

## ERB Acronym and Glossary – K

Acronym	Glossary	Definition
K	hydraulic conductivity	A measure of the ability of an aquifer to transmit a fluid; it is expressed as the volume of water at the existing kinematic viscosity that will move in a unit time under a unit hydraulic gradient through a unit area measured at right angles to the direction of flow.
K	K	Proportionality constant in Darcy's, Fick's, and Poisson's Laws
K	Potassium	An alkali metal that forms various salts with halogens and other metals. It is an essential nutrient, and among other uses, it is used in electrical impulses in the nervous system. It is abundant naturally, and is generally not considered toxic.
Kd	Diffusion Coefficient	Provides a soil or sediment-specific measure of the extent of chemical partitioning between soil or sediment and water, unadjusted for dependency upon organic carbon. To adjust for the fraction of organic carbon (foc) present in soil or sediment use $Kd = Koc * foc$ . The higher the Kd, the more likely a chemical is to bind to soil or sediment than to remain in water. This affects the efficiency of water-based remediation.
KMnO4	potassium permanganate	A crystalline salt of potassium and manganese used as an oxidizing agent; also called "purple salt".
Koc	Organic Carbon Diffusion Coefficient	Provides a measure of the extent of chemical partitioning between organic carbon and water at equilibrium. The higher the Koc, the more likely a chemical is to bind to soil or sediment than to remain in water.
Koc	Organic Carbon Partition Coefficient	Provides a measure of the extent of chemical partitioning between organic carbon and water at equilibrium. The greater the Koc, the more likely a chemical is to bind to soil or sediment than to remain in water.
Kow	Octanol Water Partition Coefficient	The octanol-water partition coefficient (kow) is the ratio of the concentration of a chemical in octanol and in water at equilibrium and at a specified temperature.
Kow	Octanol-Water Diffusion Coefficient	Provides a measure of the extent of chemical partitioning between octanol and water at equilibrium. The greater the Kow, the more likely a chemical is to partition to octanol than to remain in water. Octanol is used as a surrogate for lipids (fat), therefore Kow can be used to predict bioconcentration in aquatic organisms.
KPEG	potassium polyethylene glycol	Potassium polyethylene glycol is a common chemical used to treat PCB contaminated soils in batch reactors using the alkaline polyethylene glycol decomposition process.

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	Kaneohe Bay	Marine Corps Base, Hawaii Kaneohe Bay is located on the eastern side of Oahu, approximately 12 miles

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		northeast of Honolulu..
	karst	A geologic formation of irregular limestone deposits with sinks, underground streams, and caverns.
	kinetic energy	Energy possessed by a moving body as a result of its motion.
	kinetic rate coefficient	A number that describes the rate at which a water constituent such as a biochemical oxygen demand or dissolved oxygen rises or falls.