oxygen compounds (phenols, naphthols, furans), sulfur compounds (thiophenes, sulphides). In the course of the study, the chemical composition of the coke-chemical resin fractions was determined. The results of the study are given in Table 4.

Table 3. Numerical amount of coke-chemical resin hydrocarbons.

Identified matter	Concentration, %
Phenol	2.373
Methylphenol (cresol)	7.690
Ethylphenol	2.673
Azulene	0.763
Pyrocatechin	6.410
Methylnaphthalene	2.091
2,3-dihydro-1H-indene-5-ol	0.467
2,3- dihydroxytoluene	0.257
4-ethyl-1,3- dihydroxybenzene	6.920
Tetradecane	0.779
2-methylpentylbenzene	0.217
Pentadecane	0.426
Naphtol	0.573
Cetane	0.482
Methylnapthol	1.205
Tridecanes	0.888
1-tetradecene	0.300
Octadecane	0.210
Hexadecane	0.790
Eicosane	1.066
Genekozan	1.434
Fluoranthene (standard)	0.800
Heptadecane	0.896
Cyclopentadecane	0.888
Saturated hydrocarbons	1.426

Table 4. Chemical composition of distillate fractions of the initial coke-chemical resin.

Identified matter	Temperature,C	Content in fractions with boiling temperature C, wt.%		
		>180°C	180-250°C	250-320°C
Benzene	80	9.63	-	-
Thiophen	84	0.18	-	-
Toluene	110	10.21	-	-
m-Xylene	139	6.24	0.58	-
o-Xylene	144	5.39	0.06	-
Propyl benzene	-	0.41	-	-
1-ethyl-1-methyl benzene	159	0.46	0.15	-
Quinoline	236	0.13	0.54	2.51
3- methylpyridine	144	-	1.44	-
2,4- dimethyl pyridine	-	0.60	-	-
7-methylindol	231	-	0.61	-
2- methylquinoline	-	0.13	0.17	0.17
3- methylquinoline	-	0.11	0.03	0.25
2- methylnaphthalene	241	-	4.25	9.71
1- methylnaphthalene	245	-	1.82	5.77
diphenyl	255	0.82	0.92	4.22
2- ethyl naphthalene	258	0.60	0.25	1.66
1-ethyl-3- methyl benzene	-	1.40	-	-
1,2,3- trimethylbenzene	176	0.16	-	-