

DIRECTIONS FOR USE OF CALCIUM CARBONATE

Calcium carbonate is extremely useful as a protective buffer in papers of an archival nature. The buffering agent counteracts the effects of acidic pollutants in the atmosphere, which paper can absorb over a period of years.

We generally add 3% calcium carbonate to our pulps, which are fairly neutral to begin with. After the addition of the buffer, the dried paper should contain an alkaline reserve of approximately 2%. (This is the recommendation of the Council on Library Resources.)

The following proportion of calcium carbonate is used
(pulp or fiber must be weighed when it is dry):

12 grams calcium carbonate to 400 grams dry pulp

or

3 1/2 teaspoons calcium carbonate to 1 pound dry pulp

Mix the calcium carbonate thoroughly in two cups of water. Calcium carbonate is insoluble, so it will not dissolve. It will simply look like cloudy water. Add this directly to the pulp at the end of the beating or mixing cycle. It should be mixed in for at least 10 minutes, to ensure that the calcium carbonate has been thoroughly dispersed through the pulp.