

FORMATION AID: PNS & PMP

PNS and PMP formation aids are offered for use traditionally in Oriental papermaking, and experimentally using Western techniques. They act to deflocculate or separate the longer bast fibers for making very thin sheets, and slow down drainage during formation. Formation aid is a synthetic substitute for the tororo-aoi plant. When mixed, it turns pure water into a thick, slippery, stringy, viscous substance. Use PMP if size or other additives are present. PNS is used where no additives are present, or can be used to cause clumping of fibers.

Mixing Instructions:

Mix 1 gram PNS or PMP per liter of cool water (1g/1000ml) or (1/4 tsp./qt.), 8 to 24 hours before papermaking. Add the powder slowly to the water to ensure a proper mix. In emergencies, it can be mixed several hours before use, although it may contain clumps that have not dissolved. It is necessary to mix the solution intermittently. Formation aid has a higher specific gravity than water and will sink if not well mixed. If this happens, the settled clumps at the bottom of the bucket must be strained before making paper.

The best way to mix formation aid is by introducing the powder slowly into a stream of water, and stirring with a stick or mixing device at low speed. One gallon of this concentrated mixture is sufficient for a small (15 gal.) vat. The white water (water drained from the vat still containing formation aid) can be saved and reused.

Storage:

The powder should be stored away from heat exposure and moisture. Formation aid has an indefinite shelf life in dry form, but should be used within a few weeks from mixing for maximum effect.

Precautions:

PNS and PMP formation aids are polyacrylamides. They are non-irritating to the skin under normal conditions, but frequent or prolonged exposure to the skin should be avoided. As a general precaution, rubber gloves should be worn when mixing stock solutions and working in vats. Should an irritation develop, use should be discontinued and medical attention received. Formation aids are mild eye irritants and precautions such as safety glasses should be used when mixing. If eye contamination occurs, flush with flowing water. If irritation persists, medical attention should be obtained. Other standard chemical handling procedures, including precautions against inhalation of dusts and ingestion of the compound should be observed.

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 occurrence of incidental or consequential damages.

***For more health information contact a physician or your local poison control center.**

Data safety sheets on this product are on file. For more information on art hazards and safety, consult the Center for Occupational Hazards, 5 Beekman St. New York, NY 10038. If you have any questions about these formation aids please contact us.

revised 397 mr/per TB