

ILMENITE CONCENTRATE
(TU U Y 14-10-009-97)

Irshansk

Other name: ilmenite sand, ilmenite

CAS number: 1317-80-2

Product code 2614000010

Chemical composition of product:

<i>Name of oxides</i>	<i>Content, %</i>
TiO ₂	no less than 53
SiO ₂	up to 3,0
Fe ₂ O ₃	13,0-25,0
FeO	9,0-20,0
Al ₂ O ₃	up to 1,0
Cr ₂ O ₃	up to 0,5
P ₂ O ₅	up to 0,25
MnO	up to 0,8
V ₂ O ₅	up to 0,35

Mineralochical composition of products:

<i>Name of minerals</i>	<i>Content, %</i>
ilmenite	no less than 94,5
zircon	up to 0,5
siderite	up to 3,0
iron hydrooxysl	up to 0,5
markazite (free)	up to 1,0
markazite with ilmenite	up to 3,0
leukoxene	up to 1,0
apatite	up to 0,1
quartz	up to 3,0

Granulometric composition of products:

<i>Class size, mm</i>	<i>Exit, %</i>		<i>Distribution, %</i>			
	<i>part.</i>	<i>sum.</i>	<i>Ilmenite</i>		<i>Quartz</i>	
	<i>part.</i>	<i>sum.</i>	<i>part.</i>	<i>sum.</i>	<i>part.</i>	<i>sum.</i>
+2,0	0,00	0,00	0,00	0,00	0,00	0,00
-2,0+1,0	1,70	1,70	1,44	1,44	0,73	0,73
-1,0+0,56	12,70	14,40	13,20	14,64	0,73	1,46
-0,56+0,28	33,18	47,58	34,18	48,82	11,68	13,14
-0,28+0,14	37,36	84,94	36,71	85,53	60,58	73,72
-0,14+0,10	9,26	94,20	8,91	94,44	18,98	92,70
-0,10	5,80	100,00	5,56	100,00	7,30	100,00
Всѣго:	100,00		100,00		100,00	

Description and physical properties:

<i>Physical property</i>	<i>Unit of measure</i>	<i>Content</i>
Melting point	°C	1365
Density	kg/m ³	4150-4250
Bulk weight	kg/m ³	2150-2350
Average particle size	microns	300
Angle of natural slope	degrees	32
Hardness	units	5

In a dry state, free-flowing sand is gray-black in color with a metallic sheen. The shape of the grains is awkwardly rounded. It doesn't burn. It is not soluble in water.

Duration of storage: unlimited.

Fire hazards: does not burn.

Dispatch: in bulk in rail cars or in sea-shipping 20-foot containers.

End application: production of synthetic rutile, titanium pigment dioxide, welding electrodes, sponge titanium, metal titanium, in steelmaking production.