

Chemical Abbreviation Examples

Chemical name	Abbr.	Safety data
acetic acid	CH ₃ COOH	POISON! DANGER! Corrosive. Liquid and mist cause severe burns to all body tissue. May be fatal if swallowed. Harmful if inhaled. Inhalation may cause lung and tooth damage. Flammable liquid and vapor.
ammonia	NH ₃	POISON! DANGER! Corrosive alkaline solution. Causes burns to any area of contact. Harmful if swallowed, inhaled or absorbed through skin.
ammonium oxalate	(NH ₄) ₂ C ₂ O ₄	POISON! DANGER! May be fatal if swallowed or inhaled. May cause burns to respiratory tract and severe irritation to skin and eyes. May affect kidneys.
barium chloride	BaCl ₂	DANGER! May be fatal if swallowed. Harmful if inhaled. May cause irritation to skin, eyes, and respiratory tract. Affects heart, respiratory system, and central nervous system.
bromophenol blue		CAUTION! May be harmful if swallowed or inhaled. May cause irritation to skin, eyes, and respiratory tract.
calcium carbonate	CaCO ₃	CAUTION! May cause irritation to skin, eyes, and respiratory tract. Nuisance dust.
cobalt chloride	CoCl	Moderately toxic by ingestion, skin contact, and intravenous routes.
copper metal	Cu	Nontoxic in metallic form
copper sulfate	CuSO ₄	Moderately toxic by ingestion, skin contact, and intravenous routes.
diaminocyclohexanetetraacetic acid monohydrate		IRRITANT. Irritating to eyes, respiratory system and skin. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable gloves and eye/face protection.
Dowex resin		No known toxicity, Stored & supplied in 9 molar hydrochloric acid.
disodium ethylenediamine tetracetate	EDTA	WARNING! The toxicological properties of this material have not been fully investigated. May be harmful if swallowed. Causes eye and skin irritation. Causes digestive and respiratory tract irritation.

Formaldehyde & formalin	H ₂ CO	DANGER! May be fatal if swallowed. Harmful if inhaled or absorbed through skin. Causes irritation to skin, eyes and respiratory tract. Strong sensitizer. May cause blindness. Combustible liquid and vapor. Suspect cancer hazard. Contains formaldehyde which may cause cancer. Risk of cancer depends upon duration and level of exposure.
hexamethylenetetramine	hexamine	WARNING! Flammable solid. Hygroscopic. Possible risks of irreversible effects. May cause central nervous system depression. May cause respiratory and digestive tract irritation. May cause eye and skin irritation. May cause sensitization by inhalation and by skin contact.
hydrochloric acid	HCl	POISON! DANGER! Corrosive. Liquid and mist cause severe burns to all body tissue. May be fatal if swallowed or inhaled. Inhalation may cause lung damage.
hydrogen peroxide	H ₂ O ₂	DANGER! STRONG OXIDIZER! Moderately toxic by ingestion and skin contact. Corrosive irritant to skin and eyes. Highly explosive when highly concentrated. Avoid contact with combustibles, heat, or flame.
isopropyl alcohol		WARNING! FLAMMABLE! Harmful if swallowed or inhaled. Keep away from heat or flames.
lead	Pb	WARNING! Poison by ingestion. Suspected carcinogen.
lead nitrate	Pb(NO ₃) ₃	WARNING! POISON by ingestion. Severe eye and skin irritant Do not get in eyes or on skin
magnesium sulfate	MgSO ₄	May be toxic if ingested. Eye irritant.
mercuric chloride	HgCl ₂	DANGER! May be fatal if swallowed. Harmful if inhaled or absorbed through skin. Causes severe irritation to eyes, skin and respiratory tract; may cause burns. May cause allergic skin reaction. Mercury compounds affect the kidneys and central nervous system. Birth defect hazard. Can cause birth defects.
mercuric iodide	HgI ₂	POISON! DANGER! Liquid and vapor causes severe burns. May be fatal if swallowed. Harmful if inhaled; may cause delayed lung injury.

nickel nitrate	$\text{Ni}(\text{NO}_3)_3$	DANGER! Strong oxidizer. Contact with other material may cause fire. Harmful if swallowed or inhaled. Causes irritation to skin, eyes and Respiratory tract. May cause allergic skin or respiratory reaction. Cancer Hazard. Can cause cancer. Risk of cancer depends on duration and level of Exposure.
nitric acid	HNO_3	POISON! DANGER! Liquid and vapor causes severe burns. May be fatal if swallowed. Harmful if inhaled; may cause delayed lung injury. Strong oxidizer. Contact with other material may cause fire. Keep from contact with combustible material.
oxalic acid	$\text{H}_2\text{C}_2\text{O}_4$	DANGER! POISON! May be fatal if swallowed. Severe skin and eye irritant. Do not allow to come in contact with eyes, skin or clothing.
perchloric acid	HClO_4	DANGER! STRONG OXIDIZER. Contact with other material may cause fire or explosion. Corrosive. Causes severe irritation and burns to every area of contact. Harmful if swallowed or inhaled.
potassium bromate	KBrO_3	DANGER! STRONG OXIDIZER. Contact with other material may cause fire or form shock sensitive materials. May be fatal if swallowed. Harmful if inhaled or absorbed through skin. Causes irritation to skin, eyes and respiratory tract. May cause kidney damage.
potassium bromide	KBr	WARNING! Harmful if swallowed or inhaled. Affects central nervous system, brain and eyes. May cause irritation to skin, eyes, and respiratory tract.
potassium chloride	KCl	CAUTION! May be harmful if swallowed. May cause irritation to skin, eyes, and respiratory tract.
potassium dichromate	$\text{K}_2\text{Cr}_2\text{O}_7$	DANGER! STRONG OXIDIZER. Contact with other material may cause a fire. Corrosive. Causes severe burns to every area of contact. Harmful if swallowed or inhaled. Affects the respiratory system, liver, kidneys, eyes, skin and blood. May cause allergic reaction. Cancer hazard. Can cause cancer. Risk of cancer depends on duration and level of exposure.
potassium hydroxide	KOH	POISON! DANGER! CORROSIVE. Causes severe burns to skin, eyes, respiratory tract, and gastrointestinal tract. Material is extremely destructive to all body tissues. May be fatal if swallowed. Harmful if inhaled.

potassium iodate	KIO ₃	DANGER! STRONG OXIDIZER. Contact with other material may cause fire. Harmful if swallowed or inhaled. Causes irritation to skin, eyes and respiratory tract. May affect central nervous system, blood, and kidneys.
potassium iodide	KI	CAUTION! May cause irritation to skin, eyes, and respiratory tract.
rubeanic acid		TOXIC harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system and skin. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.
silver nitrate	AgNO ₃	POISON! DANGER! CORROSIVE. Causes burns to any area of contact. May be fatal if swallowed. Harmful if inhaled. Strong oxidizer. Contact with other material may cause fire.
silver	Ag	Nontoxic in metallic form
sodium acetate	NaOOCCH ₃	CAUTION! May cause irritation to skin, eyes, and respiratory tract.
sodium carbonate	Na ₂ CO ₃	WARNING! Harmful if inhaled. May cause respiratory and digestive tract irritation. May cause eye and skin irritation with possible burns.
sodium fluoride	NaF	DANGER! May be fatal if swallowed or inhaled. Affects respiratory system, heart, skeleton, circulatory system, central nervous system and kidneys. Causes irritation to skin, eyes and respiratory tract. Irritation effects may be delayed.
sodium hydroxide	NaOH	POISON! DANGER! CORROSIVE. May be fatal if swallowed. Harmful if inhaled. Causes burns to any area of contact. Reacts with water, acids and other materials.
sodium iodate	NaIO ₃	DANGER! STRONG OXIDIZER. Contact with other material may cause fire. Harmful if swallowed or inhaled. Causes irritation to skin, eyes and respiratory tract.
sodium iodide	NaI	WARNING! Harmful if swallowed or inhaled. Causes irritation to skin, eyes and respiratory tract. Chronic exposure may produce iodism
sodium pentacyanoamine ferrous		HARMFUL by inhalation, in contact with skin and if swallowed. Wear suitable protective clothing.
sodium sulfate	Na ₂ SO ₄	Mildly toxic by ingestion
sodium sulfite	Na ₂ SO ₃	Moderately toxic by ingestion.
starch		Non-toxic

sulfuric acid	H_2SO_4	POISON. DANGER! CORROSIVE. Liquid and mist cause severe burns to all body tissue. May be fatal if swallowed. Harmful if inhaled. Inhalation may cause lung damage. Water reactive. Strong inorganic acid mists containing sulfuric acid can cause cancer.
total ionic strength	TISAB	Contains acetic acid, sodium acetate buffer chloride, trans-1,2-diaminocyclohexane-N,N,N',N'-tetracetic acid (CDTA), and sodium hydroxide Irritant, pH = 5.
zinc metal		Relatively non-toxic in metallic form
zinc sulfate	ZnSO_4	WARNING! May be harmful if swallowed or inhaled. Causes irritation to skin, eyes and respiratory tract.