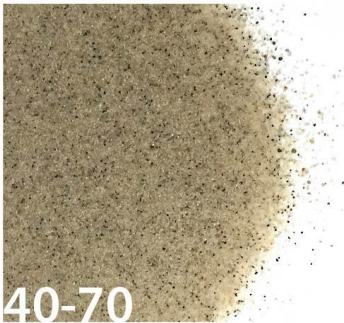
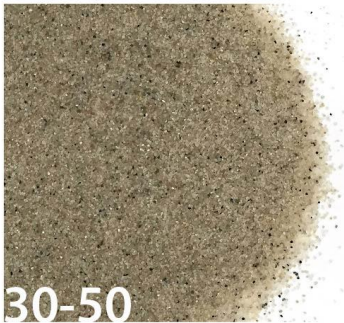
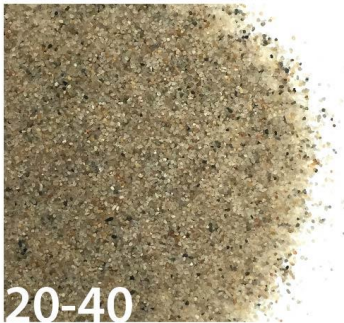
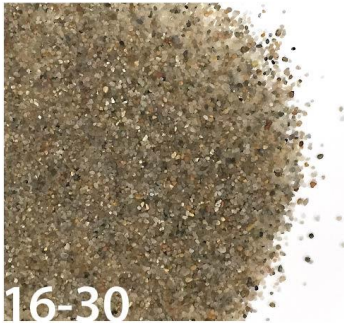


FRAC SAND

TARGET FRAC SANDS



Images are 1:1 scale

PRODUCT

TARGET® Frac Sands are high-silica materials processed in our Edmonton area plant to meet the requirements of hydraulic fracturing industry. They possess beneficial characteristics to enhance the permeability of the formation and promote improved recovery of oil and gas products.

TARGET Frac Sands are qualified for the demanding requirements of the frac industry, as determined under the API RP56 Standards, except for solubility defined by hydrofluoric + hydrochloric acid.

Rigorous quality control testing during production assures that the final products are accepted by the customer as they are tested in accordance with the American Petroleum Institute’s recommended practices for frac sand.

USES AND ADVANTAGES

TARGET Frac sands are used to increase formation permeability and aid extraction

NOTICE: Obtain the applicable **LIMITED WARRANTY** at www.targetproducts.com/product-warranty
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FRAC SAND

of oil and gas from reservoir rocks to the well bore. The frac sand size, shape, and mechanical strength influences the integrity of the newly created fractures, and therefore the flow of oil and gas out of the well. TARGET Frac sands are able to withstand downhole pressures encountered in these reservoirs.

TARGET Frac Sands are suitable for both vertical and horizontal well applications. They are thoroughly washed, dried and sized to meet the requirements of the hydraulic fracturing industry.

PHYSICAL PROPERTIES

Colour	Tan
Grain Shape	Sub-rounded
Bulk Density	95 - 100 lb/ft ³ (1,520 - 1,600 kg/m ³) Varies with particle size. Values are determined for individual projects if required. Typical values are: Frac Sand 1.50 tonnes per m ³
Hardness, Mohs	6.5 - 7
Specific Gravity	2.65
Moisture Content	<0.1% weight
Acid Solubility	<5% weight

Bulk density values vary with particle size. Values for individual products can be determined at the time of shipping if required.

PACKAGING

TARGET Frac sands are available via bulk deliveries and can be packaged in 1.75 tonne bulk bags and 25 kg (50 lb) plastic bags on request.

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FRAC SAND

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TYPICAL SIEVE ANALYSES

Sieve Size		% Retained			
ASTM	Metric	12-20	16-30	20-40	30-50
No.12	1.68 mm	1-8	-	-	-
No. 16	1.19 mm	65-85	0-2	0	-
No. 20	0.85 mm	5-15	25-30	0-5	0-1
No. 25	0.71 mm	-	40-48	-	-
No. 30	0.60 mm	0-2	20-25	50-85	4-8
No. 35	0.50 mm	-	1-5	15-30	
No. 40	0.42 mm	-	-	5-10	50-75
No. 45	0.35 mm	-	-	-	10-20
No. 50	0.30 mm	-	-	-	5-15
No. 70	0.21 mm	-	-	0-4	1-4
Pan		0-1	0-1	0-1	0-1

The sieve analyses given in the tables are typical values. Due to different feed stock sources, actual values may change from time to time however, rigorous QC testing is conducted to ensure that products remain within specification.

TYPICAL CHEMICAL ANALYSIS and PROPERTIES

Chemical Compound		Typical Value, % weight
Silica	SiO ₂	93 - 95.5 %
Alumina	Al ₂ O ₃	3.0 - 4.5 %
Iron Oxide	Fe ₂ O ₃	0.25 - 0.35 %
Calcium Oxide	CaO	0.25 - 0.65 %
Magnesium Oxide	MgO	0.07 - 0.15 %
Sodium Oxide	Na ₂ O	0.60 - 0.80 %
Titanium Oxide	TiO ₂	0.10 max
Loss on Ignition	LOI	0.30 - 0.55 %

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