

For Petroleum products test

Petroleum products-Determination of distillation characteristics [JIS K 2254 : 2018]

Standard samples A and B prepared in accordance with [5. Atmospheric pressure method 5.4 Inspection of testing instruments 5.4.1 Confirmation by standard samples (a) Preparation of standard samples A and B Table 4] as described in JIS K 2254: 2018 Petroleum products - Methods for determining distillation properties are available. Please use these if you are preparing in-house.

▼Fig. 4 Components of the standard sample and their ratio (in mL)

Component	Standard sample A	Standard sample B
<i>n</i> -Hexane	20	-
<i>n</i> -Heptane	20	-
Toluene	20	-
Xylene	20	20
2-Ethylhexanol	10	20
Tetralin	10	20
α -Methylnaphthalene	-	20
<i>n</i> -Hexadecane	-	20

Product Name	Grade	Package	Cat. No.
Distillation test method standard sample A	for petroleum products test	500 mL	11452-08
Distillation test method standard sample B	for petroleum products test	500 mL	11453-08

Petroleum products and lubricants—Determination of neutralization number [JIS K 2501 : 2003]

Product Name	Grade	Package	Cat. No.	※2
Toluene·water·2-propanol mixed solution	for petroleum products test	3 L	41035-76	
Acetic acid·chlorobenzene mixed solution	for petroleum products test	3 L	25914-76	
Acetic acid·toluene mixed solution	for petroleum products test	3 L	01865-76	
0.1mol/L Hydrochloric acid (N/10), 2-propanolic		500 mL	18597-08	●
Potassium hydrogen phthalate JIS K 8005	Reference materials for volumetric analysis	50 g	32311-96	
Methyl orange solution	Indicator for titration	500 mL	25860-08	●
		100 mL	25860-23	●
※1 0.1mol/L Potassium hydroxide solution, 2-propanolic (N/10)	for petroleum products test	500 mL	32871-08	
Amidosulfuric acid JIS K 8005	Reference materials for volumetric analysis	50 g	37372-96	
<i>p</i> -Naphtholbenzein	Guaranteed reagent for JIS	25 g	28037-30	
0.1mol/L Perchloric acid-acetic acid solution (N/10)	for nonaqueous titrimetry	500 mL	32795-08	
0.1mol/L Sodium acetate-acetic acid solution	for nonaqueous titrimetry	500 mL	38004-08	

※1 :The specified titer (factor) of this product ranges from 0.980 to 1.020. The product is sold under a similar product name, cat. no. 32852-08 (titrant for volumetric analysis), which contains approximately 19.4% water in its composition, and therefore differs from the solution specified in JIS K 2501.

※2 : ● are made-to-order products.

Petroleum products-Determination of octane number, cetane number and calculation of cetane index [JIS K 2280 : 2018]

Product Name	Grade	Package	Cat. No.
<i>n</i> -Hexadecane (Cetane)	for cetane number analysis	500 mL	18563-08



Kanto Chemical Co., Inc.

Act on the Quality Control of Gasoline and Other Fuels

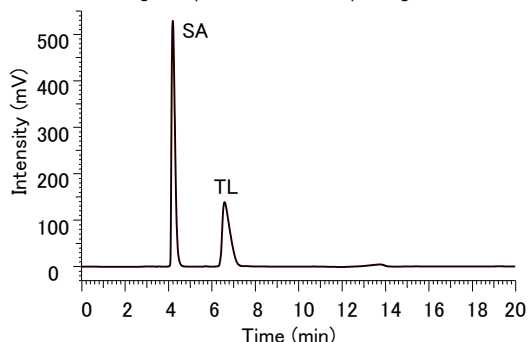
The addition of biodiesel fuel (BDF) to diesel oil is permitted under the Act on the Quality Control of Gasoline and Other Fuels, and specification values and test methods are defined for diesel oil, whether it contains BDF or not. The fatty acid methyl ester (FAME) and triglyceride (also known as TG, triglycerides) content is determined by the HPLC method.

Items for diesel fuel	Diesel oil mixed with BDF	Diesel oil mixed without BDF	Method
Fatty acid methyl ester	≤ 5.0 w%	≤ 0.1 w%	HPLC
Triglyceride	≤ 0.01 w%	≤ 0.01 w%	

Mightysil™ Si60 BDF - Specification

[Mightysil™ Si60 BDF](#) is a HPLC column for petroleum product test which separation performance was verified by methyl stearate (SA) and trilinolein (TL).

*Test chromatograms performed for each packing material batch are attached.

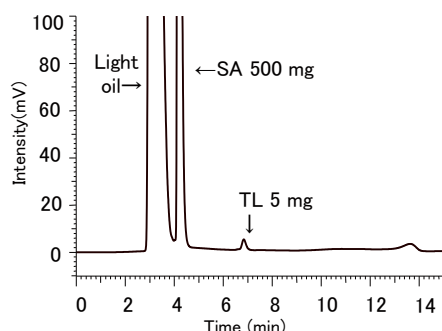


Parameter	Spec.
Retention time of methyl stearate. (min)	$3.5 \leq$
Degree of separation between methyl stearate and trilinolein.	$3 \leq$

Column : Mightysil Si60 BDF 250-4.6 (5 μ m)
 Eluent : 0.4 vol% 2-Propanol/Hexane solution (Cat.No.[32459-79](#))
 Flow rate : 1.0 mL/min
 Temp. : 40°C
 Detection : RI
 Inj. Vol. : 10 μ L
 Sample : Methyl stearate (SA) 5g/50mL
 Trilinolein (TL) 0.05g/50mL
 [Ref.] R_{tSA} : 4.25 min(≥ 3.50),
 R_s : 5.09(≥ 3.00)
 *Column standard values in brackets

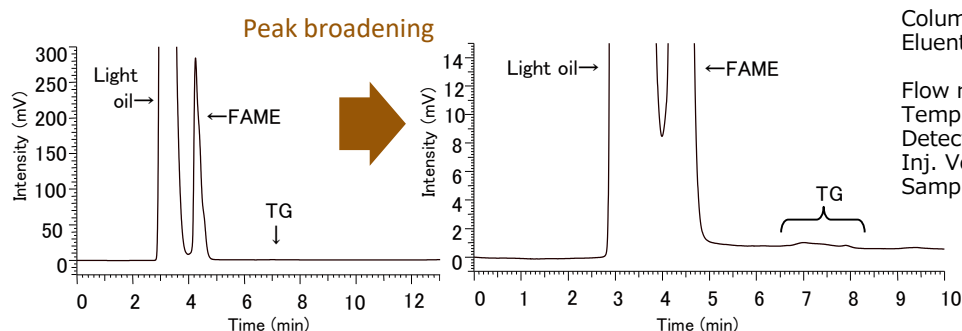
Application

Methyl stearate/Trilinolein standard stock solution (Cat.No.[25192-96](#))



Column : Mightysil Si60 BDF 250-4.6 (5 μ m)
 Eluent : 0.4 vol% 2-Propanol/Hexane solution (Cat.No.[32459-79](#))
 Flow rate : 1.0 mL/min
 Temp. : 40°C
 Detection : RI
 Inj. Vol. : 10 μ L
 Sample : Methyl stearate (SA)/Trilinolein (TL)
 Standard stock solution (Cat.No.[25192-96](#))

Sample of Light oil (Cat.No. [24107-08](#)) with BDF



Column : Mightysil Si60 BDF 250-4.6 (5 μ m)
 Eluent : 0.4 vol% 2-Propanol/Hexane solution (Cat.No.[32459-79](#))
 Flow rate : 1.0 mL/min
 Temp. : 40°C
 Detection : RI
 Inj. Vol. : 10 μ L
 Sample : Light oil added 5%BDF

Product List

Product Name	Note	Grade	Package	Cat. No.
Mightysil Si60 BDF 250-4.6 (5 μ m)	Length-InterD:250-4.6 mm (Particle:5 μ m)	for HPLC	1 pack	25555-96
Methyl stearate/Trilinolein standard stock solution Methyl stearate : 5 g/50 mL, Trilinolein : 0.05 g/50 mL	in diesel fuel	for petroleum products test	5 mL x 5	25192-96
Light oil (Diesel fuel)	for dilution (FAME, TG-free)	for petroleum products test	500 mL	24107-08
0.4vol% 2-Propanol/ <i>n</i> -Hexane solution	Eluent	for petroleum products test	1 L	32459-79
			3 L	32459-76

Others

Standard Methods of Analysis for Diesel Oil Identifiers Analysis of Coumarin

Product Name	Grade	Package	Cat. No.
Alcohol			
1-Butanol-ethanol mixed solution (1-Butanol/ethanol=4/3, for quantitative analysis, C.I.Solvent Yellow-free)	for petroleum products test	3 L	04460-76
Alkali			
Sodium hydroxide-sodium nitrate solution (NaOH : 10 g, NaNO ₃ : 20 g in 100 mL water)	for petroleum products test	3 L	38185-76

Methods for measuring oxidation products in volatile oils *[Ministerial order No. 158 Concerning the Ministry of Economy, Trade and Industry] (July, 2012)

Product Name	Grade	Package	Cat. No.
Reference solution for gasoline oxidation products index Benzyl alcohol, Methyl benzoate, Toluene, Xylene, Acetonitrile = 0.5:0.5:1.5:1.5:6.0(v/v)	for petroleum products test	5 mL(A) x 5	36002-96
Gasoline polar components solution in Acetonitrile Phenol 100ppm(w/v), m-Cresol 100ppm(v/v), o-Cresol 100ppm(v/v), 2,3-Xylenol 100ppm(w/v), Benzene 1000ppm(v/v)	for petroleum products test	5 mL(A) x 5	17007-96

※ (A): ampoul

Testing method of lubricating oil for aircraft (JIS K 2503 : 2010)

Product Name	Grade	Package	Cat. No.
0.5mol/L Hydrochloric acid (N/2)	for volumetric titration	500 mL	18593-08
0.1mol/L Hydrochloric acid (N/10)	for volumetric titration	500 mL	18595-08

Crude oil and petroleum products—Determination of sulfur content (JIS K 2541 : 2003)

Product Name	Grade	Package	Cat. No.
0.05mol/L Sodium hydroxide solution (N/20)	for volumetric titration	500 mL	37852-08
Potassium sulfate	Guaranteed reagent for JIS	500 g	32403-00
		100 g	32403-20
		25 g	32403-30

Others

Product Name	Grade	Package	Cat. No.
pH Buffer			
Phosphate equimolal pH standard solution, pH 6.86	for pH determination (JCSS)	500 mL	32799-08
Carbonate pH standard solution, pH 10.01		500 mL	32802-08
Phthalate pH standard solution, pH 4.01		500 mL	32798-08
Tetraborate pH standard solution, pH 9.18		500 mL	32801-08
Solvent			
Hexane	Guaranteed reagent for JIS	500 mL	18041-00
		3 L	18041-70
Ethanol (99.5)	Guaranteed reagent for JIS	500 mL	14033-00
		3 L	14033-70
Petroleum ether	Guaranteed reagent for JIS	500 mL	32065-00



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