Cortés, Teresa (E-ZRGZ)
Classification of 4-dimensional Bernstein algebras.

This paper contains an exhaustive and very interesting classification, up to isomorphism, of the 4-dimensional Bernstein algebras over a commutative field $K$ of characteristic not 2. A Bernstein algebra [see Yu. I. Lyubich, Russian Math. Surveys 26 (1971), no. 5, 51–124; MR0446581 (56 #4906); P. Holgate, J. London Math. Soc. (2) 9 (1974/75), 612–623; MR0465270 (57 #5175)] $A$ is a finite-dimensional commutative nonassociative algebra over a field $K$ with a nontrivial homomorphism $w: A \to K$ (i.e. a baric algebra) in which the identity $(x^2)^2 = \omega(x)^2 x^2$ is satisfied for all $x \in A$.  

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