

94200 Aniline, aminobenzene

Chemical composition : C₆H₅NH₂

Colorless liquid, which does not change in chemically pure state. However, most preparations soon turn yellow to brown when exposed to air, apparently due to traces of sulfur compounds. The oily, strongly refractive, peculiar smelling, burning tasting aniline burns with a sooty flame, it dissolves at room temperature in 31 times the amount of water with a neutral reaction. It is readily soluble in alcohol, ether, hydrocarbon disulfide, fatty and essential oils. On the other hand, it is able to dissolve even some otherwise poorly soluble substances (indigo, sulfur).

Aniline is a strong blood poison, it destroys the red blood cells, whereby lips, noses and ears turn bluish-gray. Larger amounts of aniline cause paralysis or death by respiratory failure, but even prolonged inhalation of aniline vapors is harmful.

Aniline was discovered in 1826 by Unverdorben during the lime distillation of indigo and was called "crystallin". In 1843, A. W. Hofmann recognized that this substance was identical to Runge's "kyanol" (1834), Fritzsche's "aniline" (1841) and Zini's "benzidam" (1841). Fritzsche's name aniline has become established; it goes back to "anil" (Portuguese word for indigo) because Fritzsche obtained the aniline by heating indigo and potash lye.