

2026 Cyanide Analyzer

From Metrohm Process Analytics

Hydrogen cyanide (HCN), also called prussic acid, is a highly poisonous and flammable gas used to produce different important chemicals such as polymer precursors (e.g. adiponitrile), and chelating agents (e.g. EDTA). HCN is also used to produce cyanide derivatives as sodium cyanide, which is used in the mining industry for gold extraction and metal plating. Several industrial processes produce toxic cyanide containing waste so it is critical to treat and monitor cyanide levels to meet strict plant effluent regulations.

Because of its role in many different (production) processes, it is of vital importance to closely monitor the concentration. The **2026 Cyanide process analyzer** from Metrohm Process Analytics is the most straightforward and easy-to-use analytical tool to do so online.

About the Cyanide application

Cyanide is determined via titration with silver nitrate (AgNO_3). The detection is performed with a Metrohm silver ring electrode. The analyzer is able to handle a wide range of cyanide concentrations, from **mg/L to g/L**.



Benefits for online analysis

- Protect expensive company assets by monitoring your processes
- Process data available at your fingertips 24/7 means no waiting for slow, manual laboratory methods
- Increased safety for employees – no manual sampling necessary, no exposure to dangerous environments
- Save money by reducing downtime: analyzer sends alarms for out-of-specification values which inform the operator sooner

Applications for CN^-

- ... in water for acrylonitrile production / (chemical)
- ... in wastewater treatment plants/ (environmental)
- ... in gold extraction/ (mining)
- ... in effluent streams (WWTP) / (several industries)
- ... in HCN production/ (chemical)
- ... in Cyanide control system/ (mining)
- ... in EDTA production/ (chemical)

CN^- analysis performed safely online

- Cyanide can be measured in 1 or 2 sample streams
- Compact footprint for tight industrial spaces: 326 x 273 mm
- Safe, rugged enclosure designed to IP66 specifications is ideal for process environments
- A 7" full color touchscreen shows trend graphs and allows action modifications
- Remote access and control via Ethernet and Modbus TCP/IP, with USB for data export
- Easy maintenance due to simplicity of the layout
- Automatic data and/or alarm transfer to a DCS system

