



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

FERRO CORPORATION
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CHEMICAL

Valid To: May 31, 2021

Certificate Number: 0624.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following types of tests on clay, ceramics & related products, coatings, ores & minerals, paints, pigments & related surface coatings, glass, inorganic pigments and glass frits:

Test

Test Method(s) **

Wet Chemistry

Conductivity

ASTM D1125; DTM 320

pH

ASTM D1208 (Section 6), E70; DTM 46, 197

Volatile Organic Content

ASTM D2369; DTM 143

Material Properties

Density

DTM 226

Flash Point

ASTM D93, D6450; DTM 196

Oil Absorption

ASTM D281 (Proc B); DTM 235

Particle Size Distribution

DTM 254

Wet Sieve Analysis

ASTM D185; DTM 26, 114

Viscosity

DTM 137

Surface Area

DTM 115

Moisture Content for Powder Sample

DTM 361

Spectroscopy

Atomic Absorption (Cd, Pb)

ASTM C927, C738; DTM 70, 233

ICP/OES (Ag, Al, As, B, Ba, Bi, Ca, Cd, Ce, Co, Cr, Cu, Fe, Ga, Hg, K, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, S, Se, Si, Sn, Sr, V, W, Y, Zn, Zr)

ASTM D5517; DTM 71, 233, 307

Test**Test Method(s) ******Spectroscopy (continued)**

Toxicity Characteristic Leaching Procedure (TCLP) using ICP/OES (Ag, As, Ba, Cd, Cr, Hg, Pb, Se)	DTM 224, 307
UV/VIS/NIR	DTM 344
Water Extractable Metals by ICP/OES	DTM 58, 68, 148, 307
X-ray Diffraction (Qualitative)	DTM 234
X-ray Fluorescence*	DTM 111, 232
X-ray Fluorescence (Cd, Pb)	DTM 111, 236
X-ray Fluorescence (Quantitative Comparison)	DTM 111, 232
FTIR	DTM 326

Thermal Properties

Thermal Analysis (TGA/DSC/SDT)	DTM 356
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* Using a standard-less program provided by the XRF vendor covering elements F and higher in the periodic chart.

** DTM = Defined Test Method (developed by Ferro Color and Glass)





Accredited Laboratory

A2LA has accredited

FERRO CORPORATION

Washington, PA

for technical competence in the field of

Chemical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



Presented this 27th day of September 2019.

A blue ink signature of the Vice President, Accreditation Services.

Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 0624.01
Valid to May 31, 2021

For the tests to which this accreditation applies, please refer to the laboratory's Chemical Scope of Accreditation.