



**BRENTAG MID-SOUTH, INC**  
 1405 Highway 136 West  
 Henderson, Kentucky 42420-0020  
 Tel. (270) 830-1222 • Fax (270) 826-1486

**CERTIFICATE OF ANALYSIS**

**ACETIC ACID GLACIAL  
 FOOD GRADE KOSHER**

<b>CUSTOMER:</b>	<b>LOT NUMBER:</b> 245434248219001 256119248219001
	<b>DATE ANALYZED:</b> 7-6-18

PARAMETERS	ANALYSIS	SPECIFICATIONS
Identification	Passes	1:3 Aqueous solution gives positive tests for acetate.
Assay by wt. of C <sub>2</sub> H <sub>4</sub> O <sub>2</sub> *	99.7	99.5% - 100.5%*
Non-Volatile Residue*	0.001	0.005% max.*
Lead*	< 0.0	0.5 ppm max.*
Readily Oxidizable Substances*	Passes	Passes Test*
Solidification Point*	16.6	Not cooler than 15.6°C

\* Values as reported by Vender.

INCOMING PRODUCT INFORMATION (VENDER AND CARRIER)	
VENDER: Sekisui	CARRIER: Brenntag
VENDER LOT NUMBER: 50000032467	VEHICLE NUMBER: 24950

<b>Analyst:</b> J. Tobin	<b>Approved:</b> <i>Nathan Dorris</i>
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cc: With Shipment  
 Lab File

Direct questions concerning certification of this product to personnel at the location marked below.

- Henderson, KY 270-830-1258

Form Approval: Martha Miller  
 Form Approval Date: 2/8/18

C:\RD1\WORD\COA\ACETIC GLACIAL FG

"All information provided is believed to be accurate and complete. The data provided is representative of the product quality on the date of analysis for the lot number indicated. This certificate of analysis may not include all of the constituents of the product. Persons using this information should make their own determination regarding its suitability for their particular application. This certificate of analysis shall not in any way limit or preclude the operation and effect of the applicable terms and conditions of sale."

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Manufactured by Sekisui  
Marketed by Celanese Ltd.

# SEKISUI

# APPROVED

8-7-18 ST

BRENNTAG MID-SOUTH  
1405 HIGHWAY 136 WEST  
HENDERSON KY 42420  
USA

Calvert City, KY  
Sekisui Specialty Chemicals America, LLC  
246 Johnson Riley Rd  
CALVERT CITY KY 42029-0970  
USA

e-mail: zzdaltraffic@celanese.com

## Certificate of Analysis / PQR

<b>Customer no.:</b>	2191361	<b>Date of Certificate:</b>	07 Aug 2018
<b>Sold-To PO:</b>	4501919167	<b>Delivery Item/date:</b>	80181603 000010 / 07 Aug 2018
<b>Product:</b>	Glacial Acetic Acid, Food/Kosher Grade	<b>Delivery Item Qty:</b>	43,500.000 LB
<b>Product no.:</b>	51002216	<b>Order Item /date:</b>	55701 000010 / 31 Jul 2018
		<b>Container no.:</b>	24950

Lot no.: 50000032467

Characteristic/properties	Method	UoM	Value	Limit
Assay by Titration	FCC	%(m)	99.7	99.5 - 100.5
Identification (1)	FCC		Pass	
Solidification Point, min.	FCC	°C	16.6	min. 15.6
Non-Volatile Residue, max.	FCC	%(m)	0.001	max. 0.005
Lead, max. (1), (2)	FCC	ppm(m)	< 0.0	max. 0.5
Readily Oxidizable Substances	FCC		Pass	

(1) Test results provided are based on non-routine testing. (2) Unit of measure ppm(m) equals mg/kg.

The product shall strictly conform to its respective Specification(s), and is manufactured, handled, labeled, sold and/or delivered in compliance with the Good Manufacturing Practices for food grade products under the FDA Food Modernization Act (FSMA), and purity specifications published by the Food Chemical Codex (FCC) for Glacial Acetic Acid. FCC analytical methods or equivalent validated methods are used. The shelf life of the product is one year from date of delivery, provided that it is handled and stored under the recommended conditions. When the product exceeds its shelf life, or storage deviates from the recommended conditions, the owner of the product is responsible to verify its quality status and to make decisions on its suitability for the intended end-uses. The Certificate of Analysis applies only to the above-mentioned lot. It is not valid for any subsequent re-packaged, blended or formulated product.

Rene Tucker  
Quality Manager

This report is electronically produced and is valid without signature. The above particulars do not release the customer from the obligation to carry out an inspection of goods received. The values shown represent testing performed on bulk material and are not shipment-specific. If you have any question about the quality or weight of this shipment, please contact your customer service representative.

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