

UNITED STATES PATENT OFFICE.

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BLEACHING GLUE.

No. 867,167.

Specification of Letters Patent.

Patented Sept. 24, 1907.

Application filed June 13, 1907. Serial No. 378,874.

To all whom it may concern:

Be it known that we, ARMAND JULIUS STIEGELMANN and ERICH DEHNEL, doctors of philosophy and chemists, subjects of the German Emperor, residing at Ludwigshafen-on-the-Rhine, Germany, have invented new and useful Improvements in Bleaching Glue, of which the following is a specification.

We have discovered that glue can be satisfactorily bleached by treatment with zinc formaldehyde sulfoxylate. In carrying out our invention we may make use either of the so-called basic zinc formaldehyde sulfoxylate described and claimed in the specification of Letters Patent No. 812,124, or of neutral zinc formaldehyde sulfoxylate. The bleaching can be carried out by heating a solution of the glue with either of the said zinc formaldehyde sulfoxylates and either with, or without, the addition of acid. The said zinc salts are much better suited for bleaching glue than is the corresponding sodium salt (rongalite) which latter tends to decompose and form sulfids which impart a grayish color to the glue.

Our invention may be carried out for example as follows but it is not confined to this example. Add to a solution containing glue, at a temperature of about one hundred (100) degrees centigrade, and while stirring,

a thin paste of basic zinc formaldehyde sulfoxylate, using about two (2) parts by weight thereof for every thousand (1,000) parts by weight of the finished glue. The bleaching is effected in a few minutes, and the product can be worked up as usual. In this example, instead of the thin paste of two parts of the basic zinc salt, a solution of about four (4) parts of the neutral zinc formaldehyde sulfoxylate can be employed. If desired, an acid (for instance acetic acid, formic acid, or sulfuric acid) may be added either to the mixture or to the glue solution, before the addition of the zinc salts.

Now what we claim is:

1. The process of bleaching glue which consists in treating the glue with zinc formaldehyde sulfoxylate in the presence of water.
2. The process of bleaching glue which consists in treating the glue with basic zinc formaldehyde sulfoxylate in the presence of water.
3. The process of bleaching glue which consists in treating the glue with basic zinc formaldehyde sulfoxylate in the presence of water and acid.

In testimony whereof we have hereunto set our hands in the presence of two subscribing witnesses.

ARMAND JULIUS STIEGELMANN.
ERICH DEHNEL.

Witnesses:

ERNEST F. EHRLHARDT,
J. ALBC. LLOYD.