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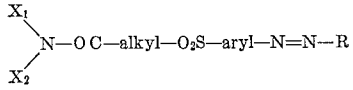
AZO DYESTUFFS

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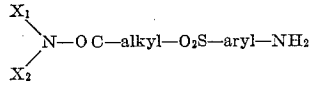
4 Claims. (Cl. 260—205)

This invention relates to azo dyestuffs, more particularly to those of the general formula:



wherein aryl means a radicle of the benzene series, R means the radical of a member of the class consisting of aniline and toluidine derivatives being substituted at the nitrogen atoms by a member of the class consisting of alkyl and hydroxyalkyl groups and the X's stand for members of the group consisting of hydrogen, alkyl and hydroxyalkyl.

The new dyestuffs are obtained by combining the diazo compounds of amines of the general formula:



wherein aryl means a radicle of the benzene series, and the X's have the aforesaid signification with coupling components which contain no substituents causing solubility in water.

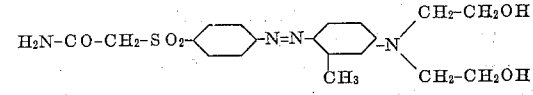
The new dyestuffs are especially useful for dyeing and printing acetate artificial silk, and the dyeings and printings thus obtained exhibit good fastness properties, particularly a good fastness to light.

By selecting the components in such a manner that at least one free aliphatic hydroxyl group is present in the molecule either of the diazo or the coupling component, the dyestuffs thus formed are distinguished on account of their essentially better tinctorial power by the valuable property of being capable when mixed with a dispersing agent of being fixed on acetate artificial silk from a neutral bath. The addition of soap to the dyeing bath can be dispensed with in such a case. Thus even a compact tissue or a strongly twisted yarn is dyed thoroughly.

In order to further illustrate our invention the following examples are given, the parts being by weight and all temperatures in degrees centigrade.

Example 1

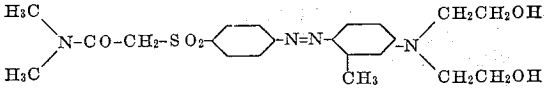
21.4 parts of 4-aminophenyl-sulfoylacetamide are diazotized in the usual manner. The clear diazo solution is then added to a hydrochloric acid solution of 20 parts of dihydroxyethyl-meta-toluidine with the addition of sodium acetate. When the dyestuff formation is complete the dyestuff of the formula:



is isolated and mixed with a dispersing agent. It dyes acetate artificial silk from a bath which only contains sodium sulfate but no soap, bright orange shades of good fastness.

Example 2

The diazo solution prepared from 24.5 parts of 4-aminophenylsulfoylacetdimethylamide is combined with a hydrochloric acid solution of 20 parts of dihydroxyethyl-meta-toluidine. After the addition of sodium acetate the formed dyestuff of the formula:

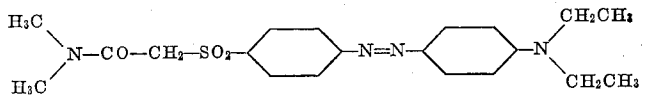


is isolated and mixed with a dispersing agent. It dyes acetate artificial silk from a bath which only contains sodium sulfate but no soap bright orange shades strongly twisted yarn being dyed thoroughly therewith.

Similar dyestuffs are obtained when using as coupling component dihydroxyethyl-3-chloroaniline, hydroxyethylmethyl-meta-toluidine or hydroxyethyl-methylaniline.

Example 3

When combining the diazocompound of 24.5 parts of 4-aminophenylsulfoylacetdimethylamide with a hydrochloric acid solution of 15.5 parts of diethylaniline and isolating the formed dyestuff after the addition of sodium acetate it may be mixed with a dispersing agent. It corresponds with the formula:

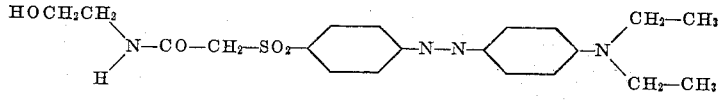


and dyes acetate artificial silk from a soap containing bath orange shades of good fastness.

When starting from 3-aminophenylsulfoylacetdimethylamide the formed dyestuff dyes reddish yellow shades.

Example 4

25.7 parts of 4-aminophenylsulfoylacethydroxyethylamide are diazotized and the diazosolution thus obtained is combined with a hydrochloric acid solution of 15.5 parts of diethylaniline. After the addition of sodium acetate the formed dyestuff of the formula:

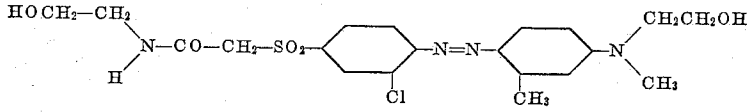


is isolated and mixed with a dispersing agent. It dyes from a sodiumsulfate containing bath acetate artificial silk strong reddish orange shades of good fastness to water and washing even strongly twisted dyed good being dyed thoroughly therewith.

A similar dyestuff is obtained when using as diazo component the diazocompound of 30 parts of 4-aminophenylsulfoylacetdihydroxyethylamide.

Example 5

The diazosolution, prepared from 29.2 parts of 3-chloro-4-aminophenylsulfoylacethydroxyethylamide is combined with a hydrochloric acid solution of 16.5 parts of hydroxyethylmethyl-metatoluidine and the formed dyestuff is isolated after the addition of sodiumacetate and mixed with a dispersing agent. The dyestuff thus obtained of the formula:

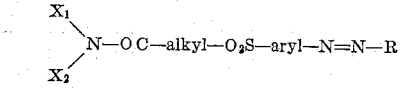


dyes acetate artificial silk from a sodium sulfate containing bath bright scarlet shades of a good fastness to water, washing and light.

Similar valuable dyestuffs are obtained when using as coupling component diethylaniline or as diazo component the diazocompound of 3-chloro-4-amino-phenylsulfoylacetdihydroxyethyl- amide or of 2-chloro-4-aminophenylsulfoylacethydroxyethylamide.

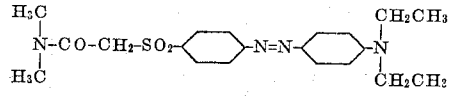
We claim:

1. Azo dyestuffs of the general formula:



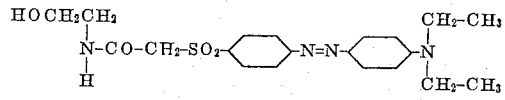
wherein aryl means a radicle of the benzene series, R means the radical of a member of the class consisting of aniline and toluidine derivatives being substituted at the nitrogen atoms by a member of the class consisting of alkyl and hydroxyalkyl groups and the X's stand for member of the group consisting of hydrogen, alkyl and hydroxyalkyl, which dyestuffs are especially useful for dyeing and printing acetate artificial silk fast shades.

2. The azo dyestuff of the formula:



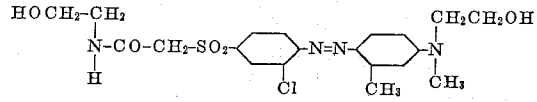
which dyestuff dyes acetate artificial silk from a soap containing bath orange shades of good fastness.

3. The azo dyestuff of the formula:



which dyestuff dyes from a sodiumsulfate containing bath acetate artificial silk strong reddish orange shades of good fastness to water and washing even strongly twisted dyed good being dyed thoroughly therewith.

4. The azo dyestuff of the formula:



which dyestuff dyes acetate artificial silk from a sodium sulfate containing bath bright scarlet shades of a good fastness to water, washing and light.

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