





















# **ABOUT TIMAC AGRO UK**





industrial power

partnerships

production units

marketina countries

# **ROULLIER GROUP**

nutritionists

Since 1959, the Groupe Roullier's teams have been meeting the real needs of the agricultural industry. A major operator in Animal and Plant Nutrition for 60 years, the Groupe Roullier has continued to develop its expertise and skillsets. While fertilisers represent over two thirds of turnover, the Group has also compiled a highly diversified business portfolio, including a range of products and services for industry as well as a specialised food production hub. Each of our subsidiaries are experts in their respective sectors, characterised by solid industrial capital and a strong capacity for innovation.

farmers & growers

met each day

# **TECHNOLOGIES**

PHYSIO PRO PHYSIO PRO is a powerful root enhancing biostimulant which allows for more efficient uptake of nutrients and water from the soil, enhancing vegetative growth

PHYSIO PRO contains aminopurines and calcium molecules that naturally activate a plants metabolism by stimulating root growth and fine root hair production.

CALCIMER

naturally rich in trace elements and mineral nutrients, optimising bioavailability of nutrients and sustaining mineralisation of the existing soil fertility.

CALCIMER is natural, fast-acting source of marine Calcium, made from highly porous Calcium Carbonate (CaO). It is a highly soluble form of calcium for the rapid correction of soil pH.



N-PROCESS N-PROCESS helps to improve nitrogen fertiliser efficiency, by reducing losses, stimulating plant physiology and following the needs of the plant. N-PROCESS also enables the phased release of Nitrogen, through the mineralisation of an organo-mineral matrix, matching the needs of the

crop according to growing conditions, whilst also fulfilling crop requirement through readily available Ammonium.

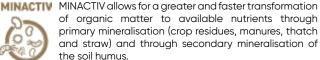
Our N-PROCESS range combines phased release Nitrogen with microbial activators and CALCIMER to encourage Soil Organic Matter (SOM) mineralisation and a physiological activator to enable the stimulation of nitrate reductase and absorption of key elements. N-PROCESS reduces leaching, volatilisation and is non-acidifying (pH neutral).



FERTIACTYL increases root development, encourages the mobilisation of nutrients, stimulates photosynthesis and increases tolerance to climatic stresses.

FERTIACTYL is the association of the exclusive patented FERTIACTYL complex, based on seaweed extracts and organic acids, with **FERTIACTYL®** mineral nutrients. The main components of the FERTIACTYL complex are organic acids (humic and fulvic acids), a natural osmolyte

and a hormonal precursor.



MINACTIV, a mix of plant extracts, rich in carbohydrates and polypeptids, is an energising complex that increases specific fungal and bacterial activity in the soil to rapidly breakdown and mineralise Soil Organic Matter (SOM) even in low temperatures.

FERTEOS (

Developed by our Centre Mondial de l'Innovation Roullier (CMI), FERTEOS is the result of our expertise in plant physiochemistry. This

complex natural additive, made up of seaweed extracts, incorporates an ammonium biofixer selected by our researchers.

FERTEOS acts on the bacteria of the nitrogen and phosphorus cycle to boost and regulate the availability of mineral nitrogen for the plant, thus increasing the yield of your crops in organic farming.

FERTEOS IV combines our expertise in seaweed technology with our soilconditioning marine calcium (Calcimer) and reactive rock phosphate.



N-PRO allows a constant flow of nitrate with increased absorption ("pump effect"), improving nitrogen transformation within the plant, therefore generating more protein and Dry Matter (DM).



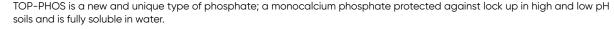
N-PRO is an Indolic hormone which enhances the action of Nitrate Reductase and stimulates crop demand for Nitrogen, which is essential for fast and effective conversion of nitrates into useable plant proteins.



SEACTIV enhances root development, nutrient absorption and nutrient movement within the plant. It also increases the

homogeneity (evenness) of crops through delayed senescence "Stay Green Effect". It optimises leaf photosynthesis while ensuring homogenous fertilisation, flowering and quality of fruit/grain yield.

SEACTIV complex contains seaweed extracts and mineral nutrients, the main components are a hormonal precursor, natural osmolytes and amino-acids. The complex of phyto-hormones increases tolerance to stresses whilst boosting plant physiological processes.



TOP-PHOS is a new molecule that contains an organic matrix and is immediately available for plant uptake throughout the growing season. Phosphate availability is combined with a root system stimulator and a biological activity booster.





# ADDING SUSTAINABLE VALUE TO YOUR SOILS AND CROPPING

Product	Technologies	N %	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O %	CaO %	MgO %	SO <sub>3</sub> %	Na %	NV	Trace Element Package	Product Description
SOIL CONDITIONERS											
Humistart +	CALCIMER MINACTIV	-	-	-	36	1	-	-	37	√	A soil microbial activator to breakdown crop residues and soil organic matter
Physiolith	CALCIMER PHYSIO PRO	-	-	-	36	1	-	-	37	1	Rapid pH adjustment with crop rooting stimulator
SOIL CONE	DITIONERS + P										
Ferteos IV	(FERTEOS (D) IV)	-	17	-	39	-	-	-	25	J	Soil conditioning soft rock Phosphate for low pH
Top-Phos 23	тор-рноѕ	-	23	-	-	-	21	-	-	-	New form of protected and readily available water soluble Phosphate
SOIL CONDITIONERS + P K											
Minactiv 14-18	CALCIMER MINACTIV	-	14	18	32	1	-	-	-	J	PK with soil biology stimulator for maximum soil health
Physio Pro PK1	CALCIMER PHYSIO PRO	-	10	25	26	1	-	-	-	<b>√</b>	PK with soil biology stimulator for maximum soil health
N PROCESS NITROGEN + SOIL CONDITIONERS											
Nutrigrass	CALCIMER N-PROCESS	20	-	-	-	-	21	8	-	J	Enhanced phased release Nitrogen with Sulphur and Sodium
Sulfammo 23	CALCIMER N-PROCESS	23	-	-		-	40	-	-	J	Enhanced phased release Nitrogen with Sulphur
Sulfammo 26	CALCIMER N-PROCESS	26	-	-		3	25	-	-	1	Enhanced phased release Nitrogen with Magnesium and Sulphur
Activ'N 15-20	CALCIMER N-PROCESS TOP-PHOS	15	20	-	-	3	20	-	-	1	Enhanced phased release Nitrogen with readily available Phosphate
Optigrass 13 5 5	CALCIMER N-PROCESS	13	5	5	-	-	15	6	-	J	Complete grazing fertiliser for low input systems with palatability improver and N-PROCESS technology
STARTER F	STARTER FERTILISERS										
PhysioStart	PHYSIO PRO	8	28	-	2	-	23	-	-	-	Microgranular starter fertiliser with Nitrogen, Phosphate, Calcium, Zinc and Sulphur
PinkStart	PHYSIO PRO	-	28	5	-	-	-	-	-	-	Oilseed Rape Starter Fertiliser
LIQUID BIC	STIMULANTS									ı	
Fertiactyl Starter	FERTIACTYL*	13	5	8	-	-	-	-	-		An enhanced starter biostimulant for rooting with Humic and Fulvic acids, Zeatin and Glycine Betane
Seactiv Vital	SEACTIV	9	5	4	-	-	-	-	-	J	An NPK foliar biostimulant with Amino Acids and IPA for arable crops
Seactiv Magnum	SEACTIV	7	-	-	-	9	-	-	-		A foliar biostimulant with Nitrogen and Magnesium
Seactiv Magical	SEACTIV	-	-	-	12	4	-	-	-		A foliar biostimulant for crops requiring additional Magnesium and Calcium
Seactiv Gold BMo	SEACTIV	-	-	-	-	-	-	-	-	5.7% B	A foliar biostimulant for crops requiring Boron and Molybdenum

# ADDING SUSTAINABLE VALUE TO YOUR LIVESTOCK PRODUCTION

# **TIMAC AGRO SUPPLEMENT BLOCKS:**

Enhancing rumen function for optimal performance and value

	Ana	lytical (	constit	uants		- a.	Add	litives /	<sup>'</sup> kg				
	Sodium	Calcium	Phosphorus	Magnesium	Zinc	Manganese	Copper	Fe Iron / Sulphur	lodine	Cobalt	Selenium	Additives	
	Na	Ca	Р	Ма	Zn	Mn	Cu	Fe/S	-1	Со	Se		Format
Sporter RUMEN COOPER	<b>19.5</b> %	<b>7.5</b> %	2 %	2.4	<b>9750</b> mg	<b>4000</b> mg		Sulphur 1 %	<b>100</b> mg	<b>40</b> mg	<b>10</b> mg	5000 mg aoferm®	15 kg
• Stockes FI IX III	6.5 %	<b>15</b> %		8 %	<b>2625</b> mg	<b>2200</b> mg	<b>50</b> mg		<b>100</b> mg	<b>40</b> mg	<b>10</b> mg	Vit E 400 mg	15 kg
O Cetabo I M M U O O O	<b>27</b> %	<b>5</b> %		2.5 %	<b>9000</b> mg	<b>4000</b> mg	<b>1500</b> mg		<b>150</b> mg	<b>60</b> mg	20 mg with 5 mg Se Orga		15 kg
OCHOR PARTECT PARTECT	12.5	<b>15</b> %	<b>4.5</b> %	<b>2</b> %	<b>2000</b> mg	<b>1000</b> mg			<b>100</b> mg	<b>40</b> mg	<b>10</b> mg	garlic 3.5 %	15 kg
O Cotoss 0 V   H	23.5	8 %	3 %	1 %	1119	<b>2000</b> , mg			<b>200</b> mg	<b>80</b> mg	<b>20</b> mg	Vit E <b>800</b> mg	15 kg
OEST .	19.5	3.5 %	5 %	<b>6</b> %	<b>6000</b> mg	<b>1000</b> mg	<b>1800</b> mg		<b>200</b> mg	<b>80</b> mg	25 mg with 5 mg Se Orga	Vit E <b>800</b> mg	15 kg
ALTO ALTO	20 %	12 %	4 %	2 %	<b>3000</b> mg	<b>2500</b> mg	<b>200</b> mg		<b>100</b> mg	<b>40</b> mg	<b>10</b> mg		15 kg



# **TECHNOLOGIES**

- Calseagrit lotech: Marine Ca and brown seaweed to optimise rumen bacteria and function
- Sodium base: Acts as appetiser and limiter to restrict over-consumption
- Fix-N: 100% natural plant complex to capture N and maximise protein production
- Aoferm: Pre-digester for fibrous material for diet optimisation
- Organic Se: Highly available source of Se for immunity and fertility
- Rumen Core: Complex of three rumen buffers to counter SARA
- Anti-oxidants: Grape extract to relieve cellular stress
- V-Phyt: Complex of natural anti-parasitics and Garlic to reduce internal and external parasites
- Chelates: Protection for vulnerable minerals to maximise target uptake



# **COMFORT FOR BETTER PERFORMANCE**

# What is Actisan 360?

- · A natural complex to sanitise bedding areas, absorb moisture and reduce odours
- · A formulation of plant extracts, mineral salts and aromatic compounds
- · Sanitising agent
- Acidifies the bedding to limit the influence of common pathogens
- Plant extracts and mineral salts
- Industry-leading ammonia and moisture absorption

### **BENEFITS** Sanitised litter







#### Healthy environment

- expenses
- 7 Longer life
- ¬ Reproduction

#### Animal Welfare

- ¬ Comfort
- → Hygiene
- → Odours

#### Improved Production

- ・ 🤊 Milk quality
- ¬ Milk production
- ≥ Slaughterhouse penalties

# PROFITABILITY OF LIVESTOCK **PRODUCTION**

# **HIGH PERFORMANCE DRYING COMPONENTS**

• Irreversible absorption (no sludge or paste)



# **ACIDIFYING SUBSTANCES**

 Considerable acidification of bedding surface

# **SANITISING AROMATIC SUBSTANCES**

 Release of aromatic compounds

#### **AMMONIA CAPTURE**

- · Acts as a nitrogen pump
- Reduces the risk of respiratory weakness linked to ammonia



# ACTIPOST (360)

# MINERAL AND BACTERIAL COMPLEX TO IMPROVE LIVESTOCK EFFLUENTS





# **PRESERVATION OF ELEMENTS** N,P,K,S

# **COMBINATION OF NATURAL CLAYS:**

- · High water absorption capacity
- Absorption N,P,K = "mineral sponge"

Total nitrogen evolution in the manure over 9 weeks





# **COMPOSTING ACTIVATION**

## COMBINATION OF MICROORGANISMS, ENZYMES, **BROWN ALGAE AND MARINE CALCIUM:**

- · Promotes bacterial and fungal life
- · Better digestion of residual organic matter (fibre, fat, protein) with a C/N ratio more favourable to nitrogen mineralisation
- · Homogenisation of effluents for facilitated utilisation.

Evolution of the C/N ratio in manure over 9 weeks

Evolution in slurry

pit surface over . 35 days





**AMMONIA CAPTURE AND ODOUR REDUCTION** 

## COMBINATION OF NATURAL CLAYS AND **MICROORGANISMS:**

- Nitrogen fixation
- Fewer NH<sub>3</sub> and CH<sub>4</sub> emissions

of the NH₃ level



**STERILISATION** 

## COMBINATION OF MICROORGANISMS AND BROWN ALGAE:

- Faster rise in effluent temperature
- Inhibits the germination power of weeds
- · Controls the development of pathogenic microorganisms



of the CH4 level

# Think different... Farm better







### **N-PROCESS**



## Chris Sharp (TD Sharp & Sons)

"To help boost grass nutrient levels and increase palatability, we started using Nutrigrass N-Process, a slow-release grazing fertiliser, three years ago, and we've been really pleased with the results. Despite drought conditions, the grass continued to thrive post-application, which relieved the pressure of having to reach for the silage pit early, to buffer feed the grazing cattle.





## R Pearce and A Goodenough, Gloucestershire

"Our yields increased; we've effectively doubled our yield within PinKstart® a year.This is the highest yield we've recorded in 20 years of growing OSR.

> "We were trying to spend a little less money, maximise investment and implement efficiencies, all while delivering a good yield at the end of the process. We feel like we've achieved this and much more, we've been able to make extra savings by cutting back on other inputs we no longer need to apply."



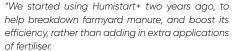
## Wiltshire College & University Centre, Lackham Campus

"We'd previously been using lime bedding but wanted to explore a gentler alternative that'd still do the job in sanitising our sawdust cubicles. Actisan 360 worked out to be the better value out of the other bedding conditioners available. Even with the tanks as full as they are, there isn't really an odour

"We also used Actisan 360 throughout the lambing period and in all of the calf pens."

## MINACTIV





"Over the two-year period we've seen a positive return on investment when compared to applying nitrogen alone. But when you factor in the savings we've made on a reduced need for bought-in feed and increased milk yields from the extra silage production, we've seen an even greater ROI!"

# N-PROCESS



"The Nutrigrass areas had much thicker swards. All through the trial Nutrigrass looked better, in terms of healthier, grew more grass kg/DM. It looked healthier from the start and cows grazed tighter. What we can say is that Nutrigrass will definitely be part of our overall Fertiliser programme in the next years to come."



## Ian Pullen - @FarmerP

My relationship with TIMAC AGRO began just a couple of years ago when we decided to add PinKstart to our first OSR crop, the results were startling and outstanding, the plants romped away, and we ended up with a bumper crop well ahead of any neighbours. My main interest though is with grass, our permanent pastures were obviously tired, so we invited Timac to come up with a solution for us. Soil tests were taken and analysed, and we started with an autumn spreading of Ferteos IV, followed with a spring dressing of

Nutrigrass N-Process. Again, the results were far advanced of what we have produced in the last five years, even with a bumper year for grass across the counties, much of our extra productivity has to be attributed to the planned application of TIMAC AGRO products along with slitting and harrowing. Our grass is recovering rapidly from grazing or mowing, and I'm no longer considering ploughing up and replacing permanent pasture.



















