

# ALIEN PROPERTY CUSTODIAN

## BINDERS FOR GLASS FIBER THREADS

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This invention relates to binders for threads or strands of glass fibers and like fibers, of the general character described and claimed in my application Serial No. 284,100, filed July 12, 1939, for Letters Patent of the United States, from which the present application is a division.

According to my present invention the binder consists of diluted aqueous solutions of animal, vegetable or mineral oils, fats, waxes and the like or mixtures thereof, with or without water-soluble adhesives, and an addition of sugar syrup which is preferably up to 5%.

These emulsions can be prepared in the usual manner practised in the art of making emulsions with the use of suitable emulsifying agents.

A glass fiber thread or strand sized with a binder according to the invention after the setting of the binder is well closed, soft and supple and has a brilliant, slightly fatty surface which renders it highly suited for textile treatments. The setting of the binder may be accelerated by artificial drying. The binder can be readily removed again by the common textile washing media, such as aqueous soap solutions or the like.

Some examples of binders according to the invention are composed as follows:

A.

	Parts
Water .....	80 to 90
Emulsifying agent such as fatty acid sul- phonate .....	3 to 5
Animal or vegetable oil.....	3 to 5
Yellow dextrine.....	5 to 10
Sugar syrup.....	Up to 5

B.

	Parts
Water .....	80 to 90
Emulsifying agent such as fatty acid sul- phonate .....	3 to 5
Animal or vegetable oil.....	3 to 5
Gelatine .....	3 to 5
Sugar syrup.....	Up to 5

Without affecting the possibility of removing the binder from the finished products by washing, the binder may be given either a more pronounced binding effect or a more pronounced lubricating effect as desired in accordance with the purpose for which it is used by a proper selection of various oils or by suitably mixing oils and fats, adding waxes and using suitable emulsifying agents. Thus, various modifications and variations may be resorted to without departing from the spirit and scope of the present invention as defined in the appended claims.

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