

A process for the preparation of morpholinium 3-methyl-1,2,4-triazolyl-5-thioacetate consists in reacting initial substances and morpholine in liquid medium, filtration, washing and drying of the residue obtained.

Thiosemicarbazide, acetic anhydride, sodium hydroxide, chloracetic acid are used as initial substances, 95% ethanol and purified water are used as liquid medium. Thiosemicarbazide is dissolved in purified water, reaction mass is cooled to $0\text{ }^{\circ}\text{C} \pm 0,5\text{ }^{\circ}\text{C}$, and acetic anhydride is added while stirring with rate that reaction mass temperature doesn't elevate above $4\text{ }^{\circ}\text{C}$. The reaction mass is stirred for another 20-30 min. at a temperature below $1\text{ }^{\circ}\text{C} \pm 1\text{ }^{\circ}\text{C}$ after addition of acetic anhydride. The residue is filtered, washed twice with water cooled to $2-4\text{ }^{\circ}\text{C}$, thoroughly pressed, then purified water and wet residue are placed to round-bottomed flask with mechanical mixer. Aqueous sodium hydroxide solution is added to the reaction mass as suspension while stirring for 0.5-1 hour, and thereafter the reaction mass is boiled for 1 hour. Then aqueous solution of chloracetic acid is added, the reaction is stirred for 30 min. and boiled for 1 hour, cooled to $2-4\text{ }^{\circ}\text{C}$, the residue is filtered, washed with cooled water three times and with cooled ethanol twice. The wet residue obtained is transferred to the round-bottomed flask with mixer, 95% ethanol is added and mixed thoroughly, and morpholine solution in 95% ethanol is added while stirring. The reaction mass is boiled for 30 min while stirring, cooled to a temperature of $85-90^{\circ}$, activated carbon is added, boiled for 10-20 min, carbon is filtered, and filtrate is cooled to $4-5\text{ }^{\circ}\text{C}$, the desired product precipitate is filtered, washed with 95% ethanol and dried at a temperature of $50-70\text{ }^{\circ}\text{C}$. The technical result is in high yield of the desired product, improvement in the quality thereof, production cheapening and technological process acceleration.