diisocyanate. More preferably, the water-dispersible polyfunctional isocyanate crosslinker is a polyfunctional blocked isocyanate crosslinker obtained by reacting a trimethylolpropane tolylene diisocyanate adduct, a glycerin tolylene diisocyanate adduct or the like, with a blocking compound (a compound that regenerates an isocyanate group when heated to 70 to 200°C together with an isocyanate adduct), phenol, diethyl malonate, methyl ethyl ketoxime, sodium bisulfite, ε-caprolactam, etc.

It is preferred that the melamine resin is mixed in a proportion of 1 to 40 mass% based on the solid content of the water repellent agent, and the polyfunctional isocyanate crosslinker is mixed in a proportion of 1 to 10 mass% based on the solid content of the water repellent agent.

[0012] The swimsuit of the present invention includes the elastic polyurethane yarn in an amount of preferably 5 to 70 mass%, more preferably 5 to 60 mass%, further preferably 5 to 50 mass%, and particularly preferably 5 to 40 mass%, when the swimsuit is assumed to be 100 mass%. With this configuration, the swimsuit including the elastic polyurethane yarn can keep high water repellency and a low water retention rate as a whole. As other fiber yarns, synthetic fiber yarns such as polyester yarns, nylon yarns, and polypropylene yarns can be appropriately used.

[0013] The water repellency of the swimsuit of the present invention is preferably grade 4 or higher, and more preferably grade 5 in the spray test according to JIS L 1092. The fabric having a water repellency of grade 4 or higher is suitable for, e.g., a swimsuit. The water retention rate of the swimsuit after 60 minutes is preferably 50 mass% or less, more preferably 40 mass% or less, and further preferably 30 mass% or less of the mass of the swimsuit.

[0014] The elastic polyurethane yarn may be either a bare yarn or a yarn covered with another synthetic fiber yarn. The covered yarn may be either a single covered yarn or a double covered yarn. The swimsuit is preferably constituted by a woven fabric or knitted fabric using an elastic polyurethane fiber yarn covered with another synthetic fiber yarn. Examples of the synthetic fiber yarn include, but are not particularly limited to, polyester synthetic fiber yarns typified by polyethylene terephthalate, polytrimethylene terephthalate, polybutylene terephthalate, and copolymerized polyester fiber yarns containing any of these as a main component; polyamide synthetic fiber yarns typified by nylon 6 and nylon 6,6; and polypropylene

long as a polymer diol and a diisocyanate are used as starting materials. The synthesis method is also not particularly limited. For example, the polyurethane may be a polyurethane urea composed of a polymer diol, a diisocyanate and a low-molecular-weight diamine, or a polyurethane urethane composed of a polymer diol, a diisocyanate and a low-molecular-weight diol. Further, the polyurethane may be a polyurethane urea prepared using a compound having a hydroxyl group and an amino group in the molecule as a chain extender. It is also preferred that a polyfunctional glycol having trifunctionality or higher functionality, isocyanate and the like are used within a range that does not impair the effect of the present invention.

Preferable examples of the polymer diol include polyether diol, polyester diol, and polycarbonate diol. Among these, a polyether diol is preferred particularly from the viewpoint of imparting flexibility and elongation to the yarn.

Preferable examples of the polyether diol include polyethylene oxide, polyethylene glycol, derivatives of polyethylene glycol, polypropylene glycol, polytetramethylene ether glycol (hereinafter, abbreviated as PTMG), copolymers of tetrahydrofuran (THF) and 3-methyltetrahydrofuran (modified PTMG), copolymers of THF and 2,3-dimethyl THF (modified PTMG), polyols having side chains on both sides as disclosed in, e.g., Japanese Patent No. 2615131, and random copolymers in which THF and ethylene oxide and/or propylene oxide are irregularly arranged. Such polyether diols may be used individually, or two or more kinds of these may be mixed or copolymerized.

[0018] From the viewpoint of imparting wear resistance and light stability to the elastic polyurethane yarn, polyester diols such as butylene adipate, polycaprolactone diol and polyester polyol having a side chain as disclosed in, e.g., JP S61-26612 A, and polycarbonate diols as disclosed in, e.g., JP H2-289616 A are favorably used.

Such polymer diols may be used individually, or two or more kinds of these may be mixed or copolymerized.

As the molecular weight of the polymer diol, the number-average molecular weight is preferably 1000 or more and 8000 or less, and more preferably 1500 or more and 6000 or less, from the viewpoint of imparting elongation, strength, heat resistance and the like to the yarn. The use of a polyol having a molecular weight of this range makes it possible to easily obtain an elastic yarn excellent in elongation, strength,