

**CERTIFICATE OF ANALYSIS**

**Product Name** Acetic Acid , Glacial  
**Grade** Meets ACS GRADE Monograph  
**Catalog #** 281000ACS  
**Lot #** C21D21CAS0000AAG  
**Date of Manufacture:** 04/20/2021  
**Recommended Retest Date:** Five Years from Date of Manufacture

TEST	Specification	Result
Assay	≥ 99.7% (CH <sub>3</sub> COOH)	99.9%
Color (APHA)	10 max	5
Dilution Test	Passes test	Pass
Residue after Evaporation	0.001% max	< 0.001%
Acetic anhydride [(CH <sub>3</sub> CO) <sub>2</sub> O]	0.01% max	< 0.01%
Chloride (Cl)	1 ppm max	< 1 ppm
Sulfate (SO <sub>4</sub> )	1 ppm max	< 1 ppm
Heavy Metals (as Pb)	0.5 ppm max	< 0.5 ppm
Iron (Fe)	0.2 ppm max	< 0.2 ppm
Substances Reducing Dichromate	Passes test	Pass
Substances Reducing Permanganate	Passes test	Pass
Titration Base	0.0004 meq/g max	< 0.0004 meq/g

This lot of Acetic Acid complies with all of the current requirements listed in the American Chemical Society monograph. Certain test data have been supplied by third parties.

This product is not derived, nor does it come in contact with, any materials derived from bovine or other animal sources.

This product is for further commercial manufacturing, laboratory or research use, and may be used as an excipient or a process solvent for pharmaceutical purposes. It is not intended for use as an active ingredient in drug manufacturing nor as a medical device or disinfectant. Appropriate/legal use of this product is the responsibility of the user.

Approved by: G.Scoca, Quality Control Chemist

Date of Approval: 07/22/2021

