

AAA MOLYBDENUM PRODUCTS, INC.

MOLYBDENUM AND RHENIUM CHEMICALS FOR INDUSTRY

SPECIFICATION SHEET

MOLYBDOSILICIC ACID CAS Number: 11089-20-6, 12027-12-2

DESCRIPTION

Molybdosilicic Acid, also known as 12-Molybdosilicic Acid solution, is a clear yellow liquid. The solid is a yellow crystalline which has several hydrates: $H_4[SiMo_{12}O_{40}] \cdot xH_2O$ ($x = 5-29$). This heteropolymolybdate acid is tetrabasic and has a very high solubility in water and several oxygenated solvents. NMR evidence has shown that the four protons in the heteropoly anion are present as H_3O^+ ions. There are a number of salts of Molybdosilicic Acid. The solution is sensitive to light and should be protected from light exposure. In addition, it tends to become slightly reduced over time, turning from yellow to pale green. The yellow color is restored with the addition of dilute Hydrogen Peroxide, which reoxidizes the compound.

SPECIFICATIONS

Specification (%)

Aluminum (Al)	<0.0005
Ammonium (NH ₄)	<0.0001
Chloride (Cl)	<0.0005
Heavy Metals (as Pb)	<0.0010
Iron (Fe)	<0.0005
Sodium (Na)	<0.0015
Sulfate (SO ₄)	<0.0005
Typical Concentration (H ₄ [SiMo ₁₂ O ₄₀]):	240-310 g/L