

B A S

biodegradable and/or biobased innovative compounds
by TPV compound



B A S



BAS, is the range of biodegradable and/or biobased innovative compounds by **TPV compound**.

BAS compounds arise upon the increasingly push to drive the industrial polymer research towards new materials with the lowest possible environmental impact, without renouncing the useful properties of fossil-based plastics.



OUR EFFORT FOR THE ENVIRONMENT



All BAS compounds have been deeply studied to reach the best solutions to replicate current polluting plastics. On this drive, we can offer:

BIODEGRADABLE Compounds to limit the traditional plastics accumulation in the environment

BIOBASED Compounds, to limit the supply from fossil resources of traditional plastics. At the same time, we believe in a sustainable transition from traditional plastics to bio-materials. Therefore, our drive our effort to offer the possibility of transforming bio-materials into finished articles by means of the same transformation technologies as traditional plastics, such as extrusion or injection molding



ALL BAS ARE BIODEGRADABLE AND/OR BIOBASED

B I O D E G R A D A B L E



All polymers are degradable but only biodegradable polymers are able to be decomposed by microorganism in water, carbon dioxide and oxygen without leaving microplastics or toxic elements in the environment. Depending on the environmental pool of biodegradation it is possible to distinguish between:
Biodegradable in soil, Home composting, Industrial composting.

B I O B A S E D



Unlike traditional plastics deriving from fossil resources, Biobased polymers are deriving, entirely or at least in part, from non-GMO renewable resources, such as agricultural vegetable waste



We can offer both extrusion and injection molding compounds for different applications

NAME	PROCESS	FEATURES
BAS 0524E MAR02	Extrusion	Biodegradable In soil
BAS 0526EW NAT	Extrusion	Biodegradable In soil
BAS 0522E NAT	Extrusion	Home compostable
BAS 0627E NAT	Extrusion	industrial compostable/Partially biobased
BAS 0923 NAT	Injection Molding	industrial compostable/Full biobased
BAS 0332 NAT	Blow Molding	industrial compostable/Partially biobased

beyond the range of already approved products, our commitment as a compounding is to always meet the customer's needs by customizing the product according to its requirements

BAS 0524E MAR02



Biodegradable compound, containing wood flour as natural Biofiller. It is certified by TUV-AUSTRIA as biodegradable in soil and has good flexibility and excellent elongation at break. It is the ideal substitute for P-PVC and LDPE for applications in which the product is required to biodegrade in the soil.

2023

BAS - TPV COMPOUND

BIODEGRADABLE IN SOIL

CERTIFIED BY TUV-AUSTRIA

TECHNICAL INFORMATION

TESTING METHOD	UNIT OF MEASURE	VALUE
ISO 1183-1	g/cm ³	1,24
ISO 868	Shore A	95
ISO 527	N/mm ²	20
ISO 527	%	600
ASTM D 1238	g/10 min.	5

Application:

- Binding tubes for plants
- Greenhouse binding tubes
- Double plates for agriculture
- Net for fruit and vegetable
- Net for packaging of fish

Processing parameters: We suggest to use a single screw extruder with L/D > 20. A standard screw designed for plasticized PVC with compression ratio 2,1 - 2,5:1 is suitable to work this compound.

Extrusion temperature

Storage: The compound is sold in a special package, after drying, so that it can be stored away from heat and humidity for up to 12 months. After opening the package, the compound must be used immediately..

BAS 0526EW NAT



A special version of BAS 0524E containing wine processing waste as natural Biofiller. The presence of this particular Biofiller, in addition to giving to the compound a particular color and fragrance, accelerates the biodegradation processes.

2023

BIODEGRADABLE IN SOIL

TECHNICAL INFORMATION	TESTING METHOD	UNIT OF MEASURE	VALUE
Specific Weight	ISO 1183-1	g/cm ³	1,26
Hardness	ISO 868	Shore A	95
Tensile Strength	ISO 527	N/mm ²	20
Elongation at Break	ISO 527	%	600
Fluidity Index (190 °C/2,16 kg.)	ASTM D 1238	g/10 min.	5

Application:

- Binding tubes for plants
- Greenhouse binding tubes
- Article for vine growing

Processing parameters: We suggest to use a single screw extruder with L/D > 20. A standard screw designed for plasticized PVC with compression ratio 2,1 - 2,5:1 is suitable to work this compound.

Extrusion temperature

Storage: The compound is sold in a special package, after drying, so that it can be stored away from heat and humidity for up to 12 months. After opening the package, the compound must be used immediately..

BAS - TPV COMPOUND

BAS 0627E NAT



A compound specially developed for the extrusion of biodegradable hoses. The compound is suitable for tubular extrusion of hoses up to a diameter of 100 mm. Moreover, compared to fossil sourced LDPE, normally used for these applications, it gives possible to obtain hoses with half the thickness without losing mechanical properties.

2023



HOME COMPOSTABLE



PARTIALLY BIOBASED

TECHNICAL INFORMATION	TESTING METHOD	UNIT OF MEASURE	VALUE
Specific Weight	ISO 1183-1	g/cm3	1,27
Hardness	ISO 868	Shore A	95
Tensile Strength	ISO 527	N/mm2	35
Elongation at Break	ISO 527	%	150
Fluidity Index (190 °C/2,16 kg.)	ASTM D 1238	g/10 min.	5

Application:

- Irrigation hose
- perforated hose
- plant cover hose
- Shrub Protection Hose

Bas 0627E Compound

Processing parameters: We suggest to use a single screw extruder with L/D > 20. A standard screw designed for plasticized PVC with compression ratio 2,1 - 2,5:1 is suitable to work this compound.

145±15°C 145±15°C 150±15°C 155±15°C

Extrusion temperature

Storage: The compound is sold in a special package, after drying, so that it can be stored away from heat and humidity for up to 12 months. After opening the package, the compound must be used immediately..

BAS 0522E NAT



Compound specially designed for bubble extrusion of translucent and transparent films, with good flexibility and excellent elongation at break. It is the ideal substitute for LDPE for the extrusion of biodegradable films up to a thickness of 20 micron

2023

HOME COMPOSTABLE

TECHNICAL INFORMATION

	TESTING METHOD	UNIT OF MEASURE	VALUE
Specific Weight	ISO 1183-1	g/cm ³	1,22
Hardness	ISO 868	Shore A	95
Tensile Strength	ISO 527	N/mm ²	20
Elongation at Break	ISO 527	%	600
Fluidity Index (190 °C/2,16 kg.)	ASTM D 1238	g/10 min.	5

Application:

- mulch sheets
- supermarket shopping bags
- courier bags
- clothing bags
- industrial package

Processing parameters: We suggest to use a single screw extruder with L/D > 20. A standard screw designed for plasticized PVC with compression ratio 2,1 - 2,5:1 is suitable to work this compound.

Extrusion temperature

Storage: The compound is sold in a special package, after drying, so that it can be stored away from heat and humidity for up to 12 months. After opening the package, the compound must be used immediately..

BAS - TPV COMPOUND

BAS 0923 NAT



A Fully Biobased compound, suitable for the molding of semi-rigid/rigid items. Usable for various applications, it is designed to give to the final product a particular aesthetic finish.

2023



INDUSTRIAL
COMPOSTABLE



FULLY BIOBASED

TECHNICAL INFORMATION	TESTING METHOD	UNIT OF MEASURE	VALUE
Specific Weight	ISO 1183-1	g/cm3	1,23
Hardness	ISO 868	Shore D	67
Tensile Strength	ISO 527	N/mm2	1750
Elongation at Break	ISO 527	%	50
Fluidity Index (190 °C/2,16 kg.)	ASTM D 1238	g/10 min.	9

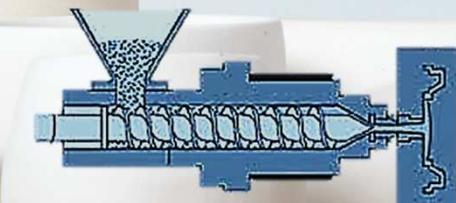
Application:

- Filament for 3d printer
- vases and other design items
- cups (cold cups)
- rigid food containers,
- trays
- silverware
- salad bowls
- straws
- tea bags
- coffee pods



BAS - TPV COMPOUND

Processing parameters: we suggest to use Injection molding machine with standard screw for polyolefins. Recommended back pressure between 3 and 15 bar.



Injection moulding temperature

Storage: The compound is sold in a special package, after drying, so that it can be stored away from heat and humidity for up to 12 months. After opening the package, the compound must be used immediately..

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BAS 0627E NAT



A compound, usable as HDPE counterpart, for extrusion/blow molding specially designed for the industrial bottle sector. Suitable for both the cosmetic sector and the food and beverage packaging.

2023



INDUSTRIAL
COMPOSTABLE



PARTIALLY BIOBASED

TECHNICAL INFORMATION	TESTING METHOD	UNIT OF MEASURE	VALUE
Specific Weight	ISO 1183-1	g/cm3	1,27
Hardness	ISO 868	Shore A	95
Tensile Strength	ISO 527	N/mm2	35
Elongation at Break	ISO 527	%	150
Fluidity Index (190 °C/2,16 kg.)	ASTM D 1238	g/10 min.	5

Application:

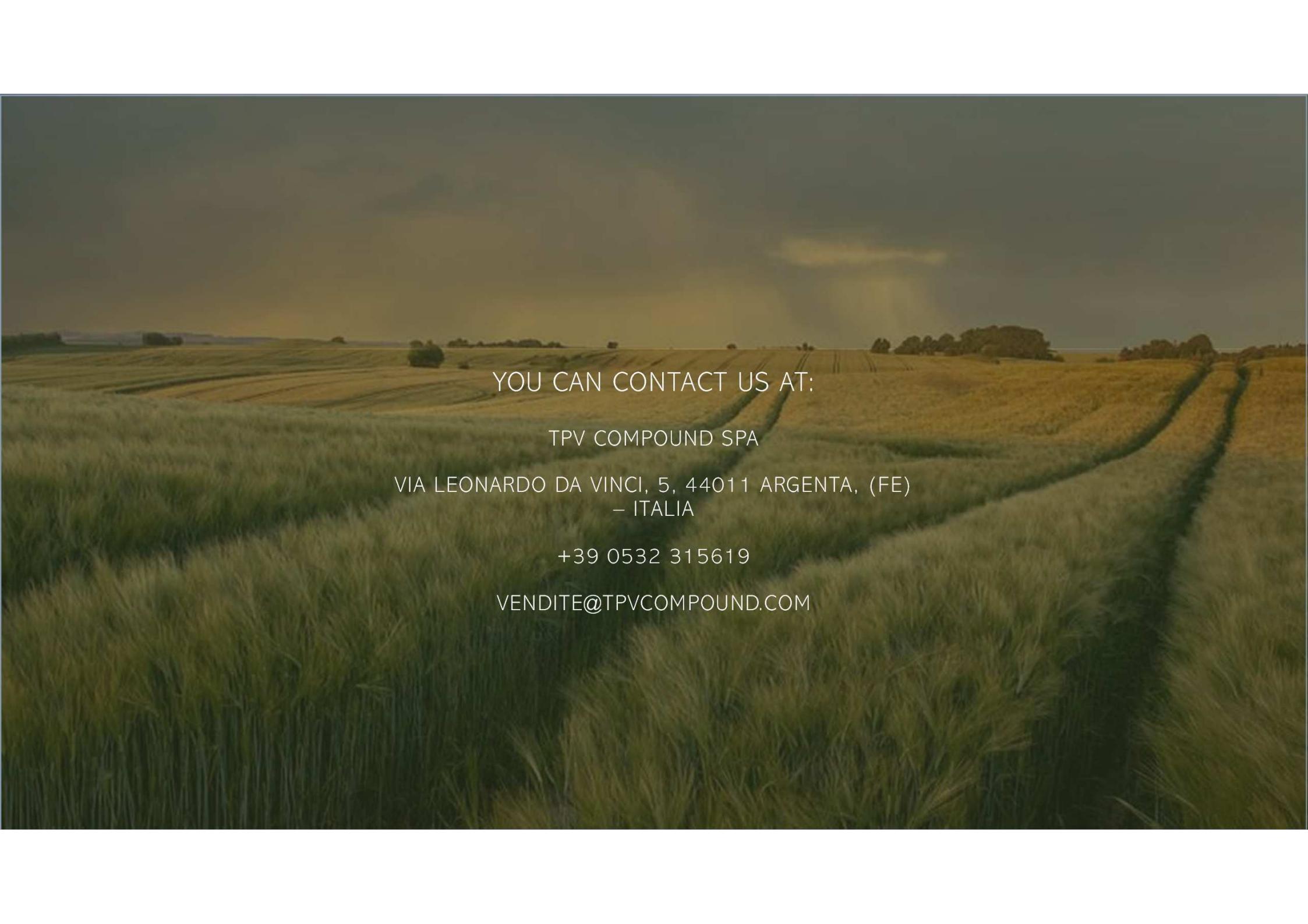
- cosmetic bottle
- bottle caps
- water bottles
- water tanks

BAS - TPV COMPOUND

Processing parameters: We suggest to use a single screw extruder with L/D > 20. A standard screw designed for plasticized PVC with compression ratio 2,1 - 2,5:1 is suitable to work this compound.

The diagram shows a single-screw extruder barrel with four temperature zones indicated by boxes below it: 145±15°C, 145±15°C, 150±15°C, and 155±15°C. The word "Extrusion temperature" is written below the barrel.

Storage: The compound is sold in a special package, after drying, so that it can be stored away from heat and humidity for up to 12 months. After opening the package, the compound must be used immediately..

The background of the image is a wide-angle photograph of a rural landscape. In the foreground, there's a field of tall, green grass or young crops. Beyond it, several fields of mature, golden-yellow grain are visible, separated by dark, winding paths or furrows. The horizon is flat and stretches to a line of small trees and bushes. The sky above is filled with heavy, dark clouds, with patches of bright yellow and orange light breaking through from behind, suggesting either a sunrise or sunset.

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