



PRODUCT CATALOGUE



EKO CHEM
compounds





OUR PRODUCTS MEAN YOUR SUCCESS

We are a leading manufacturer of high-quality plastics, specialising in providing innovative solutions for industry. With many years of experience and a state-of-the-art machinery park, we offer a wide range of products that meet the highest quality standards.

Our plastics are used in a variety of sectors, including the automotive, construction, packaging and electronics industries.



We are committed to development and ecology, which is why we ensure that our production processes are sustainable.



In-house research and development facilities and an extensive quality department allow us to continuously improve our products and ensure their best quality.



Our team of experts is on hand to assist at every stage of the collaboration, providing comprehensive technical support and advice.





EKOABSORBER
premium

MOISTURE ABSORBER

An additive for plastics in a convenient granule form that effectively absorbs moisture, thus eliminating the need for drying the material in traditional dryers. Thanks to its hygroscopic properties, EKOABSORBER not only removes moisture, but also prevents the gassing of plastics, resulting in reduced waste and improved efficiency of the entire production process.

This product can be processed on your machines without any risk, and its use does not adversely affect the properties of the final products.

Advantages of using the EKOABSORBER moisture absorber

- Eliminates the need to dry plastics
- Prevents gassing of plastics
- Stabilises the processing
- Removes acidic contaminants
- Produced in Poland – easily and quickly available
- Available in variants: PREMIUM and STANDARD
- High filling with moisture-absorbing active substance: up to 83%
- Low dosage requirement: from 0.5% to 3%
- Reduces the cost of the final product.

The absorber is compatible with:



HDPE



LDPE



PP



ABS



PVC



PS



Absorber action

Film before using the absorber



Film after using the absorber



Application

EKOABSORBER can be used wherever plastics are used in production, in the form of granules, regrinulates, regrinds and agglomerates.



Film blowing



Recycling



Compounding



Extrusion



Injection moulding

Packaging:

Available in 25 kg packs and in big-bags.

*Storage: in tightly closed and original packaging, in a dry and dark room, no longer than 12 months from date of production

Processing methods:

- › Extrusion
- › Extrusion blow moulding
- › Injection moulding



FLEXOCHEM

TPE-S THERMOPLASTIC ELASTOMERS

FLEXOCHEM is a type of thermoplastic elastomer formed by combining a styrene elastomer phase (SBS, SEBS, SEPS, etc.) with a thermoplastic phase.

Carefully selected components and the unique FLEXOCHEM formula guarantee that even the most demanding expectations are met, while maintaining the high quality of the final product.

Advantages of using Flexochem TPE:

- ▶ Wide product portfolio in terms of hardness: from 15 ShA to 95 ShA.
- ▶ Possibility of colouring.
- ▶ Classic colour availability of granules: black, natural and transparent.
- ▶ Very good resistance to UV radiation.
- ▶ Does not contain PVC in the composition.
- ▶ Production in Poland - high availability and fast delivery.
- ▶ Reusable and easy to recycle.
- ▶ Repeatable, high quality regardless of delivery.
- ▶ Possibility of partial use of recycled additives in the primary material.



Application



Packaging



household



appliances seals



tapes



membranes



handles



Toys



Shoe insoles



Wheels



Mats



Profiles



Soft touch applications



Packaging:

Available in 25 kg packs and in big-bags.

Processing methods:

- ▶ Injection moulding
- ▶ Extrusion
- ▶ Thermoforming
- ▶ Co-extrusion
- ▶ Extrusion blow moulding
- ▶ 2K injection moulding

EXTRUSION – UNFILLED

	Unit	ISO	30A	40A	50A	60A	70A	80A	90A
Hardness	ShA	868 (15s)	30	40	50	60	70	80	90
Density	g/cm ³	1183	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Tensile strength	MPa	37	5.5	7	7.5	9.5	11.5	13	17
Module 100%	MPa	37	0.8	1	1	1.5	3	3.5	5
Elongation at break	%	37	>800	>800	>800	>800	>800	>800	700
Tear strength	kN/m	34-1	23	33	28	33	41	48	62

EXTRUSION – PARTIALLY FILLED

	Unit	ISO	30A	40A	50A	60A	70A	80A	90A
Hardness	ShA	868 (15s)	30	40	50	60	70	80	90
Density	g/cm ³	1183	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Tensile strength	MPa	37	5.5	6	6.5	8	9	12	14
Module 100%	MPa	37	0.7	1	1	1.5	2.5	3	5
Elongation at break	%	37	>800	>800	>800	>800	>800	>800	700
Tear strength	kN/m	34-1	22	29	29	34	43	48	61

EXTRUSION – FILLED

	Unit	ISO	30A	40A	50A	60A	70A	80A	90A
Hardness	ShA	868 (15s)	30	40	50	60	70	80	90
Density	g/cm ³	1183	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Tensile strength	MPa	37	4.5	6	7	8	9	11	13.5
Module 100%	MPa	37	0.8	1	1	1.5	2.5	3.5	5
Elongation at break	%	37	700	>800	>800	>800	>800	>800	700
Tear strength	kN/m	34-1	21	33	28	32	40	50	64

INJECTION MOULDING – UNFILLED

	Unit	ISO	30A	40A	50A	60A	70A	80A	90A
Hardness	ShA	868 (15s)	30	40	50	60	70	80	90
Density	g/cm ³	1183	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Tensile strength	MPa	37	4	4.5	5.5	7.0	9.5	11	13
Module 100%	MPa	37	0.8	1	1.5	2.0	2.5	3.0	5.5
Elongation at break	%	37	>800	>800	>800	>800	>800	>800	700
Tear strength	kN/m	34-1	24	26	30	34	43	52	66

INJECTION MOULDING – PARTIALLY FILLED

	Unit	ISO	30A	40A	50A	60A	70A	80A	90A
Hardness	ShA	868 (15s)	30	40	50	60	70	80	90
Density	g/cm ³	1183	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Tensile strength	MPa	37	3.5	4.0	6.5	6.5	10.0	10.5	13
Module 100%	MPa	37	0.7	1	1.5	1.5	2.5	3	5
Elongation at break	%	37	>800	>800	>800	>800	>800	>800	700
Tear strength	kN/m	34-1	20	21	30	32	35	44	59

INJECTION MOULDING – FILLED

	Unit	ISO	30A	40A	50A	60A	70A	80A	90A
Hardness	ShA	868 (15s)	30	40	50	60	70	80	90
Density	g/cm ³	1183	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Tensile strength	MPa	37	4.0	4.5	6	7	9	10	11
Module 100%	MPa	37	0.8	1	1	1.5	2.5	3.5	5
Elongation at break	%	37	700	>800	>800	>800	>800	>800	700
Tear strength	kN/m	34-1	20	22	27	30	38	44	57



EKOCOLOR
black

BLACK DYE MASTERBATCH

High-quality colour concentrate in the form of black granules. It is used in the plastics industry. **EKOCOLOR BLACK** is a simple and effective solution for manufacturers who want to give their products a solid, intense black colour.

Advantages:

- ▶ High product yield – the use of EKOCOLOR allows an intense black colour to be obtained with a relatively low dosage.
- ▶ Colour stability – thanks to high-quality components. EKOCOLOR BLACK ensures colour fastness and resistance to fading.
- ▶ Production in Poland – high availability and fast delivery.



EKOCOLOR is used in:



automotive



electronics



construction



packaging



daily
consumer
goods



Packaging:

Available in 25 kg packs and in big-bags.

Types of black colour concentrate

Name	Polymer matrix	Pigment content [%]	Filler	Application
EKOCOLOR BLACK	PE	15	None or up to 65%	extrusion, injection moulding, thermofforming, including industrial packaging, consumer packaging, agriculture, construction, food contact products*.
EKOCOLOR BLACK	PE	20	None or up to 60%	
EKOCOLOR BLACK	PE	30	None or up to 50%	
EKOCOLOR BLACK	PE	35	None or up to 45%	
EKOCOLOR BLACK	PE	40	None or up to 35%	
EKOCOLOR BLACK	PE	50	None or up to 20%	

* possibility to produce colour for food contact products electronics



EKOIMPACT

IMPACT MODIFIER

EKOIMPACT improves the impact resistance of plastics and their durability. Ideal for materials which are characterised by brittleness and low impact resistance.

It significantly improves the properties of the material, giving it elasticity and strength. This makes the product more resistant to mechanical damage. Thanks to this, the materials become more resistant to impact, scratches and cracks, which significantly increases their durability and service life.

Advantages:

- Adding the modifier increases flexibility and strength, making the final product more resistant to mechanical damage.
- Increased resistance to impact, scratches and cracks, significantly extending the service life of the final product.
- Stable and high product quality, monitored on an ongoing basis by our internal laboratory.

Application

➤ Increased resistance to cracking and breaking

It improves impact resistance, which means that the material becomes more resistant to cracking under impact or sudden temperature changes.

➤ Extended product life

The use of **EKOIMPACT** makes the end products more durable and resistant to mechanical damage, which translates into a longer service life.



The impact modifier is compatible with:



HDPE



LDPE



PP



ABS



PS

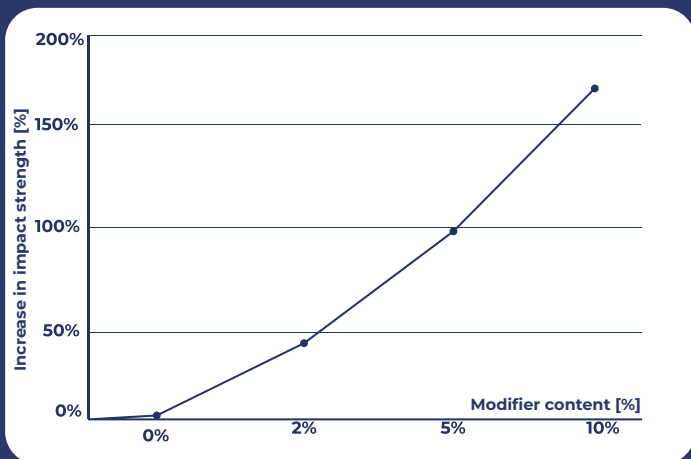


Packaging:

Available in 25 kg packs and in big-bags.

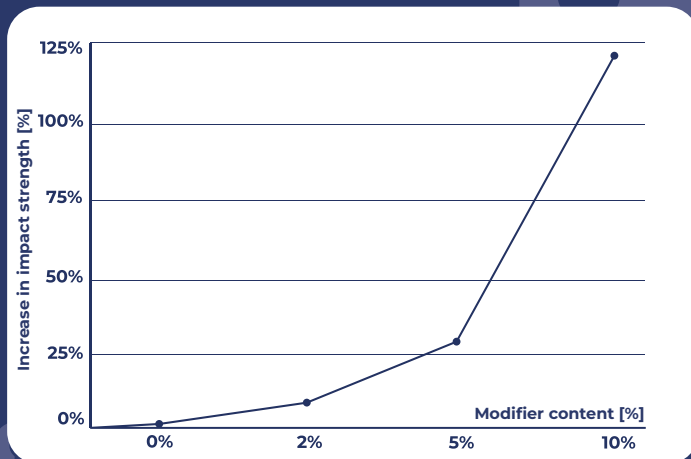
INCREASE IN IMPACT STRENGTH

IMPACT MODIFIER FOR PP



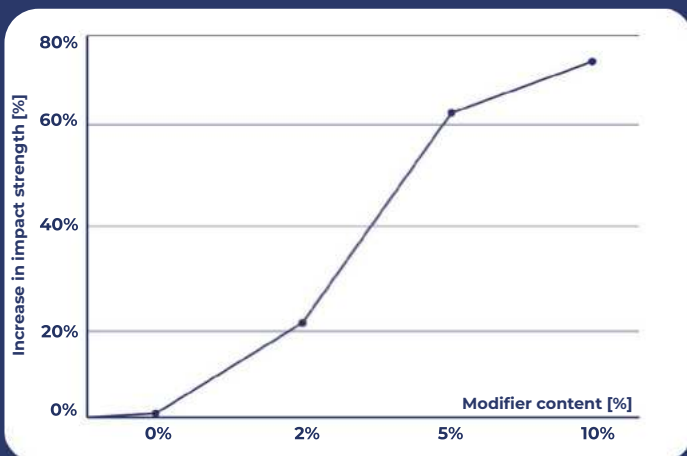
Modifier content	Increase in impact strength
0%	0%
2%	40%
5%	100%
10%	170%

IMPACT MODIFIER FOR PE



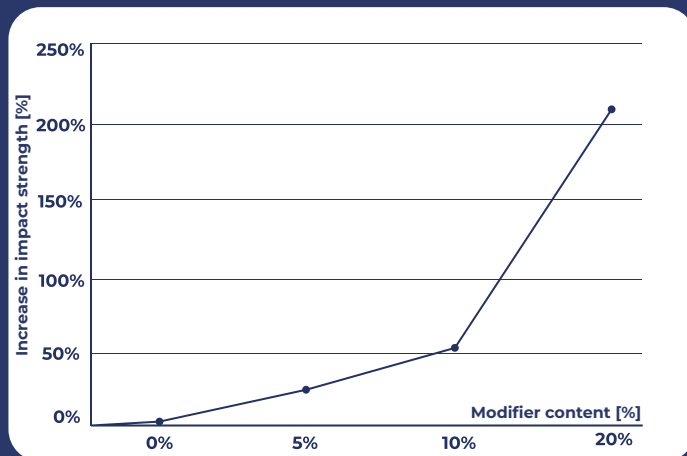
Modifier content	Increase in impact strength
0%	0%
2%	5%
5%	30%
10%	120%

IMPACT MODIFIER FOR ABS



Modifier content	Increase in impact strength
0%	0%
2%	25%
5%	60%
10%	80%

IMPACT MODIFIER FOR PS



Modifier content	Increase in impact strength
0%	0%
5%	25%
10%	50%
20%	210%

rTPE and rTPV REGRANULATES

Regranulates are an environmentally friendly alternative to primary raw materials, supporting sustainable development. Growing environmental awareness is driving increased interest in regranulates and their wider use in various industries. Depending on the type of base material, regranulates are available as rTPE and rTPV.

Advantages of using rTPE and rTPV regranulates:

- Reduced production costs – regranulates are cheaper than primary raw materials. Using them on their own or in combination with primary materials reduces the manufacturing costs of the end product.
- High repeatability and high standard because EKOFLEX regranulates come from selected and tested post-production waste.
- Wide range of processing options – EKOFLEX regranulates can be processed in various ways, offering great flexibility in product design.
- rTPE and rTPV regranulates contribute to sustainable development and environmental protection, fitting in with the zero-waste culture.
- Raw material available in hardnesses ranging from:
 - 60 to 95 ShA for rTPV
 - 40 to 95 ShA for rTPE



Application:

Regranulates are widely used in many industries. In the automotive industry, they are used, for example, in the production of seals, joint covers and interior components. In the construction industry, they are used for window seals and expansion joints.



rubber seals



car covers



soft touch applications



rubber pads



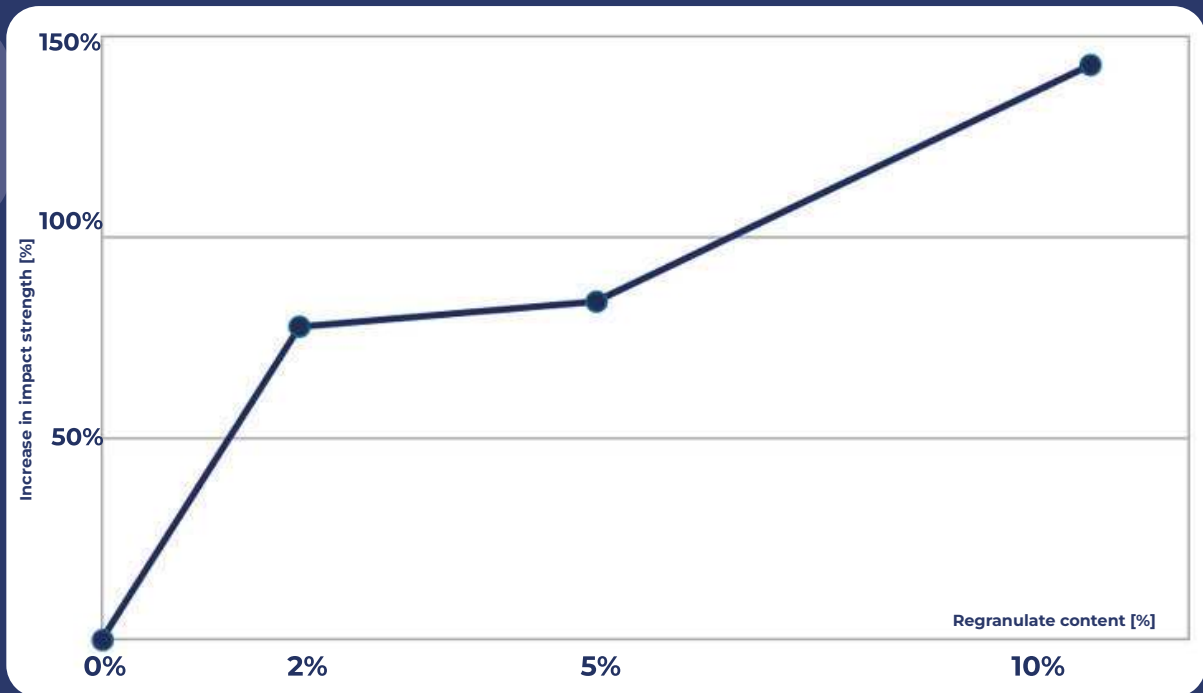
compounding PP



Regranulates as an impact modifier:

Regranulates are also used as impact modifiers in PP processing. They are an ideal solution for manufacturers looking for ways to improve the mechanical properties of their products while reducing their susceptibility to damage.

Effect of regranulate addition on PP impact strength



Addition of regranulate	Increase in impact strength
0%	0%
2%	80%
5%	100%
10%	140%

Packaging:

Available in 25 kg packs and in big-bags.

Processing methods:

- Injection moulding
- Thermoforming
- Extrusion



EKOMASTER
clean

CLEANING GRANULATE

A granulated cleaner for maintaining the cleanliness and efficiency of extruders used in plastics processing.

During operation, extruders can accumulate contaminants, material residues and deposits that affect production quality and machine performance. With EKOMASTER Clean, we can significantly reduce machine cleaning time when changing colours or switching from one material to another.

Advantages of using EKOMASTER Clean:

- Increased efficiency: Keeping the extruder clean allows for smoother operation, which translates into higher production efficiency.
- Improved quality: Clean machines work better, which improves the quality of the final products.
- Time savings: Regular cleaning makes it easier to quickly prepare the machine for the next production run.



Application

- Removing material residues: After production, the cleaning material can be used to remove any remaining raw materials.
- Machine maintenance: Regular cleaning of extruders with appropriate cleaning agents helps to keep them in good working order, which extends their service life.



The choice of the right cleaning agent for extruders should depend on the type of materials being processed and the specific characteristics of the machine. Regular cleaning and maintenance are essential for maintaining optimum performance and production quality.

Packaging:

Available in 25 kg packs and in big-bags.





Ekochem Sp. z o.o.
Głogowo, ul. Akacyjowa 1,
87-123 Dobrzejewice | Poland
NIP: 879-266-69-18 | BDO 000026444

 +48 56 674 45 00
 biuro@wwekochem.com

 www.wwekochem.com

