

Organic fertilization solutions – production and advice

VIOLLEAU®
AKIOLIS



Our expertise

Agronomic valorization of animal and plant by-products

For more than 30 years, our company has specialized in the selection and transformation of organic materials for the production of fertilizers.

In 1989, we started with the production of compost from livestock effluents and thereafter started developing considerable expertise in the formulation of organic fertilizers from the recycling of animal and plant co-products for a circular and sustainable agriculture.

In 2010, we joined **Tessenderlo Group** through one of its subsidiaries **Akiolis**, which is a major player in the European production of Category 3 Processed Animal Protein (C3 PAP) and Category 2 Meat and Bone Meal (C2 MBM).



2 GRANULATION UNITS



16,000 M² COMPOSTING INFRASTRUCTURE



65,000 TONS/YEAR PELLETIZING CAPACITY



30,000 TONS/YEAR COMPOSTING CAPACITY

This partnership with Akiolis has given us access to secure sourcing of meat powders and PAPs, the agronomic value of which optimizes the effectiveness of our formulas today. Our two granulation units are located in La Forêt-sur-Sèvre and Vénérolles.

Our products, which are in the form of pellets and composts, can be used in market gardening, viticulture, arboriculture, green spaces, and field crops. And they can be used in organic and conventional productions.

In 2021, Tessenderlo Group confirmed its growth ambitions in the area of organic agriculture by creating a standalone business unit named "Violleau" that integrates the biocontrol activities of the group alongside the existing pellet and composting ones.

With the concept of sustainability becoming more important by the day, we continuously develop, in partnership with the TIC (Tessenderlo Innovation Center) and agronomic research institutes, new solutions that meet the demands of the agricultural market.

C3 PAP and C2 MBM*

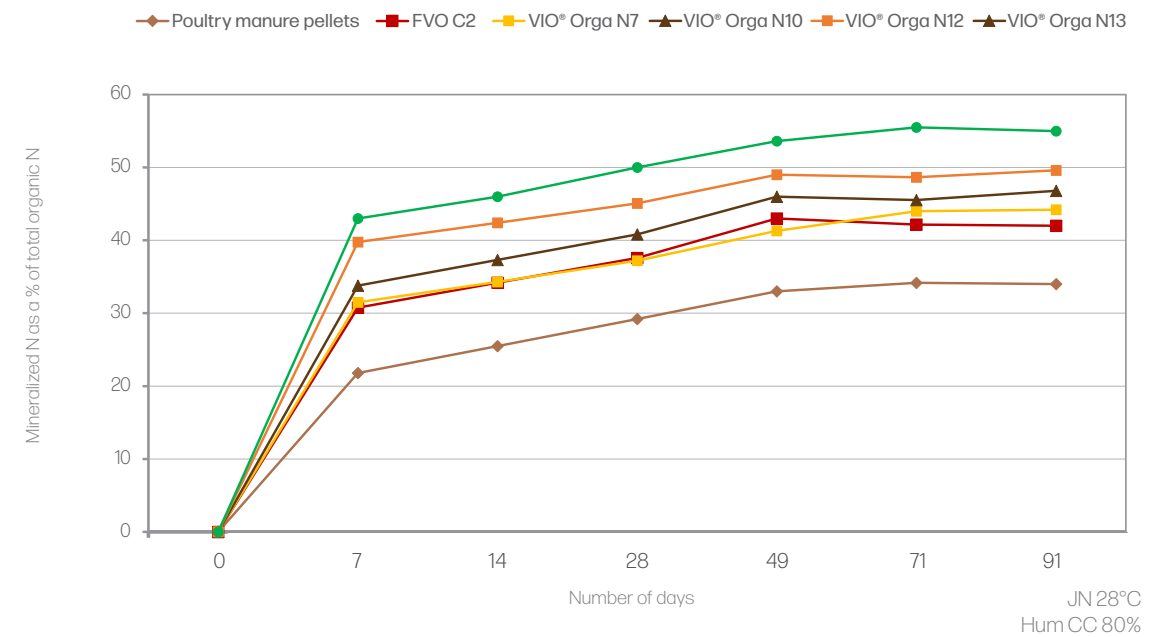
Ensuring an efficient nitrogen and phosphorus supply to the soil

The intrinsic qualities of C3 PAP and C2 MBM make them particularly interesting raw materials for the formulation of organic fertilizers:

- Delivery of key nutrients (mainly N&P) to the plant for plant growth and development
- Contribution of organic matter to the soil
- Organic nitrogen is released gradually, matching the plant development requirements

Nitrogen mineralization kinetics study for various Violleau products

CTIFL laboratory, 2017 (Azopro methodology)



Conclusions: the composition and formulation process impact the nutrient efficiency of the products

The CTIFL study shows that Violleau products accelerate the availability of nitrogen for crops.

This efficiency is explained by their high biodegradability and the chain reactions that it triggers: high biodegradability leads to the faster decomposition of products by microorganisms which impacts the mineralization of carbon and in turn leads to the faster release of mineral elements, including nitrogen, which becomes more quickly available to crops.

The speed of nitrogen release depends on the formulation and the amount of nitrogen available, which is different for each product. However, regardless of the formulation, the study concludes that the potential for nitrogen release is high for Violleau products.

* C3 PAP: Processed Animal Protein category 3 - C2 MBM: Meat and Bone Meal category 2

Violleau, a player in sustainable agriculture and the circular economy

OUR PROMISES

- > Optimal carbon footprint
- > Clear product traceability
- > Controlled quality
- > Guaranteed sanitary safety
- > Certified organic origin



PRODUCTION OF C3 PAT AND C2 MBM
Animal by-products

RAW MATERIAL INPUT

Plant by-products
Livestock effluents
Green waste
Mineral matter

FARMING



AGRI-FOOD INDUSTRIES

Slaughterhouses
Food distribution



ORGANIC AND CONVENTIONAL APPLICATIONS

Broadacre crops
Fruit and vegetable production
Hobby market and green spaces



Collection service

PAP C3
MBM C2

Selection, formulation, control, blending, processing

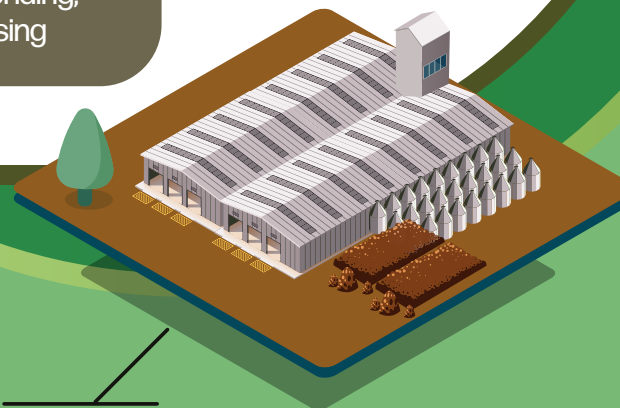
100% LOCAL PRODUCTION

Fertilizers and organic amendments

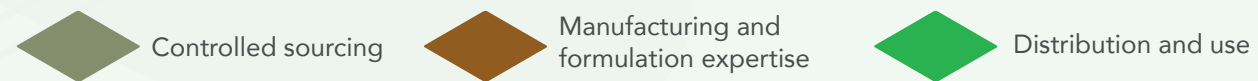
AGRO-SUPPLY DISTRIBUTORS



ELABORATED PROCESSES
For the production of pellets and composts



C3 PAP: Processed Animal Protein category 3 - C2 MBM: Meat and Bone Meal category 2





Quality control

Selection of raw materials, process control, and traceability

Pellets

The raw materials used in our formulations are traceable and mostly certified as being usable in organic agriculture:

- Feather, blood, meat, and bone powders (C3 PAT, C2 MBM*)
- Co-products from agricultural activities: composts, vegetable husks and pulps, and dehydrated droppings
- Industry co-products: plant co-products, mineral or organic materials selected for their solubility, agronomic quality, or use in organic farming

Secure sourcing:

- Rigorous selection of manufacturers of C3 PAT and C2 MBM*
- Regulatory compliance of inputs (Regulation (EC) No. 1069/2009 on animal by-products)
- Traceability of batches from raw material to finished products
- Sample library
- Regular analysis of production by an independent laboratory



Composts

Our composting platform features 8 controlled chambers in which our different formulations are matured.

Secure sourcing:

- Livestock effluents
- Co-products from food processing industries
- Green waste from local authorities
- Meat and bone powders

Guarantees of sanitary safety and traceability:

- Validation of specifications with farming and industrial partners
- Quality control of inputs in our internal laboratory
- Precise monitoring of composting parameters

* C3 PAP: Processed Animal Protein category 3 - C2 MBM: Meat and Bone Meal category 2

Pellets, composts and foliar fertilizers

Overview of our fertilization solutions

Pellets

A wide range of organic and organo-mineral formulas adapted to all agronomic situations.

		UAB							Packaging	Diameter
VIO® Orga	100% organic fertilizers		v	v	v	v	v	v	Bulk Big bag	4.5 mm
VIO® +	Organo-mineral fertilizers		v	v	v	v	v			
VIO® + SK	Organo-mineral fertilizers		v	v	v		v			
VIO® Humus +	Organic amendments		v	v	v	v	v	25 kg bag		
VIO® Acti	Organic fertilizers with agronomic additives (NF U44-204) to optimize nutrient availability and/or plant growth		v	v	v	v	v			
VIO® Start	Organic starter fertilizers				v	v			3.75 mm	

Composts

Formulas that allow a contribution of plant organic matter as well as fertilization to feed plants and improve the soil.

		UAB							Packaging	Diameter
VIO® Humus	Organic amendments in compost*		v	v	v	v	v	v	Bulk	10 - 30 mm
VIO® Fertil	Organic fertilizer in compost*		v	v	v	v	v			

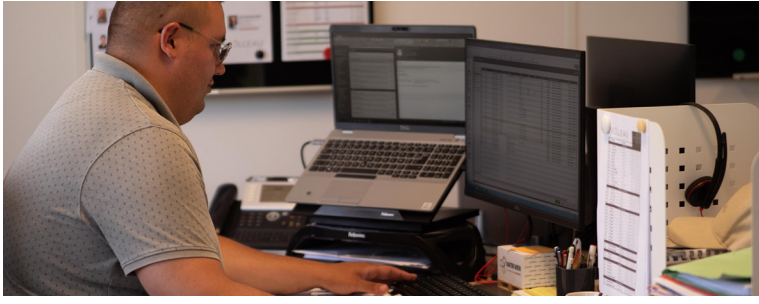
* With the exception of one or two formulas, the products in the VIO® Humus and VIO® Fertil ranges can be used in organic agriculture.

Foliar

Nutritional supplements that stimulate plant development to optimize quality and yield.

		UAB							Packaging
VIO® Green	Registered natural biostimulant (no. 1200485) based on SHB lignocellulosic extract for plant growth and development		v	v	v	v	v	v	10 L canister (600 L pallet)
VIO® Green Nutri	EC NPK fertilizer for foliar application		v	v	v	v	v		
K-Leaf®	Potassium fertilizer (low in chlorine) for foliar application		v	v	v	v	v	20 kg bag Packaged in pallets weighing 1.260 tons	





OUR TEAM AT YOUR SERVICE

VIOLEAU[®]
AKIOLIS

27, ZAE La Gouinière
79380 La Forêt sur Sèvre
FRANCE



Tel.: +33 5 49 80 74 02 - contact@violleau.fr
www.violleau-agro.com

Part of Tessengerlo Group