

Blendex®

Emulsion / ANFO Blends

DESCRIPTION

Blendex® is a blended blasting agent used in underground and open pit mining as well as quarries and construction. Blendex® is manufactured by mixing ANFO with AE 59. The final product can be augured or pumped, depending on the mixture ratio. For dry holes, the blend ratios will range from 10% Emulsion / 90% ANFO to 40% Emulsion / 60% ANFO. This range of blends is augured into dry or dewatered holes. Blends of 50% Emulsion and greater are chemically gassed. For pumpable blends, ANFO is mixed with gassed AE 59 in ratios from 70% Emulsion / 30% ANFO to 100% Emulsion. This range of blends can be loaded into wet holes but should be pumped from the bottom of the hole to displace any water present to prevent contamination of the blend by the water.



BLENDX® TECHNICAL CHARACTERISTICS

	%Emulsion / %ANFO					
	100/0	70/30	60/40	50/50	40/60	30/70
Nominal Density (g/cc)	0.85 – 1.25	0.9 – 1.24	0.95 – 1.24	0.95 – 1.24	1.27 ± 2%	1.15 ± 2%
† Detonation Velocity ft/s (m/s)	15,000 - 21,500 (4,600 – 6,500)					
† Detonation Pressure (GPa)	11.9	12.8	13.2	12.4	11.8	10.2
† Energy (kJ/kg)	3,907	4,291	4,429	4,512	4,611	4,663
† Gas Volume (l/kg)	1,070	1,066	1,065	1,066	1,066	1,066
Minimum Hole Diameter	4.5"	4.5"	4.5"	4.5"	4.5"	4.5"
Water Resistance	Excellent	Excellent	Good	Good	Moderate	Poor
† Relative Weight Strength	73	81	84	87	90	93
† Relative Bulk Strength	118	133	139	139	141	136
Transport and UN Numbers	UN 0241 Class 1 Division 5 1.5D					



† Theoretical values from computational modelling of formulations using EXPLO 5

BLENDX® RECOMMENDED USES

In wet conditions, the Blendex® products of 70% emulsion or greater should be pumped into the bottom of the hole to displace any water and minimize any mixing that may occur with the emulsion and ground water. Blendex® blends should not be top loaded into water.

BLENDX® MANUFACTURING

Blendex® is manufactured on the truck at the blast site.

AE 59 is manufactured in Rush Valley, Utah near Salt Lake City, Utah.