

CERTIFICATE OF ANALYSIS

Product: PGMEA
Lot. No.: EXAMPLE
Man. Date: EXAMPLE
Exp. Date: EXAMPLE
Grade: ULSI
Density (20°C): 0.970 g/cm³

MicroChemicals GmbH
Fon Nicolaus-Otto-Str. 39
Fax D-89079 Ulm
Email +49 (0) 731 977343-0
Internet +49 (0) 731 977343-29
 Info@MicroChemicals.com
 www.microchemicals.com

From a representative sample the following values were determined:

21.01.2022
QC Director Dr.-Ing. Christian Koch

Parameter	Specification	Result
Assay (GC, on anhydrous basis)	99.8-100 %	99.8 %
Color (APHA, Pt-Co)	<= 10	5
Water (KF)	<= 1000 ppm	< 500 ppm
Chloride (Cl)	<= 2 ppm	< 1 ppm
Cations		
Aluminum (Al)	< 20 ppb	< 10 ppb
Antimony (Sb)	< 20 ppb	< 10 ppb
Arsenic (As)	< 20 ppb	< 10 ppb
Barium (Ba)	< 20 ppb	< 10 ppb
Beryllium (Be)	< 20 ppb	< 10 ppb
Bismuth (Bi)	< 20 ppb	< 10 ppb
Boron (B)	< 20 ppb	< 10 ppb
Cadmium (Cd)	< 20 ppb	< 10 ppb
Calcium (Ca)	< 20 ppb	< 10 ppb
Chromium (Cr)	< 20 ppb	< 10 ppb
Cobalt (Co)	< 20 ppb	< 10 ppb
Copper (Cu)	< 20 ppb	< 10 ppb
Gallium (Ga)	< 20 ppb	< 10 ppb
Germanium (Ge)	< 20 ppb	< 10 ppb
Gold (Au)	< 20 ppb	< 10 ppb
Iron (Fe)	< 20 ppb	< 10 ppb
Lead (Pb)	< 20 ppb	< 10 ppb
Lithium (Li)	< 20 ppb	< 10 ppb
Magnesium (Mg)	< 20 ppb	< 10 ppb
Manganese (Mn)	< 20 ppb	< 10 ppb
Molybdenum (Mo)	< 20 ppb	< 10 ppb
Nickel (Ni)	< 20 ppb	< 10 ppb
Nobelium (No)	< 20 ppb	< 10 ppb
Palladium (Pd)	< 20 ppb	< 10 ppb
Platinum (Pt)	< 20 ppb	< 10 ppb
Potassium (K)	< 20 ppb	< 10 ppb
Silver (Ag)	< 20 ppb	< 10 ppb
Sodium (Na)	< 20 ppb	< 10 ppb
Strontium (Sr)	< 20 ppb	< 10 ppb
Tantalum (Ta)	< 20 ppb	< 10 ppb
Thallium (Tl)	< 20 ppb	< 10 ppb
Tin (Sn)	< 20 ppb	< 10 ppb
Titanium (Ti)	< 20 ppb	< 10 ppb
Vanadium (V)	< 20 ppb	< 10 ppb
Zinc (Zn)	< 20 ppb	< 10 ppb
Zirconium (Zr)	< 20 ppb	< 10 ppb
Particles		
Particle count > 0.5 µm (Filtered through 0.2 µm, filled under inert gas.)	< 25 p/ml	<10 p/ml

The analytical results should not be construed as guaranteeing specific properties of the product or its suitability for a particular application. The above data do not release from carrying out an incoming goods inspection. This report is not to be signed.