



EasyBond Genesis

**Seed
Enhancement**

Pasture & Pulse
Legume Crops

**Rhizobium –
Protectant
Formulation**

Enhances survival rates of Rhizobium cells by providing a protective coating. For use with EasyRhiz™ Vial Concentrate Legume Inoculant



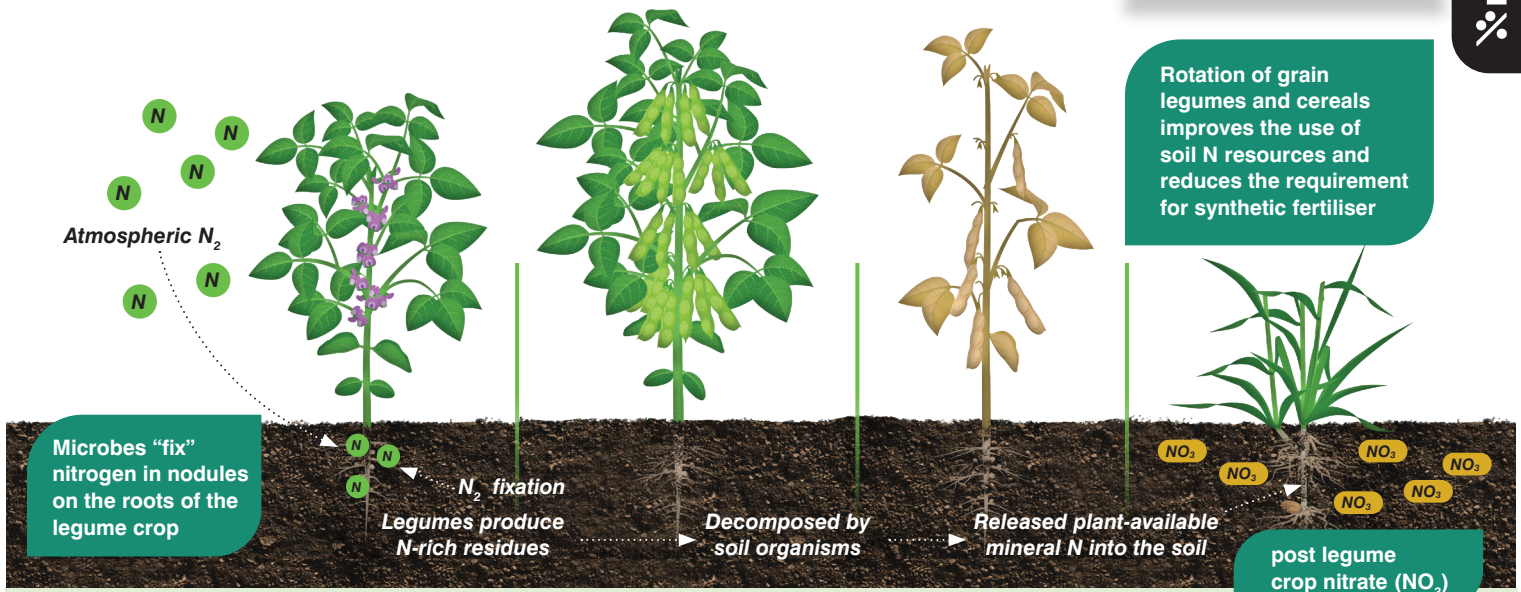
Benefits: of Rhizobia Technology

Soil bacteria called *Rhizobia* works together with legume plants to take atmospheric nitrogen (N^2) found in soil air spaces and 'fixes' it to the plant root system to form root nodules.

EasyRhiz™ is manufactured with highly productive *Rhizobia* strains that significantly improve crop yields even when background *Rhizobia* is present in the soil.



SEED ENHANCEMENT
EASYPOND GENESIS TDS / PASTURE & PULSE



Compact - easy to store, transport and a shelf life of 12 months.



Easy to mix, readily dissolves in water and stays in suspension.



Free nitrogen.



No withholding periods.



Ideally suited for water injection application.

Provides the opportunity to separate Rhizobia from toxic chemicals, such as fungicides applied to the seed coat.



Legumes treated with the correct Rhizobium, convert atmospheric N_2 into plant available N.

Estimates 30-200 kg/ha of N annually.

Equivalent to 64-432 kg of urea.



Improves cereals plant performance when grown after legume crops, with improved yields and protein.

EasyBond Genesis

Rhizobium Protectant

BENEFITS	EasyBond <i>Genesis</i> improves the survivability of Rhizobium by reducing osmotic shock and desiccation, whilst also improving on-seed adhesion
HOW IT WORKS	EasyBond <i>Genesis</i> is a water-soluble powder that helps buffers water to nourish and protect cells during reconstitution. EasyBond also helps to stick and protect Rhizobium bacteria when applied on-seed.
DOUBLE INOCULATION	<p>Double the inoculant rate is recommended for the following scenarios:</p> <ul style="list-style-type: none"> • If planting a legume crop into a paddock for the first time • Paddocks with greater than 4 years without a legume • Acidic soils • Dry or wet weather conditions • Prolonged periods between treating and sowing • Where herbicide residues (particularly Group B and I) or other seeds treatments are being <p>Ratio for double rates - 2 x EasyRhiz™ Vials are mixed with 1 x EasyBond <i>Genesis</i>, and keeping the water ratio standard.</p>
PROCEDURE	<p>In a clean bucket, dissolve the contents of one EasyBond <i>Genesis</i> sachet in 1 L of cool, clean, non-chlorinated water (pH between 6.5 and 7.5). Add desired inoculant (EasyRhiz™ vial or NoduleN™) and adjust final volume to required levels.</p> <p>Note: If increasing the inoculant rate, use 1 sachet of EasyBond and keep the water ratio standard.</p>



SEED ENHANCEMENT
EASYBOND GENESIS TDS / PASTURE & PULSE





SEED

SEED ENHANCEMENT
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EasyBond Genesis

Application Rates & Methods

Choose either method:

• In-Furrow via Liquid injection. **OR** • On-Seed Application.

On-Seed Application Method

Procedure

1. Select correct inoculant group type for the legume seed being sown. To select correct group type for the legume seed, refer to NEM's Legume Inoculant Group Chart.
2. Remove cap and rubber bung from EasyRhiz™ Vial.
3. Fill EasyRhiz™ vial to the shoulder with cool, clean, non-chlorinated water (pH between 6.5-7.5). Return bung, shake vigorously and leave the vial to stand for 30 minutes until the entire contents are reconstituted.
4. In a clean bucket, dissolve the EasyBond Genesis contents in the appropriate amount of cool, clean, non-chlorinated water (pH between 6.5 and 7.5) based on size of seed being treated (refer to table below for suggested volumes of water). **NOTE:** Using less water will shorten drying time but may reduce seed coverage.

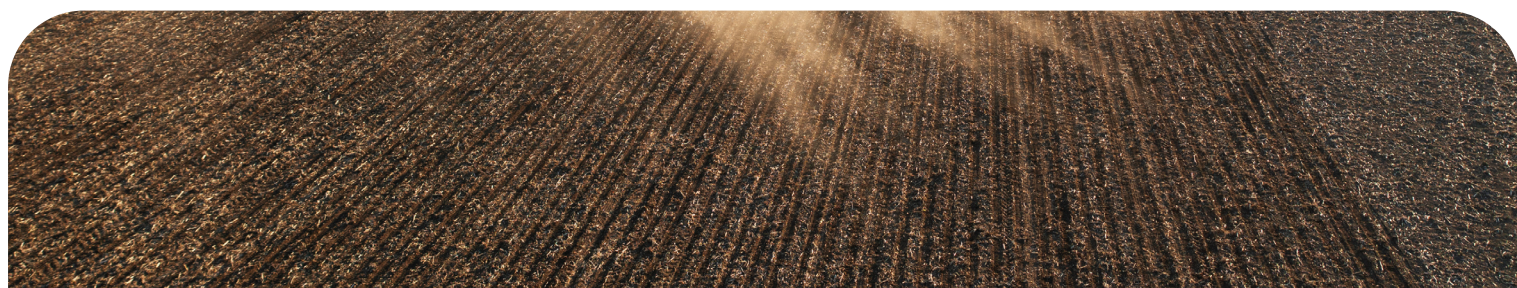
Mixing Ratios For On-Seed Applications

Weight	Seed Size	Water Rate
50 kg	Small	0.75 L
250 kg	Medium	1.5 L
500 kg	Large	3 L

NOTE: The water rates in the above table are a general guide as to what water rates can be used. Variation in seeds including size, shape, surface profile and permeability alters the efficiency of coverage, absorbance and drying time. Sufficient slurry volume (EasyRhiz™ + EasyBond Genesis + water) needs to be applied to allow the slurry to mix and spread throughout the seed, without over wetting.

5. Add the reconstituted EasyRhiz™ vial into the bucket with the EasyBond Genesis solution. Rinse vial out thoroughly to ensure entire contents are removed. Mix the solution thoroughly.
6. Apply solution to the correct weight of seed and mix until all seeds are evenly coated.

NIL withholding period. Do not open the pack until ready to use. Refer to the Safety Data Sheet (SDS) before using. Gloves and face masks should be used while preparing and applying the product.





SEED

EasyBond Genesis

Application Rates & Methods

SEED ENHANCEMENT
EASYBOND GENESIS TDS / PASTURE & PULSE



Choose either method:

• In-Furrow via Liquid injection. **OR** • On-Seed Application.

In-Furrow via Liquid Injection Method

Procedure

1. Select correct inoculant group type for the legume seed being sown.
To select correct group type for the legume seed, refer to NEM's Legume Inoculant Group Chart.
2. Determine the number of vials required to treat the sowing area (*see formula and example tables below*).

Using the following formula will determine the number of vials required to be added to the injection tank to achieve the minimum necessary amount of rhizobia in the seed furrow. The suggestion is that the number of vials are rounded up to the next whole vial as part vials do not store.

Example formula for number of EasyRhiz™ vials per 1000 L

$$\left[\frac{\text{Sowing rate (kg per ha)}}{\text{Kg of seed treated per vial}} \right] \div \left[\frac{\text{Water rate (L per ha)}}{1000 \text{ L (Tank size)}} \right]$$

The following 2 tables show how the variables of seeding rate (kg/ha), seed per vial (kg), liquid injection rate (L/ha) and injection tank volume (L) influence the EasyRhiz™ concentration required in each injection tank.

Crop	Faba Bean	Crop	Lentil
Sowing rate (kg/ha)	120	Sowing rate (kg/ha)	80
Seed treated per vial (kg)	500	Seed treated per vial (kg)	250
EasyRhiz™ vials/ 1000 L	2.4	EasyRhiz™ vials/ 1000 L	3.2
Rounded up to full vial	3	Rounded up to full vial	4

Tables show examples of how sowing rate (kg/ha) and water inject rate (L/ha) directly influence the number of vials required per 1000 L injection tank.

Injection Water rate (L/ha)	100
Tank volume (L)	1000

3. Remove cap and rubber bung from the required number of EasyRhiz™ Vial(s).
4. Fill each individual EasyRhiz™ vial to the shoulder with cool, clean, non-chlorinated water (pH between 6.5-7.5). Return bung, shake vigorously and leave the vial to stand for 30 minutes until the entire contents are reconstituted.
5. The application rate of rhizobia required per liquid injection tank is dependent on seed sowing rate (kg/ha), kg of seed treated per vial (kg), injection water rate applied (L/ha) and injection tank volume (L). Row spacing can vary from 20 to 50 cm but inoculation rates are calculated on seeding rate as kg/ha.
6. Add the reconstituted EasyRhiz™ vial(s) into the bucket containing 1 L of EasyBond Genesis. Rinse the vial out thoroughly to ensure entire contents are removed.
7. Fill spray tank of your liquid injection system with cool, clean, non-chlorinated water (pH between 6.5 and 7.5) and incorporate the 1 L of rhizobia inoculant preparation while filling.
8. Apply the mixed solution directly in the planting furrow.

Note: Ideally, the solution should be in contact with the seed at sowing.

NIL withholding period. Do not open the pack until ready to use. Refer to the Safety Data Sheet (SDS) before using. Gloves and face masks should be used while preparing and applying the product.

EasyBond Genesis

Legume Inoculant Chart

Biological Nitrogen Fixation.

Group Type	Legume	Strain	Host Plant Common Name	Weight of Seed Treated per Pack (kg)				Seasonality
				Peat			Concentrate Vial	
				Standard	Jumbo	Mega		
AL	Lucerne	RR1128	Lucerne, Alfalfa, Strand and Disc Medics	-	125	250	100	●
AT	Lucerne	SRDI736	Acid Tolerant Lucerne	-	65	125	-	●
AM	Medic	WSM1115	Barrel, Burr, Snail, Sphere, Gama and Murex Medics	-	* 250	* 500	-	●
B	White Clover	TA1	White, Red, Strawberry, Alsike, Berseem Cluster and Suckling Clovers	-	125	-	-	●
C	Sub Clover	WSM1325	Crimson, Cupped, Helmet, Rose and Subterranean Clovers	-	250	500	200	●
C	Sub Clover	WSM1325	Arrowleaf, Balansa, Bladder, Gland, Purple and Persian Clovers	-	125	250	100	●
H	Soy	CB1809	Soybean	-	500	-	500	●
I	Mung Bean	CB1015	Mung bean, Cowpea, Shaw creeping vigna, Moth, Dune and Rice and Snake bean	-	500	-	500	●
I	Mung Bean	CB1015	Sunn Hemp	-	250	-	250	●
J	Lab Lab	CB1024	Pigeon Pea, Dolichos Lablab, Hyacinth Bean	100	-	-	500	●
J	Lab Lab	CB1024	Perennial Horse Gram	50	-	-	250	●
M	Siratro	CB756	Butterfly Pea, Atro, Puero, Tropical Kudzu	* 50	-	-	* 200	●
M	Siratro	CB756	Siratro, Velvet, Banana and Phasey Bean, Calopo, Glycine	* 25	-	-	* 100	●
P	Peanut	NC92	Peanut and Groundnut	-	-	-	500	●
F	Faba Bean	SRDI969	NEW Acid Tolerant Faba, Tick and Broad Beans	-	-	1000	500	●
E	Field Pea	WSM4643	Acid Tolerant Field Pea, Common, Bitter, Purple and Woolly Pod Vetch	-	-	1000	500	●
E	Lentil	WSM4643	Acid Tolerant Lentil	-	-	500	250	●
G	Lupin	WU425	Narrow Leaf and Albus Lupin	-	-	1000	500	●
G	Lupin	WU425	Yellow, Slender, Pink, and Hybrid Serradella	-	-	500	200	●
N	Chickpea	CC1192	Desi, Garbanzo and Kabuli Chickpeas	-	-	1000	500	●
-	Adzuki bean	5G1B	Adzuki bean	100	-	-	* 200	●
-	Birdsfoot trefoil	SU343	Birdsfoot trefoil	-	-	-	* 25	●
-	Biserrula	WSM1497	Biserrula	-	-	100	* 50	●
-	Burgundy bean	CB1717	Burgundy bean	-	-	-	* 100	●
-	Centro	CB1923	Centro and Centurion	-	-	-	* 200	●
-	Caucasian Clover	CC283b	Caucasian Clover, Kura Clover	-	-	-	* 50	●
-	Common Bean	CC511	French or Common bean, Navy, Kidney, Dry, Lima beans and Black Turtle	-	-	-	* 250	●
-	Desmanthus	CB3126	Desmanthus	* 25	-	-	* 100	●
-	Desmodium	CB627	Desmodium	-	-	-	* 50	●
-	Fenugreek	SU277	Fenugreek	-	-	-	*200	●
-	Leucaena	CB3060	Leucaena	* 50	-	-	* 250	●
D	Greater Lotus	CC829	Lotus pedunculatus, Lotus and Lotus Hirsutus	-	-	-	* 25	●
-	Messina	SRDI554	Messina	-	* 125	-	-	●
-	Stylo	CB1650	Caribbean stylo	-	-	-	* 50	●
-	Stylo	CB3481	Caatinga stylo	-	-	-	* 50	●
-	Sulla	WSM1592	Sulla	* 10	-	-	* 100	●
-	Tagasaste	CC1502	Tree lucerne or Tagasaste	-	-	-	* 25	●

EasyBond Genesis Rhizobium Protectant Mix one EasyBond Genesis 100g packet per EasyRhiz™ vial. Sold separately.

* Discontinued: Product available until current stock clears.

Seasonality Type ● Pasture Inoculant ● Summer Inoculant ● Winter Inoculant ● Specialised Inoculant ⓘ For application rates refer to technical data sheet
Standard: 250g~ | Jumbo: 1.25kg~ | Mega: 2.5kg~ | Vial: 30ml



Increasing microbial diversity boosts ecosystem productivity where each beneficial species, no matter how small, has an important role to play. NEM's biological agriculture system has been developed to enhance soil health, create resilient landscapes, improve crop and pasture performance and sustainable farming futures. Learn why we are so passionate about microbes and how they can benefit you – visit www.nem.com.au

EasyBond *Genesis*

EasyBond Genesis is compatible with EasyRhiz™ Vial

Customer Technical Support: Speak with our friendly support team if you need to seek specialist or product compatibility advice.



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