Honeywell

Sodium cyanide

Product Stewardship Summary

Chemical Name:	Sodium cyanide
Synonyms:	Cymag
CAS Number:	143-33-9
EC (EINECS) Number:	205-599-4
Revision number:	1-2022

- **Chemical identification and uses**: Sodium cyanide is a poisonous compound with the formula NaCN. Sodium cyanide appears as a white crystalline solid, lump solid or powder. Sodium cyanide solution appears as a clear colorless aqueous solution. It is widely used in ore extracting processes for the recovery of gold and silver, electroplating, casehardening of steel, base metal flotation, metal degreasing, dyeing, printing, and photography. They are also widely used in the synthesis of organic and inorganic chemicals (e.g., nitriles, carboxylic acids, amides, esters, and amines; heavy metal cyanides) and in the production of chelating agents. The main usage is as laboratory chemicals. Cyanide has a high affinity for metals, which leads to the high toxicity of this salt. Its main application, in gold mining, also exploits its high reactivity toward metals. It is a moderately strong base. When treated with acid, it forms the toxic gas hydrogen cyanide.

- **Potential exposures:** Exposure to it can occur in industrial/manufacturing facilities and/or during use as laboratory chemicals in research settings. Users risk exposure primarily through inhalation and skin contact. Cyanides are well absorbed via the gastrointestinal tract or skin and rapidly absorbed via the respiratory tract. Once absorbed, cyanide is rapidly and ubiquitously distributed throughout the body, although the highest levels are typically found in the liver, lungs, blood, and brain. There is no accumulation of cyanide in the blood or tissues following chronic or repeated exposure. Good manufacturing and industrial hygiene practices for Sodium cyanide should be followed to prevent or reduce contact. See the Safety Data Sheet (SDS) for additional information.

- **Human Health hazards:** A deadly human poison by ingestion. Toxic by skin absorption through open wounds, by ingestion, and by inhalation of dust. Acute contact can irritate the skin and eyes. Breathing Sodium Cyanide can irritate the nose, throat and lungs causing coughing, wheezing and/or shortness of breath. It is fatal if swallowed, in contact with skin or if inhaled. It can Cause damage to organs through prolonged or repeated exposure. One should refer to See the Safety Data Sheet (SDS) for additional information and any protective information. Sodium Cyanide has not been tested for its ability to cause cancer in animals.

- **Environmental Health hazards:** it is very toxic to aquatic life and biodegradable in aquatic environment has not been ascertained. It should not be released into environment.

- Please contact us at PMTPSCustomerCare@Honeywell.com for more information. Additional information sodium Cyanide may also be found at the following links:

  EPA – Sodium cyanide

  PubChem- Sodium Cyanide