CALCIUM CARBONATE

One of the most commonly used buffering agents is Calcium Carbonate. Buffers are used to control the pH of paper, assuring a reserve of alkalinity needed to protect it from degrading acidic environmental pollutants. It has been shown, however, that paper will degrade almost as rapidly if the paper is too alkaline. A pH of around 8 is suggested as most suitable for the longevity of the paper. Our Calcium Carbonate is available in precipitated form, having a generally even particle size and shape.

Use and Mixing Instructions:

Calcium Carbonate can be added at the rate of 2% by weight to dry fiber for adequate buffering qualities. This means that 2-3 grams of buffer is used for 100 grams of fiber. You can add them in at the end of the beating cycle or earlier, actually beating them in. Check the pH of the pulp to see whether adequate buffering has been obtained.

Calcium Carbonate does not dissolve in water. The particles actually stay in suspension and intermesh with the fibers. A cationic retention aid can improve adhesion of the buffering agent.

When larger percentages of Calcium Carbonate are used, the characteristics of the paper are changed by filling in the spaces between the fiber. The high luster on magazine papers comes from fillers. After a certain point, the additions of filler begin to weaken the paper, making it softer. If you decide to use it as a filler, you will need to experiment with different amounts to assure desired results.

Precautions:

Calcium Carbonate is considered a nuisance dust, and can cause possible nasal irritation. If this is a problem, remove yourself from contact with it. A dust resperator should be worn. If spilled, sweep up or wash away with water.

Please read for your protection: Warranty information
All information and suggestions in this product handout is only the opinion of Lee S. McDonald Inc. Since each artist has their own personal technique, and other numerous factors are involved, we cannot guarantee that the products will perform to each individuals' satisfaction. Testing of our products should be undertaken by the consumer to determine whether the product meets the intended needs. The user is responsible for final determination of suitability. Lee S. McDonald Inc. makes no warranty of any kind, express or implied, other than that the material conforms to its applicable current Standard Specifications. The responsibility of Lee S. McDonald Inc. for claims arising out of breach of warranty, negligence, strict liability, or otherwise, is limited to the purchase price of the material or product. We cannot be liable for the occurence of incidental or consequential damages.

If you have any questions about the use of this Calcium Carbonate please contact us.

*For more health information contact a physician or your local poison control center.
Data safety sheets on this product are on file; a set of data safety sheets for the products we sell is available for $20.00. For more information on art hazards and safety, consult the Center for Occupational Hazards, 5 Beekman St. New York, NY 10038.

MEASUREMENT TABLE

Fluid Measures:

		1Tbsp	=	3 tsp.			
1 fl. oz	=	2 Tbsp					
8 fl.oz	=	1 cup					
16 oz.	=	2 cup	=	1 pint			
32 oz.	=	4 cup	=	2 pt.	=	1 quart	
128 oz	=	16 c	=	8 pt.	=	4 qt.	= 1gal.

1 milliliter	=	.0338 oz.			
15 ml.	=	1 tbs.			
29.57 ml.	=	1 oz.			
.03 liter	=	1 oz.			
1 liter	=	33.81 oz.	2.11 pt. =	1.06 qt.= .26 gal.	
.473 liter =	1 pt.				
.946 liter =	1 qt.				
3.785 liters	=	1 gal.			

Apothecary Measures:

fluid	1 fl. dram	=	.125 oz.		
	8 fl. dram	=	1 oz.		
	128 fl. dram	=	16 oz.	=	1 pt.

Weight Measures:

dry	1 gram	=	.0353 oz.		
	28.35 grams	=	1 oz.		
	453.6 grams	=	16 oz.	=	1 lb.
	.45 kg.	=	16 oz.	=	1 lb.
	1 kg.	=	35.27 oz.	=	2.3 lb.

1 Gallon of water at room temp. weighs approx.	8 1/3 lb.
1 pint "	1 lb.

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