

# Tradeasia International Pte Limited

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## FORMIC ACID 90% SPECIFICATION

### PRODUCT IDENTIFICATION

CAS NO. : 64-18-6  
EINECS NO. : 200-579-1  
FORMULA : HCOOH  
MOL WT. : 46.03  
H.S. CODE : 2915.11  
TOXICITY : Oral rat LD50: 1100mg/kg  
SYNONYMS : Hydrogencarboxylic acid; aminic acid; formylic acid  
DERIVATION : Methylformate, Condensed water

### DESCRIPTION OF FORMIC ACID

Formic acid, also called methanoic acid), is the simplest and has the lowest mole weight of the carboxylic acids, in which a single hydrogen atom is attached to the carboxyl group (HCOOH). If a methyl group is attached to the carboxyl group, the compound is acetic acid. It occurs naturally in the body of ants and in the stingers of bees. Functionally, it is not only an acid but also an aldehyde; it reacts with alcohols to form esters as an acid and it is easily oxidized which imparts some of the character of an aldehyde. Pure formic acid is a colorless, toxic, corrosive and fuming liquid, freezing at 8.4 C and boiling at 100.7 C. It is soluble in water, ether, and alcohol. It irritates the mucous membranes and blisters the skin. It is prepared commercially from sodium formate with the reaction of condensed sulfuric acid. Formic acid is used as a chemical intermediate and solvent, and as a disinfectant. It is also in processing textiles and leathers, electroplating and coagulating latex rubber.

### Product Specification

Acid (HCOOH) : 90% Min  
Chloride (Cl-) : 20 ppm max  
Heavy Metal (Pb) : 5 ppm max  
Iron (Fe) : 5 ppm max  
Sulphate (SO4) : 10 ppm max

### PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE : colorless liquid with a pungent odor  
MELTING POINT : 8.3 C  
BOILING POINT : 100.7 C  
SPECIFIC GRAVITY : 1.21  
SOLUBILITY IN WATER : miscible  
VAPOR DENSITY : 1.6  
NFPA RATINGS : Health: 2; Flammability: 2; Reactivity: 1  
FLASH POINT : 69 C  
STABILITY : Stable under ordinary conditions