



NEWAY SINOPHC TECH. LIMITED

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Certificate of Analysis

Product Name: Metal Etchant Product Information

Product Number ME-20260220
Batch Number ME-SH2026022001
Brand SIGALD
CAS Number N/A (Complex chemical mixture)
MDL Number N/A (No specific MDL for composite etchant)
Formula Blend of Inorganic Acids, Corrosion Inhibitor, Chelating Agent & Deionized Water
Formula Weight Variable (Chemical mixture)
Quality Release Date 20 FEB 2026

Test Results

Test	Specification (Electronics & Metal Processing Standard)	Result	Unit	Test Method
Appearance (Color)	Light yellow to amber	Amber	-	Visual Inspection
Appearance (Form)	Transparent homogeneous liquid	Transparent liquid	-	Visual Inspection
Total Acid Content	15.0-20.0%	17.8%	%	Acid-Base Titration
Etching Rate (Copper, 25°C)	2.0-4.0 µm/min	3.2 µm/min	µm/min	Weight Loss Method
Etching Rate (Aluminum, 25°C)	1.5-3.0 µm/min	2.4 µm/min	µm/min	Weight Loss Method
pH Value (25°C)	0.5-2.0	1.2	-	Digital pH Meter
Corrosion Inhibition Efficiency	≥ 90%	96.5%	%	Electrochemical Test
Heavy Metals (Pb)	≤ 5 ppm	0.9 ppm	ppm	Atomic Absorption Spectrometry (AAS)
Heavy Metals (As)	≤ 1 ppm	0.1 ppm	ppm	Atomic Fluorescence Spectrometry (AFS)
Iron Ion Content	≤ 0.05%	0.01%	%	Spectrophotometry
Stability (25°C, 7d)	No precipitation/stratification	Complies	-	Visual & Centrifugal Test
Supplier Information	Confirmed	Confirmed	-	-
Registered Trademark	Confirmed	Confirmed	-	-

Certification

This batch of product has been tested in accordance with electronics and metal processing industry standards for metal etchant and meets all specified requirements. It is qualified for use.
Issue Date:20 FEB 2026