



# *Potassium cyanide*

## *Product Stewardship Summary*

Chemical Name:	Potassium cyanide
Synonyms:	Kalium cyanid
CAS Number:	151-50-8
EC (EINECS) Number:	205-792-3
Revision number:	1-2024

- **Chemical identification and uses:** Potassium cyanide is a poisonous compound with the formula KCN. Potassium cyanide appears as white amorphous lumps or a crystalline mass with a faint odor of bitter almonds. Used mainly for silver plating, steel hardening, gold and silver extraction, and fumigation (fruit trees, ships, railroad cars, and warehouses). It is also used in photography as a reducer.
- **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. Potassium cyanide releases hydrogen cyanide gas, a highly toxic chemical asphyxiant that interferes with the body's ability to use oxygen. Potassium cyanide is used commercially for fumigation, electroplating, and extracting gold and silver from ores. Hydrogen cyanide gas released by potassium cyanide has a distinctive bitter almond odor (others describe a musty "old sneakers smell"), but a large proportion of people cannot detect it; the odor does not provide adequate warning of hazardous concentrations. It is usually shipped as capsules, tablets, or pellets. Potassium cyanide absorbs water from air (is hygroscopic or deliquescent). Good manufacturing and industrial hygiene practices for Potassium cyanide should be followed to prevent or reduce contact. See the Safety Data Sheet (SDS) for additional information.
- **Human Health hazards:** It is classified as very highly toxic. Probable oral lethal dose in humans is less than 5 mg/kg or less than a taste (7 drops) for a 150 lb. person. It is an eye and skin irritant. Exposure to potassium cyanide can be rapidly fatal. It has whole-body (systemic) effects, particularly affecting those organ systems most sensitive to low oxygen levels: the central nervous system (brain), the cardiovascular system (heart and blood vessels), and the pulmonary system (lungs). It is toxic by skin absorption through open wounds, by ingestion, and by inhalation of dust. Acute contact can irritate the skin and eyes. One should refer to See the Safety Data Sheet (SDS) for additional information and any protective information.
- **Environmental Health hazards:** It is very toxic to aquatic life and biodegradability in aquatic environment has not been ascertained. It should not be released into environment.
- Please contact us at [ESSPSCustomerCare@Honeywell.com](mailto:ESSPSCustomerCare@Honeywell.com) for more information. Additional information on Potassium cyanide may also be found at the following links:

[EPA – Potassium cyanide](#)

## [PubChem- Potassium Cyanide](#)

*This product stewardship summary is intended to give general information about the chemical or categories of chemicals addressed. It is not intended to provide an in-depth discussion of all health and safety information. Additional information on the chemical is available through the applicable Material Safety Data Sheet which should be consulted before use of the chemical. The product stewardship summary does not supplant or replace required regulatory and/or legal communication documents. Statements concerning use of our products are made without warranty that any such use is free of patent infringement and are not recommendations to infringe any patent.*