Carriage House PAPER
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DIRECTIONS FOR USE OF METHYL CELLULOSE

Methyl cellulose is a water soluble gum useful to papermakers chiefly as a mild adhesive that does not degrade the paper. It may be used to glue paper to paper, or other fibers and materials to paper, either in the paper's wet stage (when the sheets have just been formed), or when the paper is dry. In either case, the bonding occurs only when the materials have dried.

Methyl cellulose is frequently used by book and document restorers, not only for its archival properties, but also because it is reversible, meaning that by soaking the glued paper in water, the glue can be dissolved, and the glued parts may be separated without damage.

Directions:
Methyl cellulose is in the form of powdered granules. Make up a solution in the following manner:
Dissolve 2 tablespoons of methyl cellulose in a 1/2 cup of boiling water. One can also use very hot tap water. Stir thoroughly until all the granules have absorbed water; the solution should be fairly thick and syrupy. Next add 1 cup of very cold water, and mix thoroughly. Some users prefer to use a blender to mix up their solution.

Use:
If necessary, add cold water in order to make a fairly free-flowing glue. A brush is useful for spreading the glue onto the paper. Or fibers that are meant to be adhered onto the paper may be dipped into the methyl cellulose solution.

Some papermakers add methyl cellulose to pulp in order to strengthen it; this may be useful in the case of cotton linters pulp, which has a relatively short fiber. It does not seem necessary for the long fibered pulps, such as abaca and cotton or linen rag. If methyl cellulose is added to pulp used for casting into plaster moulds, some difficulty may be encountered in the release of the paper from the mould, since the substance is essentially a glue.

Precautions:
Methyl cellulose is a non-toxic substance. The premium grade of it is used as a food additive. The only possible hazard is that certain persons may be sensitive to the dust from the powder in which case a protective dust mask should be worn when handling the dry material.