

## SYNTHESIS OF AZOMETHINES FROM 2-AMINO-4-PHENYLTHIAZOLE

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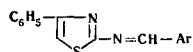
Azomethines based on 2-aminothiazole have been described by Hantzsch et al. [1]. More recently, 2-( $\alpha$ -furylideneamino)thiazole [2] has been synthesized and it has been shown that compounds of this type possess biological activity. We have obtained the previously unreported 2-arylideneamino-4-phenylthiazoles by condensing 2-amino-4-phenylthiazole (I) [3, 4] with some aromatic and heterocyclic aldehydes. The initial I was obtained by analogy with a published method [5] with a yield of 74%. To carry out the condensation, 10-30 drops of methanolic NaOH solution was added to a solution of 0.003 mole of I and an equimolecular amount of the aldehyde in 10 ml of methanol with vigorous stirring, and the azomethine separating out after standing was filtered off, dried and crystallized. All the azomethines obtained are yellow or reddish-brown crystalline substances, some of which are readily soluble in benzene and dioxane, more sparingly in ethanol and insoluble in water. The analytical data are given in the table.

## REFERENCES

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3. H. Traumann, Ann., **249**, 38, 1888.
4. Preparative Organic Chemistry [in Russian], GKHI, Moscow, p. 803, 1959.
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Ar	Mp, °C*	Empirical formula	S, %		Yield, %
			found	calculated	
C <sub>6</sub> H <sub>5</sub>	174-175	C <sub>16</sub> H <sub>12</sub> N <sub>2</sub> S	12.33	12.13	74
<i>m</i> -NO <sub>2</sub> ·C <sub>6</sub> H <sub>4</sub>	180-182**	C <sub>16</sub> H <sub>11</sub> O <sub>2</sub> N <sub>3</sub> S	10.47	10.37	60
<i>p</i> -NO <sub>2</sub> ·C <sub>6</sub> H <sub>4</sub>	192-194	C <sub>16</sub> H <sub>11</sub> O <sub>2</sub> N <sub>3</sub> S	10.11	10.37	65
<i>p</i> -N(CH <sub>3</sub> ) <sub>2</sub> ·C <sub>6</sub> H <sub>4</sub>	152-153	C <sub>18</sub> H <sub>17</sub> N <sub>3</sub> S	10.69	10.43	78
<i>p</i> -CH <sub>3</sub> O·C <sub>6</sub> H <sub>4</sub>	124-126	C <sub>17</sub> H <sub>14</sub> ON <sub>2</sub> S	10.95	10.89	70
$\alpha$ -C <sub>10</sub> H <sub>7</sub>	165-167	C <sub>20</sub> H <sub>14</sub> N <sub>2</sub> S	10.19	10.20	74
$\alpha$ -C <sub>4</sub> H <sub>3</sub> O	159-162(decomp.)	C <sub>14</sub> H <sub>10</sub> ON <sub>2</sub> S	12.44	12.61	54
$\alpha$ -( $\alpha'$ -O <sub>2</sub> N·C <sub>4</sub> H <sub>2</sub> O)	187**	C <sub>14</sub> H <sub>9</sub> O <sub>3</sub> N <sub>3</sub> S	10.62	10.71	46
$\alpha$ -C <sub>4</sub> H <sub>3</sub> S	94-95***	C <sub>14</sub> H <sub>10</sub> N <sub>2</sub> S <sub>2</sub>	23.83	23.72	50
$\alpha$ -( $\alpha'$ -C <sub>6</sub> H <sub>5</sub> ·C <sub>4</sub> H <sub>2</sub> S)	191-192	C <sub>20</sub> H <sub>14</sub> N <sub>2</sub> S <sub>2</sub>	18.62	18.51	48
$\alpha$ -( $\alpha'$ -O <sub>2</sub> N·C <sub>4</sub> H <sub>2</sub> S)	112-114(decomp.)	C <sub>14</sub> H <sub>9</sub> O <sub>2</sub> N <sub>3</sub> S <sub>2</sub>	19.88	20.33	32

\*From a mixture of benzene and n-octane.

\*\*From benzene.

\*\*\*From 95% ethanol.