

## 47324 - 47328 Basalt Black

Basalts are mostly dark, fine-grained, in numerous varieties extraordinarily common effusive rocks (density 2.6-3.3, mostly 2.8-3). Here and there one observes also fluidal, almond-stone-like, foamy, spherical or columnar forms. The basalts of the Fingal Cave have columnar formations. For example, a plagioclase basalt from the Hawaiian Islands had the following composition: 50% SiO<sub>2</sub>, 2.5% TiO<sub>2</sub>, 12.1% Al<sub>2</sub>O<sub>3</sub>, 2.10% Fe<sub>2</sub>O<sub>3</sub>, 10% FeO, 0.16% MnO, 9.6% MgO.

Important constituents of many basalts are augite, plagioclase and magnetite. In many cases a uniform groundmass with relatively few injected, small crystals is found. Since the basalt cooled down relatively fast as an effusive rock, crystals could not form here as a rule as large as they are frequent with depth rocks (granite).

Basalts in the form of mighty veins, ceilings, vents and streams in the Eifel, Röhn, Siebengebirge, Westerwald, Vogelsberg, etc., have erupted from the earth and solidified during the Tertiary period. Huge basalt blankets can be found in Iceland, on the Farör Islands, the Hebrides and in India (Deccan). In many volcanoes still active today, the lavas and ashes have basaltic compositions, as in Etna and the Hawaiian volcanoes. Basalt is an African word.

Basalt is very hard, water and weather resistant. We offer basalt as a filler in various sieving, fire-dried, for gray mortar masses.

### Technical Data

Sizes of the available Basalts:

47324 Basalt Black, fine powder:	0 – 0.2 mm
47326 Basalt Black, fine sand:	0,1 – 0.3 mm
47327 Basalt Black, medium fine sand:	0.1 – 0.6 mm
47328 Basalt Black, sand:	0.5 – 1 mm

Color:	black
Bulk density of raw material:	3 g/cm <sup>3</sup> (20°C)

Mineralogical Composition (Powder-XRD of bulk, wt%)

Quartz:	4
Feldspar:	-
Pyroxene:	43
Muscovite/Illite	-
Olivine:	53
Mica (Biotite):	-



Chemical Composition (wt%)

SiO <sub>2</sub> :	50.47
Al <sub>2</sub> O <sub>3</sub> :	13.80
Fe <sub>2</sub> O <sub>3</sub> :	10.70
TiO <sub>2</sub> :	2.09
CaO:	9.30
MgO:	9.40
K <sub>2</sub> O:	1.38
Na <sub>2</sub> O:	2.86