

## Certificate of Analysis

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Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System  
 Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120632

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	E139	Quality Test / Release Date	11/04/2019
Lot Number	196284		
Description	PETROLEUM ETHER, A.C.S.		
Country of Origin	United States	Suggested Retest Date	Nov/2024
Chemical Origin	Organic - non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	CLEAR,COLORLESS LIQUID
ACIDITY	PASS/FAIL	= PASS TEST	PASS TEST
BOILING RANGE (36 - 60 DEG C)	PASS/FAIL	= PASS TEST	PASS TEST
BOILING TEMP (BEGINNING)	DEGREES CELSIUS	Inclusive Between 36 - 39	38
BOILING TEMP (ENDPOINT)	DEGREES CELSIUS	Inclusive Between 52 - 60	58
COLOR	APHA	<= 10	5
COPPER STRIP CORROSION	PASS/FAIL	= PASS TEST	PASS TEST
DISTILLATION RESIDUE	PASS/FAIL	= PASS TEST	PASS TEST
DOCTOR TEST	SWEET/FAIL	= PASS TEST	PASS TEST
EVAPORATION RESIDUE	%	<= 0.001	<0.0001
FRACTION DISTILLS < 40 C	%	<= 60	<10
FRACTION DISTILLS < 54 C	%	>= 95	95
HEAVY OILS & FATS	PASS/FAIL	= PASS TEST	PASS TEST
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
SAPONIFICATION VALUE	MG KOH/GRAM	<= 0.015	0.013
SPECIFIC GRAVITY @ 25 DEG C		Inclusive Between 0.630 - 0.660	0.64
STEARIN EVAPORATION RESIDUE	GMS.	<= 0.003	<0.0003
UNSATURATED COMPOUNDS	PASS/FAIL	= PASS TEST	PASS TEST



Peter Yang - Quality Control Manager - Bridgewater

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.  
 If there are any questions with this certificate, please call at (800) 227-6701.

\*Based on suggested storage condition.