



Silver ores

The most common silver-bearing minerals recovered by flotation are argentiferous galena, native silver, argentite (Ag_2S) and tetrahedrite ($(\text{Cu,Fe,Ag})\text{Sb}_4\text{S}_3$). Often these minerals float with the base metals such as copper and lead sulphides or are the primary target mineral (tetrahedrite).

Aryl (cresylic or phenyl based) and alkyl based dithiophosphates enhance the recovery of free silver minerals and that mineralization not associated with specific base metal sulphide minerals. Flotation response of silver minerals is normally best at natural pH because lime tends to depress silver minerals in flotation.

Use of soda ash for elevating pH is suggested as an alternative pH modifier. Alkyl dithiophosphates are used when high silver mineral selectivity is required.

When silver is associated with metal sulphide minerals, normal flotation practices used for floating the specific sulphides will also recover silver values.



Initially consider the following Danafloat™ collectors for silver mineralization:

Danafloat™ 068
Danafloat™ 070
Danafloat™ 123
Danafloat™ 233
Danafloat™ 245
Danafloat™ 468
Danafloat™ 571