiserMaxx® Advanced	48 hours	48 hours	Not Tested
CruiserMaxx® Pak & Warden® RTA®	48 hours	48 hours	48 hours
INOVATE® System: Rancona® Xxtra + NipSIT Inside® insecticide	48 hours	48 hours	Not Tested
Macho® 600 ST	48 hours	48 hours	Not Tested
Metastar® ST	48 hours	48 hours	Not Tested
Nitro Shield®	48 hours	48 hours	48 hours
Poncho®/VOTiVO®	48 hours	48 hours	Not Tested
Sebring®	48 hours	48 hours	48 hours
Seed Shield®	48 hours	48 hours	48 hours
Senator® 600 FS	48 hours	48 hours	48 hours
Trilex® 2000	48 hours	48 hours	48 hours
Trilex® 6000	48 hours	48 hours	48 hours
Trilex® AL Flowable & Gaucho® SB Flowable	48 hours	48 hours	48 hours
Trilex® Flowable	48 hours	48 hours	48 hours
Trilex® Flowable & Allegiance® FL	48 hours	48 hours	48 hours
Trilex® Flowable & Allegiance® FL & Gaucho® SB Flowable	48 hours	48 hours	48 hours
Warden® RTA®	48 hours	48 hours	48 hours
Bare seed	48 hours		

Soybean			
Cell-Tech® Liquid	Planting window (days after application)		
	Sequential	Simultaneous	Tank mix
Acceleron™ Seed Applied Solutions STANDARD	4 days	4 days	Not Tested
Acceleron™ Seed Applied Solutions BASIC	4 days	4 days	Not Tested
Acceleron™ Seed Applied Solutions BASIC + Poncho®/VOTiVO®	4 days	4 days	Not Tested
ApronMaxx® Bean Pak	4 days	4 days	4 days
ApronMaxx® RFC	4 days	4 days	4 days
ApronMaxx® RTA®	4 days	4 days	4 days
Avicta® and Avicta® Complete Beans with CruiserMaxx®	4 days	4 days	Not Tested
CruiserMaxx® Beans	4 days	4 days	4 days
CruiserMaxx® Advanced	4 days	4 days	Not Tested
CruiserMaxx® Pak & Warden® RTA®	4 days	4 days	4 days
ILeVO®	4 days	4 days	Not Tested
INOVATE® System: Rancona® Xxtra + NipSIT Inside® insecticide	4 days	4 days	Not Tested
Intego®	4 days	4 days	4 days
Macho® 600 ST	4 days	4 days	Not Tested
Metastar® ST	4 days	4 days	Not Tested
Nitro Shield®	4 days	4 days	4 days
Poncho®/VOTiVO®	4 days	4 days	Not Tested
Sebring®	4 days	4 days	4 days
Seed Shield®	4 days	4 days	4 days
Senator® 600 FS	4 days	4 days	4 days
Trilex® 2000	4 days	4 days	4 days
Trilex® 6000	4 days	4 days	4 days
Trilex® AL Flowable & Gaucho® SB Flowable	4 days	4 days	4 days
Trilex® Flowable	4 days	4 days	4 days
Trilex® Flowable & Allegiance® FL	4 days	4 days	4 days
Trilex® Flowable & Allegiance® FL & Gaucho® SB Flowable	4 days	4 days	4 days
Warden® RTA	4 days	4 days	4 days
Bare seed	4 days		

Soybean**Cell-Tech® Liquid**

When Cell-Tech® is applied in-furrow there will be no adverse effect from seed treatments applied and allowed to dry prior to planting.

Asset® PPS	Tank mix compatible*
Tank mix compatible*	
Asset® RS	

*Water used for dilution of Cell-Tech® or preparation of a Cell-Tech® tank mix must be non-chlorinated or de-chlorinated. Do not mix Cell-TechNovozymes (TT) directly with chemical product prior to addition of water. Always add Cell-TechNovozymes (TT) to diluted chemical. Tank mixes must be used within 12 hours. Do not hold tank-mixed materials for later use. Mix only what will be used within a 12-hour time period.

Soybean

JumpStart®	Planting window (days after application)		
	Sequential	Simultaneous	Tank mix
Acceleron™ Seed Applied Solutions BASIC	120 days	120 days	Not Tested
Acceleron™ Seed Applied Solutions STANDARD	120 days	120 days	Not Tested
Acceleron™ Seed Applied Solutions BASIC + Poncho®/VOTiVO®	120 days	120 days	Not Tested
ApronMaxx® RFCTM	10 days	10 days	Not Tested
ApronMaxx® RTA®	20 days	20 days	Not Tested
Avicta®	120 days	120 days	Not Tested
Avicta® Complete	120 days	120 days	Not Tested
Complete ZMC	120 days	120 days	Not Tested
CruiserMaxx® Advanced	120 days	120 days	120 days
CruiserMaxx® Advanced with Vibrance®	120 days	120 days	120 days
CruiserMaxx® Beans	120 days	120 days	120 days
CruiserMaxx® Beans with Vibrance®	120 days	120 days	120 days
CruiserMaxx® Plus	120 days	120 days	120 days
CruiserMaxx® Plus with Vibrance®	120 days	120 days	120 days
EverGol® Energy	120 days	120 days	60 days
Gaucho® 600 FL	30 days	30 days	Not Tested
Inovate®	120 days	120 days	Not Tested
Macho® 600 ST	30 days	30 days	Not Tested
Nitro Shield®	30 days	30 days	Not Tested
Poncho®/VOTiVO®	120 days	120 days	Not Tested

PPST 2030	120 days	120 days	Not recommended
Prevail® (planter box)	14 days	Not Tested	Not Tested
Protector™ L - Allegiance® (planter box)	24 hours	Not Applicable	
Protector™ L - Allegiance®	Not Tested	2 days	Not Tested
Sebring®	30 days	30 days	Not Tested
Sebring® 318FS	60 days	60 days	Not Tested
Sebring® Max	30 days	30 days	Not Tested
Seed Shield	120 days	120 days	Not Tested
Senator® 600 FS (low rate)	30 days	30 days	Not Tested
Senator® 600 FS (high rate)	21 days	21 days	Not Tested
SoyGreen®	Not Tested	Not Tested	24 Hours
Stiletto®	12 hours	12 hours	Not Tested
Trilex® AL	7 days	7 days	Not Tested
Trilex® 6000	14 days	14 days	Not Tested
Trilex® 2000	7 days	7 days	Not Tested
Vibrance®	120 days	120 days	120 days
Vitaflo® 280	7 days	7 days	Not Tested
Warden® RTA®	30 days	30 days	Not Tested
Bare seed		120 days	

Soybean			
QuickRoots® Wettable Powder	Planting window (days after application)		
	Sequential application	Simultaneous application	Tank mix
Acceleron™ Seed Applied Solutions STANDARD	300 days	300 days	30,976 mm
Acceleron™ Seed Applied Solutions BASIC	300 days	300 days	220 days
Acceleron™ Seed Applied Solutions STANDARD + ILeVO®	300 days	300 days	260 days
Acceleron™ Seed Applied Solutions BASIC + ILeVO®	300 days	300 days	260 days
Allegiance® FL	Not Tested	240 days	Not Tested
ApronMaxx® RFC	300 days	300 days	Not Tested
ApronMaxx® RTA	300 days	300 days	Not Tested
CruiserMaxx® Advanced + Vibrance®	300 days	300 days	220 days
CruiserMaxx® Vibrance®	300 days	300 days	300 days

EverGol® Energy	300 days	300 days	300 days
EverGol® Energy + Gaucho 600	300 days	300 days	300 days
EverGol® Energy + ILeVO®	300 days	300 days	Not Tested
ILeVO®	300 days	300 days	300 days
Inovate™	300 days	300 days	300 days
Intego® Suite System	300 days	300 days	Not Tested
Integral®	300 days	300 days	Not Tested
Mertect® 340-F	300 days	300 days	300 days
Molybdenum	Not Tested	210 days	210 days
Poncho®/VOTiVO®	300 days	Not Tested	Not Tested
Seed Shield® Beans	300 days	300 days	300 days
Warden® CX	300 days	300 days	300 days
Bare seed	380 days		

Application of QuickRoots® Wettable Powder

Do not confuse “Planting window” with “Application Window”. QuickRoots® Wettable Powder is intended to be applied after it has been mixed with a liquid product, either seed treatment chemistry or water alone. Once the powder has been mixed with a liquid, the mixture must be applied to seeds within two hours after a liquid was introduced to the wettable powder. This is the Application Window. Once the treated seeds have dried, the Planting window days begins. If mixed slurries containing QuickRoots® Wettable Powder are allowed to remain in a mix tank longer than two hours, the remaining mixture should not be used. It is recommended to mix small batches that can easily be used within the two-hour Application Window.

Wheat and other cereal crops			
JumpStart® Wettable Powder	Planting window (days after application)		
	Sequential application	Simultaneous application	Tank mix
Warden® Cereals 360	30 days	30 days	30 days
Warden® Cereals WR II	30 days	30 days	30 days
Warden® Cereals HR	30 days	30 days	Not Tested



Wheat and other cereal crops			
QuickRoots® Wettable Powder	Planting window (days after application)		
	Sequential application	Simultaneous application	Tank mix
Cruiser® Vibrance® Quattro	Not Tested	85 days	85 days
CruiserMaxx® Vibrance® Cereals	85 days	85 days	15 days
CruiserMaxx® Vibrance® Cereals + Cruiser® 5FS	60 days	60 days	30 days
Cruiser® Vibrance® Quattro	Not Tested	85 days	85 days
Cruiser® Vibrance® Quattro + Intego® Solo	60 days	60 days	60 days
EverGol® Energy	90 days	90 days	90 days
Insure® Cereal	Not Tested	85 days	85 days
Insure® Cereal FX4	80 days	80 days	80 days
NipsIt™ Suite Cereals	10 days	10 days	10 days
Rancona® Pinnacle	Not Recommended	Not Recommended	Not Recommended
Rancona® Trio	80 days	80 days	80 days
Raxil® PRO MD	65 days	65 days	35 days
Raxil® PRO Shield	60 days	60 days	60 days
Stamina®	85 days	85 days	85 days
Warden® Cereals 360	70 days	70 days	50 days
Warden® Cereals II	100 days	100 days	100 days
Warden® Cereals HR	Not Recommended	Not Recommended	Not Recommended
Warden® Cereals WR II	120 days	120 days	120 days

Alfalfa	
Nitragin® Gold	Planting window (days after application)
Allegiance® FL (Over-Treat Application)	18 months
Apron XL® (Over-Treat Application)	18 months
Prontius® (Over-Treat Application)	18 months



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About Novozymes

Novozymes is the world leader in biological solutions. Together with customers, partners and the global community, we improve industrial performance while preserving the planet's resources and helping to build better lives. As the world's largest provider of enzyme and microbial technologies, our bioinnovation enables higher agricultural yields, low-temperature washing, energy-efficient production, renewable fuel and many other benefits that we rely on today and in the future. We call it Rethink Tomorrow.

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