

# ACTIVATED CARBONS



# ABOUT US

JSC Sorbent was founded in 1939. It specializes in manufacturing of the high-quality products and technologies guaranteeing environmental protection and protection from harmful effects.

> 1200

Qualified specialists

> 1000

Consumers in Russia and abroad

> 30

Trademarks of activated carbon

# Zelinsky Group

**2018** — The year of unification of four manufacturers under one brand Zelinsky Group.

The philosophy of Zelinsky Group reflects the strategy of protecting people and the whole world, emphasizing the relationship with the case of the great scientist **Nikolay Zelinsky** — Russian chemist, the creator of the first effective gas mask.



# Manufactured products



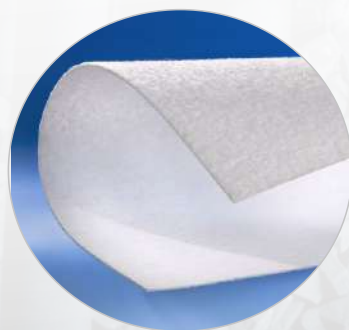
Activated carbon



Coagulants



Respiratory personal protective equipment



Filter cloth



Water purification and water treatment systems





# GRANULAR ACTIVATED CARBONS

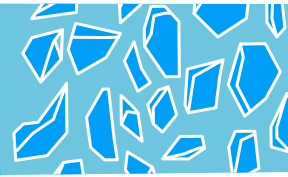




Granular activated carbons are sorbents made of low-ash fossil coal or pyrolyzed coconut shell by steam activation.

Name of indicator	 <b>KAUSORB</b>	 <b>DAUSORB</b>
Iodine number, mg/g	1000 – 1450	850 – 1100
CTC, %	45 – 65	45 – 65
Hardness, %, min	94	94
Moisture content, %, max	5	5
Ash content, %, max	3	15
Bulk density, t/m <sup>3</sup>	0,45 – 0,55	0,45 – 0,55
Main particle sizes, mesh (mm)	6x12 (1,68 – 3,36)	6x12 (1,68 – 3,36)
	8x30 (0,6 – 2,38)	8x16 (1,2 – 2,38)
	12x20 (0,8 – 1,68)	8x30 (0,6 – 2,38)
	12x40 (0,42 – 1,68)	12x20 (0,8 – 1,68)
	30x70 (0,21 – 0,59)	12x40 (0,42 – 1,68)
Packaging	-bag packing of 20 kg; -big bag of 550 kg	-bag packing of 25 kg; -big bag of 550 kg

# Application of granular activated carbons



Gas purification



Gold recovery



Water treatment



Process liquid purification



# PELLETIZED ACTIVATED CARBONS







**Pelletized activated carbons** are sorbents made in the form of cylindrical granules (pellets) from mineral raw materials (fossil coal).

Name of indicator	SORBER-10	SORBER-15	SORBER-30 and 40
Diameter of pellets, mm	1	1,5	3 and 4
Butane adsorption, %, min		–	30
Surface area, m <sup>2</sup> /g, min	–	–	900 – 1200
Iodine number, mg/g	850 – 1000	850 – 1000	850 – 1000
CTC, %	50 – 75	50 – 75	60 – 80
Hardness, %, min	95	95	95
Moisture content, %, max	5	5	5
Bulk density, t/m <sup>3</sup>	0,45 – 0,55	0,45 – 0,55	0,45 – 0,55
Particle sizes <0,5 mm, %, max	0,5	–	–
Particle sizes <1 mm, %, max	–	0,6	1
Packaging	-bag packing of 20 kg; -big bag of 500/550 kg	-bag packing of 23/25 kg; -big bag of 500/550 kg	



**Pelletized activated carbons** are sorbents made in the form of cylindrical granules (pellets) from mineral raw materials (fossil coal).

Name of indicator	AG-3	AG-5	SKD
Hardness, %, min	75	75	75
Moisture content, %, max	5	5	3
Total pore volume for water, cm <sup>3</sup> /g, not less than	0,8	0,82 – 0,98	0,7
Bulk density, t/m <sup>3</sup>	0,4 – 0,5	0,41 – 0,48	–
Packaging	-bag packing of 23/25 kg; -big bag of 500/550 кг	-bag packing of 20 kg; -big bag of 500 кг	-bag packing of 20 kg; -big bag of 500/550 кг

# Application of pelletized activated carbons



Gas purification



The basis of catalysts



Water treatment



Process liquid purification



# POWDER ACTIVATED CARBONS





Powder activated carbons are sorbents made in the form of low-dispersed powder from eco-friendly raw materials – birch or fossil coal, by steam or chemical activation.

Name of indicator	EXTRASORB-101	EXTRASORB-102	EXTRASORB-103	EXTRASORB-UAF
Iodine number, mg/g	800 – 1100	–	–	700
Methylene blue adsorption, mg/g	150 – 250	220 – 280	280 – 330	–
Molasses adsorption, %	–	100 – 120	120 – 140	–
Moisture content, %, max	10	10	10	10
Ash content, % max	10	10	10	20
Bulk density, t/m <sup>3</sup>	0,3 – 0,4	0,3 – 0,4	0,3 – 0,4	0,4 – 0,5
pH	>7	2 – 6	2 – 6	>7
Mass fraction of ferrum compounds, %, max	0,2	0,2	0,2	–
Particle sizes, max, mm	0,105	0,105	0,105	0,1
Packaging	-bag packing of 15 kg -big bag of 300/500 кг	-bag packing of 20 kg		-bag packing of 20 kg; -big bag of 400/500 кг

**Powder activated carbons** are sorbents made in the form of low-dispersed powder from eco-friendly raw materials – birch or fossil coal, by steam or chemical activation.

Name of indicator	OU-A	OU-B	OU-V	SPDK-1, 2, 3
Methylene blue adsorption, mg/g	225	210	not defined	220 – 280
Molasses adsorption, %	100	100	75	–
Adsorption activity for iodine, mg/g, not less than	–	–	–	800 – 1000
Phenol adsorption, mg/g	–	–	–	15 – 30
Moisture content, %, max	10	58	10	8
Ash content, % max	10	6	10	5
pH	not defined	4 – 6	not defined	–
Packaging	-bag packing of 15 kg; -big bag of 300/500 kg			

# Application of powder activated carbons



Purification of syrups



Pharmaceuticals purification



Water treatment



Vegetable oil purification

# THE ADVANTAGES OF WORKING WITH US

## OWN PRODUCTION.

The manufacturing area includes two powerful coal workshops.

## INDIVIDUAL APPROACH.

We manufacture products with individual parameters for each client.

**QUALITY.** We check all products in our own laboratory for compliance with ASTM.

**LOGISTICS.** We deliver products to the client in a short time.

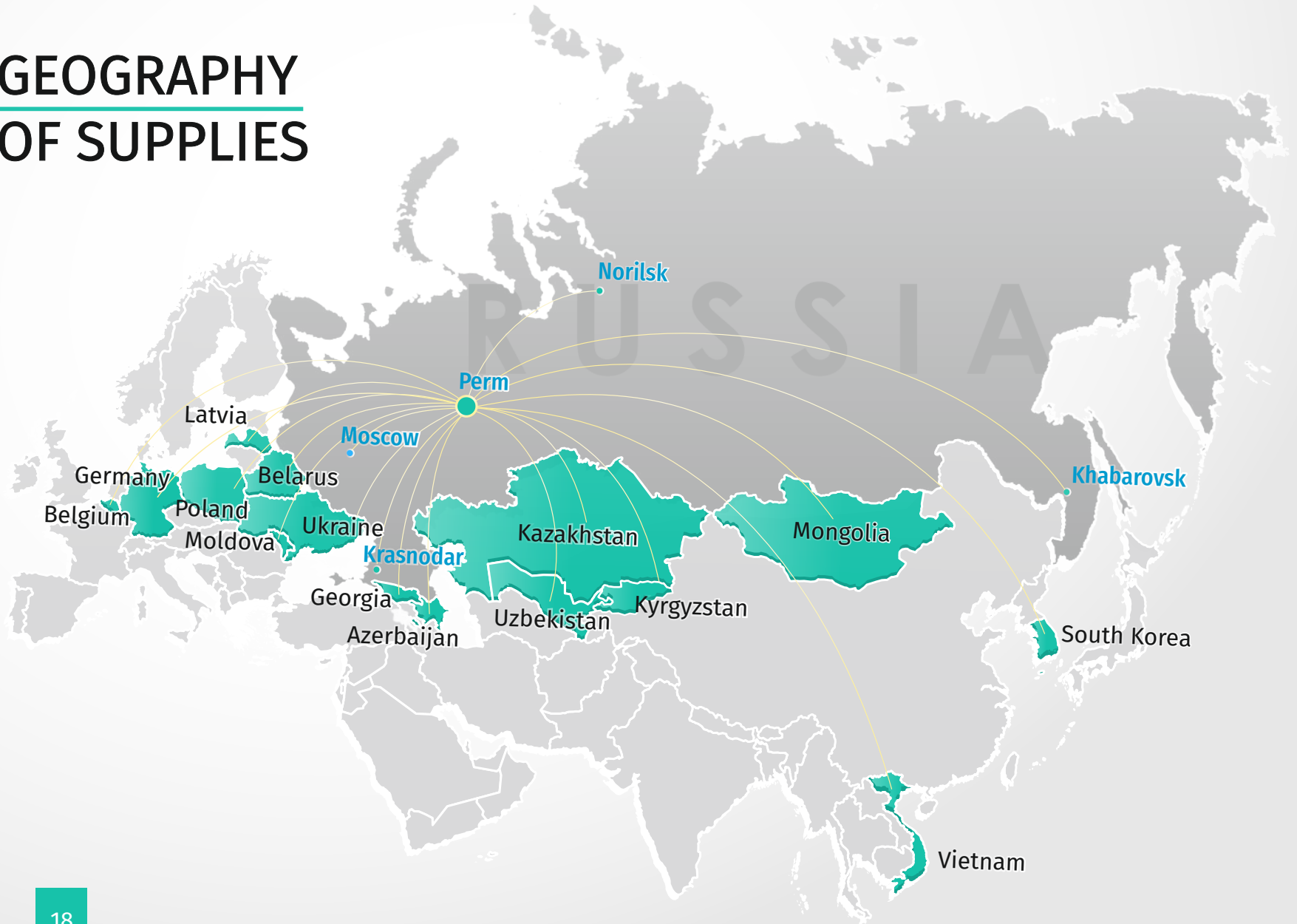
**SERVICE.** Managers consult clients at every stage of the bargain.



# OUR CLIENTS



# GEOGRAPHY OF SUPPLIES



# We invite you to cooperation!

Our customers are already buying quality activated carbon.  
Join us!

Veronika Masaleva  
Sales manager

tel.: +7 (964)197 85 82  
+7 (342) 258-62-57

[veronika.masaleva@zelinskygroup.com](mailto:veronika.masaleva@zelinskygroup.com)

[en.carbonrus.com](http://en.carbonrus.com)

[en.zelinskygroup.com](http://en.zelinskygroup.com)