



IT ALL COMES SO NATURALLY



# NATURAL PROTECTION FROM SPOILAGE



 **MILLBIO**  
INNOVATION, NATURALLY

# FROM THE STUDY OF PLANTS AND BOTANICALS A BRILLIANT CONCEPT HAS EMERGED

## INTRODUCING THE CORE INGREDIENT

The quest for a natural solution to help freshness is over.

A botanical extract from the Rowan berry is the answer:

X-TRA GUARD, the most recent innovation formulated by the recently merged BioNaturals and Millbo companies.



# THE ROWAN BERRY TREE

## A STORY OVER THE YEARS



### ***Sorbus aucuparia L.***

(n.) [cent. XV; lat. Scient. sörbus]

*"Latin name used in the botanical classification to indicate trees and saplings of the rosaceae pomioidee genus: The Rowan Berry Tree.*

*The tree has orange or scarlet fruits with a 1cm diameter from which an edible essence, much loved by birds, (Aucuparia) can be extracted".*

# MILLBIO SOLUTION FOR BAKERY PRODUCTS

## X-TRAGUARD™ THE SHIELD FROM PLANTS

X-TRA GUARD is a **natural ingredient** which has been extracted from the Rowan berry, with the use of a tapioca flour carrier. It has been meticulously developed to help long shelf life products and is wholly derived from the Rowan berry's natural botanical compounds.



# FOOD MATTERS LIVE WINNER PRODUCT

«FOOD» MAGAZINE – ADV PAGE



**Future Ingredients  
Competition 2021**

**MILLBO**




**X-TRAGUARD<sup>™</sup>**  
**PROTECTION  
FROM NATURE**

WINNER PRODUCT  
FOOD INGREDIENTS  
AWARD 2021  
**FOOD  
MATTERS**  
*live*

IN BAKED PRODUCTS  
IN TRADITIONAL BURGERS  
IN VEGGIE BURGERS  
IN CHEESE  
IN SAUCES

VEGAN | CLEAN LABEL | NO GMO | NO ADDITIVES

X-tra Guard is the innovative line created with botanical extracts, in particular the rowan berry (*Sorbus Aucuparia* L.), a natural source of sorbate. It offers important advantages both in applications and in label declarations. To find out more, write to [info@millbo.it](mailto:info@millbo.it)

 **MILLBO**  
NATURAL SOLUTIONS FOR  
CONTEMPORARY BAKING

MILLBO.COM

# X-TRA GUARD FEATURES

- A CLEAN LABEL SOLUTION
- ALLERGEN FREE
- AN INGREDIENT NOT AN ADDITIVE
- VERIFIED EFFECTIVE ON SHELF LIFE
- KOSHER AND HALAL CERTIFIED
- NON – GMO
- LABEL FRIENDLY DECLARATION:  
botanical/plant/fruit extract (*Sorbus aucuparia L.*)\*

\*Ask for the leading lawyers written opinion on label declaration



# PRODUCT DESCRIPTION AND RECOMMENDED DOSAGE



**DESCRIPTION:** plant/ fruit/ botanical extract



**INGREDIENTS:** botanical extract (*Sorbus aucuparia L.*), tapioca flour



**APPARANCE:** off white to light yellow powder



**ODOR AND FLAVOUR:** fruity and slightly acid



**DOSAGE:** the recommended dosage is between 0.25 and 0.5 % on total recipe\*

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\*Contact our customer care for advice on the best solutions for your products.

# APPLICATIONS : WHERE EXTENDED SHELF LIFE IS WANTED



**TORTILLAS**



**CAKES**



**BISCUITS**



**COOKIES**



**WRAPS**



**FRUIT JAMS**



**FILLING**



**CREAMS**



**BARS / MUFFINS**



**MARGARINE**



# PRACTICAL INFORMATION



**PACKAGING** 20 kg paper bags with liner  
50 bags/pallet 100x120 cm (= 1000 kg pallet)



**MOQ** 1 pallet



**LEAD TIMES** 1 to 20 MT: 2 weeks  
Over 20 MT: 6 weeks



**SHELF LIFE** 12 months from date of manufacturing



**STORAGE** Ambient and dry (max 25° C)



## COST IN USE – EXAMPLE 1: PIADINA RECIPE

INGREDIENTI	% on total recipe	rm cost €/kg	cost	total
Flour (W180/200)	61,9	0,6	0,37	0,66
Water	31,2	0	0	
Extra virgin olive oil	3,6	6	0,22	
Salt	1,3	0,2	0,00	
Baking powder	1,5	1,2	0,02	
X-TRA GUARD - 5000 ppm	0,50	12	0,06	



## COST IN USE – EXAMPLE 2: POUND CAKE RECIPE

INGREDIENTS	% on total recipe	rm cost €/kg	cost	total
Flour	25,65	0,6	0,15	2,50
Butter	21,5	8	1,72	
Sugar	21,5	0,9	0,19	
Eggs	21,5	1,6	0,34	
Milk	4,3	0,7	0,03	
Baking powder	0,8	1,2	0,01	
Salt	0,2	0,2	0,00	
Starch	4,3	0,5	0,02	
X-TRA GUARD - 2500 ppm	0,25	12	0,03	



## X-TRA GUARD (*Sorbus aucuparia* L.)

CODE	PRODUCT
4292	X-TRA GUARD – rowan berry extract - standard version
4309	X-TRA GUARD GF – rowan berry extract - gluten free version
4326	X-TRA GUARD FERM – fermented flour and botanical extract
4288	X-TRA GUARD S – rowan berry extract - soluble version
4308	X-TRA GUARD S GF – rowan berry extract – soluble and gluten free version
BN21016	X-TRA GUARD V – rowan berry extract with vinegar powder
BN21013	X-TRA GUARD L – rowan berry extract with lemon powder
4327	X-TRA GUARD BIO – organic version
4344	X-TRA GUARD 50 LDE – rowan berry extract – USA market



**PALLETIZATION:** 30 x 20 kg bag – 600 kg pallet (80 x 120) or 50 x 20 kg bag – 1000 kg (100 x 120)



**CUSTOM TARIFF:** 21.06



## ASK NOEMI

For full technical data sheet, safety data sheet and product samples requests.

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