

## Fire-resistant halogen-free composite **KAMLEN 1**

KAMLEN 1 contains up to 80% mineral antipyrenes.

The product is customized for production of aluminum composite panels.

#### Technical characteristics

Index name	1102	1103	1104
Melt flow index gr/10 min.	0,4-1,5	0,4-1,5	0,4-1,5
Antipyrenes contain, %	75	80	40



## Polymeric and bituminous additives **KAMLEN2**

Rubber concentrates based on polyolefin have wide application in making polymeric products, bituminous concretes, roofing and waterproofing materials.

## Application

#### POLYMERIC ADDITIVES | 2360, 2362

Are used in the manufacture of polymer products as additives to improve the frost resistance, impact strength, elasticity, and stress cracking resistance of the polymer products.

#### BITUMENOUS ADDITIVES | 2390, 2391, 2392

Are used in the production of bituminous concretes to improve failure resistance, crack resistance, heat resistance, water and frost resistance of pavement.

Is an excellent solution for production of roofing and waterproofing materials. Achievable heat resistance is up to 125 °C; radius of curvature R10 up to -25 °C.





## Filled modified composites based on polypropylene **KAMLEN 3**

The homopolymer or block copolymer of polypropylene with fillers, modifiers, additives, providing high mechanical failure resistance to the products. These composites can be used as substitutes for metals or thermosets. They avoid the shrinkage and buckling of materials.

An excellent solution for manufacture of products of structural. electrical or general purpose by injection molding and extrusion



Index name	3306	3310	3315	3317	3331	3332	3333	3334
Density, gr/cm <sup>3</sup>	1,19	1,19	0,93	0,92	1,22	1,25	1,25	1,22
Melt flow index, gr/10 min. (230 °C; 2,16 kgf)	11-15	10-15	5-9	6-12	1-2	12-14	15-17	12-16
Tensile yield strength, MPa	15	20	19	15	22	24	16	17
Tensile strength at break, MPa	10	16	12	10	16	18	13	14
Elongation at break, %	40	40	20	100	40	40	60	50
Charpy unnotched impact strength, 23 °C, kJ/m²	No break	37	No break					
Charpy unnotched impact strength, -40 °C, kJ/m²	45	-	60	35	-	-	-	-
Flexural modulus, MPa	-	-	745	-	-	2400	1600	1800



# Concentrate of mineral filler **KAMLEN 4**

Mineral concentrate (talc, ground marble) based on polymer.

KAMLEN 4 shows good results in in the tube, profile making, production of polypropylene fibers and polymer films.

As the modifying additive KAMLEN 4 allows achieving an exceptional stiffness and heat resistance of products, significantly improves the optical properties of products. It is actively used to improve productivity and reduce unit cost.



Index name	4102	4112	4113	4306	4308	4323	4324
Melt flow index, gr/10 min.	0,5-2,5	0,5-2,5	0,5-2,5	7-15	7-15	3-5	0,2-1,5
Filler concentrate, %	50	50	60	80	80	40	65
Base	LDPE	LDPE	LDPE	PP	PP	PP	PP
Use recommendations	Film production		Production of tubes, profiles, polypropylene fibers		Manufacture of polymer products by injection molding and extrusion		





## Concentrates of special additives **KAMLEN 5**

#### Additives that work

 Processina • UV-stabilizers

 Slip additives Antistatic additives

Additive type	Mark	Base	Use recommendations
Processing	5301	PP	Increase productivity, reduce die
additives	5108	LDPE	build up, and improve appearance of goods.
	5109	LLDPE	or goods.
	5110	LLDPE	
	5111	LLDPE	
UV-stabilizer	5107	LDPE	Use of the product significantly reduces the UV negative effects and increases the use of the product without a critical loss of its basic physical and mechanical characteristics.
Slip additive	5120	LLDPE	Concentrate slip additive reduces the coefficient of friction of the surface.
Antistatic additive	5105	LLDPE	Prevents the formation of static electricity on the surface of the product.



## Concentrates for polymers coloring **KAMLEN 6**

Colour concentrates based on polyolefin. They are presented in white and gray colour.

They are used for polymer coloring in the production of sundry and industrial mechanicals.

Index name	6108	6109	6304	6305
Pigment concentration, %	50	70	25	25
Base	PE	PE	PP	PP



## Thermoplastic elastomers **KAMLEN 7**

TEP (thermoelastoplast) based on polyolefin and elastomer.

Current substitutes of technical rubber and PVC compound.

They have perfectly proved in the production of sealing profiles for windows and doors, outsoles, in the manufacture of spare parts and components for the automotive industry. In contrast to rubbers TEP are colored in the production process and can be processed multiply.

The material is characterized by high ozone and weather resistance.



Index name	7301	7302	7303
Density, gr/cm <sup>3</sup>	1,15	1,15	1,15
Melt flow index, gr/10 min. (190 °C; 5,0 kgf)	1,8	1	1,5
Tensile strength, MPa	13	7	5
Elongation at break, %	800	1000	700
SHORE A HARDNESS, it.	95	75	75







## Carbon black masterbatch **CARBOLEN**

Coloring masterbatch contains up to 40% high-structure black carbon, dispersed in polymer support.

An excellent solution for production of polyethylene pipe grade, cable ware, polymer films, sundry and industrial mechanicals.

CARBOLEN perfectly dispersed in the polymer, darken products and gives long-term light-resistance.



Index name	0130	0140
Melt flow rate, gr/10 min, (190 °C; 21,6 kgf)	2-15	0,2-6
Weight content of carbon black, %	30±2	40±2
Weight content of volatile compounds, not more than, %	0,2	0,2
Type of carbon black dispersion	I-II	I-II



# Our key value is trust of partners and long-term cooperation

Kamsky plant of polymeric materials is one of leading Russian producers of composite materials and flexible polymer packaging.

Modern technical equipment at manufacturing sites and the latest technology allow us to offer complete solutions in the field of polymer processing and industrial packaging.

In 10 years we have gained considerable experience and scientific and technical potential, as a result we have opportunity to develop and produce today modern customized solutions for our clients.

Advantages of our company are complex approach, quality, initiativity and safety.

