

ABSTRACT

The present invention provides a surface treatment liquid for metal having a sufficiently high film-forming property. The present invention relates to a surface treatment liquid for metal comprising an azole silane coupling agent, the surface treatment liquid further comprises (A) an organic acid ion having one to three acidic groups in one molecule; (B) an inorganic acid (or mineral acid) ion; (C) an alkali metal ion and/or an ammonium ion; and (D) a copper ion.