

STANDARD DIESEL

Khushbu Petro-Chem R & D Centre Analysis of Petroleum Products & Lubricants

TEST REPORT							ORIGINAL
TO BIO-MARINE SOLUTION (NZ) LTD. P. O. BOX 15-996 AUCKLAND 0640			SAMPLE SUBMITTED BY PARTY AS Diesel & Diesel + New Formula Fuel Stick				
			TEST REPORT NO.: KPC/324/SEP/2008				
			DATE: 15 th September 2008				
SR. NO.	SPECIFICATIONS	TEST METHOD ASTM	UNITS	TEST RESULTS		STANDARD VALUE (DIESEL) BIS: 1460	
				Diesel	Diesel + New Formula Fuel Stick		
1.	KINEMATIC VISCOSITY AT 40°C	D445	cSt	2.32	2.86	2.0 - 7.5	
2.	ACIDITY, INORGANIC	D664	mgKOH/gm	NIL	NIL	NIL	
3.	ASH	D874	% by wt	NIL	NIL	0.02 MAX.	
4.	FLASH POINT COC	D93	°c	45	48	32 MIN.	
5.	WATER CONTENT	D2709	% by wt	NIL	NIL	0.05 MAX.	
6.	POUR POINT	D2500	°c	+6	+7	12 - 18	
7.	DENSITY AT 27°C	D1278	gm/cm ³	0.832	0.834	0.82-0.88	
8.	SEDIMENTS	D2709	mg/100ml	NIL	NIL	1.0 MAX.	
9.	TOTAL SULPHUR	D5864	% by mass	0.65	0.63	1.0 MAX.	
10.	CARBON RESIDUE, RAMSBOTTOM	D4530	%	0.16	0.17	0.20 MAX.	
11.	COPPER STRIP CORROSION TEST FOR 3 HRS AT 100°C	D130	---	<1a	<1a	1 MAX.	
12.	DISTILLATION, RECOVERY OF 85% AT °C	D1160	°c	332	334	350 MAX.	
13.	DISTILLATION, RECOVERY OF 90% AT °C	D1160	°c	354	355	366 MAX.	
14.	DISTILLATION, RECOVERY OF 95% AT °C	D1160	°c	379	382	370 MAX.	
15.	COLOUR INDEX	---	---	0.0	0.5	TO REPORT	
16.	CETEN NUMBER, DIESEL INDEX	D613	---	46	52	46 MIN.	
17.	ACIDITY, TOTAL	D664	mgKOH/gm	0.02	0.04	0.50 MAX.	
18.	GROSS CLORIFIC VALUE	D5865	Kcal/Kg	10350	10780	Abv. 10000	

INTERPRETATION / CONCLUSION:

The addition of New Formula Fuel Stick to Diesel Fuel increases Ceten Number upto 6 and Gross calorific value upto 430 Kcal/Kg.

FOR,
KHUSHBU PETRO-CHEM R & D CENTRE

[Signature]
AUTHORIZED SIGNATORY

THIS REPORT IS PREPARED IN GOOD FAITH UNDER STANDARD TEST CONDITIONS. THE REPORT OR PART THERE OF MUST NOT BE USED FOR ANY LEGAL MATTER. REGISTRATION NO.: 0401/32623

The Addition of FUEL STICK will:

RAISE THE FLASH POINT

REDUCE THE SULPHUR CONTENT

RAISE THE CETANE NUMBER

INCREASE THE CALORIFIC VALUE

This fuel will burn cleaner and achieve more complete combustion.

Increasing the cetane number and raising the calorific value will produce more power from the fuel.

A more complete burn = less emissions.

**BETTER COMBUSTION = MORE POWER
FROM THE SAME AMOUNT OF FUEL
OR
LESS FUEL FOR THE SAME AMOUNT OF POWER
YOU CHOOSE!**