

What is Acetanilide?

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About Acetanilide:

- It is a **synthetic organic compound** with a designated molecular formula of **C₈H₉NO**.
- It is also known as **N-phenylacetamide, acetanil, or acetanilid**.

- It is a **white, odorless solid**.
 - It is **functionally related to** an **acetic acid**.
 - It was introduced in therapy in 1886 as a **fever-reducing drug**.
 - Its effectiveness in **relieving pain** was discovered soon thereafter, and it **was used as an alternative to aspirin** for many years in treating such common complaints as headache, menstrual cramps, and rheumatism.
 - Excessive or **prolonged use** of acetanilide **engenders toxic side effects**: it **interferes with** the **function of hemoglobin**, the oxygen-carrying pigment of the blood.
 - **In the body**, acetanilide is mostly **converted to acetaminophen (paracetamol)**, which has **replaced acetanilide in therapy** because it is less likely to induce blood disorders.
 - It is **used as** an **intermediate in the production of dyes, rubber**, and other **chemicals**.
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Q1: Which is hemoglobin?

It is an iron-containing protein found in the red blood cells that carries oxygen from the lungs to the body's tissues and returns carbon dioxide from the tissues back to the lungs. It is made up of four protein molecules (globulin chains) that are connected together. Haemoglobin forms an unstable reversible bond with oxygen. In the oxygenated state, it is called oxyhemoglobin and is bright red; in the reduced state, it is purplish blue. It also plays an important role in maintaining the shape of the RBCs.

Source: [Five hospitalised after inhaling some chemical compound in Andhra Pradesh's Vizag](#)

Source: <https://vajiramandravi.com/current-affairs/acetanilide/>

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