

CERTIFICATE OF QUALITY No. 05. 089

Issued to: CATAQUIM, S.A.

Product: FASER ADDITIVE-FUEL CATALYZER

The undersigned, General Director of the Ministry for Economic Development and based on articles 76 and 77 of the Law of Metrology and Standardization, 35 of the Federal Law for Consumer Protection; 21 Fraction X of the Internal Regulations of the Ministry for Economic Development, published in the Federal Tax Laws on March 16, 1989; 4th Fraction X, clause b) of the Agreement signed on September 12, 1985 that assigns administrative units and delegates authority to the Undersecretaries, Comptroller, General Directors and other subordinates of the Ministry of Economic Development and the Second Transitory Article of the Agreement through which the Administrative Units of the Ministry for Economic Development are assigned, dated April 3, 1989, this authority

CERTIFIES

That in Central Testing Lab CM-12 of the Department of Military Industry of the Ministry for National Defense, the product named "Faser Additive"- fuel catalyst was subjected to several lab and field tests, as requested by Cataquim, S.A., with the following results:

I. LAB TESTS

a) The flash point according to norm ASTM D92-52 (oC)

FUEL	WITHOUT FASER	WITH FASER
DIESEL	64	62
DIAFANO	72	70
FUEL OIL	101.5	98

b) DENSITY (G/CM3) norm ASTM D287-39

FUEL	WITHOUT FASER	WITH FASER
GASOLINE	0.750	0.750
DIESEL	0.820	0.820
DIAFANO	0.820	0.820
COMBUSTIBLE	0.965	0.965

c) VISCOCITY (CPS) norm ASTM D88-44

FUEL	WITHOUT FASER	WITH FASER
GASOLINE	1.40	1.40
DIESEL	2.14	1.88
DIAFANO	2.11	2.11
FUEL OIL	858.70	813.70

d) CHEMICAL ANALYSIS norms D-129; D-811-41

QUALITATIVE (%)		QUANTITATIVE (%)	
CR-NEGATIVE	FE-TRACES	CR 0.000	FE 0.044
V-TRACES	NI-NEGATIVE	V 0.058	NI 0.000
MO-POSITIVE	S-POSITIVE	MO 0.187	S 0.870
W-TRACES		W TRACES	

e) CORROSION TESTS norm ASTM D-665

Plates of iron, steel, aluminum, copper and brass were placed in different fuels (gasoline, diesel, diafano and combustible) with and without FASER respectively for a period of 5 hours, finding no changes or traces of corrosion in any of the plates after that period of time.

f) SATURATION TEST

To find the saturation point, we obtained results on the flash point and viscosity, adding 1,2,3 and 4 tablets per liter to each of the fuels respectively in separate tests.

VISCOCITY (CPS)		FLASH POINT (oC)
Gasoline without FASER	1.40	NOTE: FLAMMABLE IN ALL CONCENTRATIONS
Gasoline 1 tablet	1.40	
Gasoline 2 tablets	1.40	
Gasoline 3 tablets	1.40	
Gasoline 4 tablets	1.40	
Diafano without FASER	2.11	72.0
Diafano 1 tablet	2.11	72.0
Diafano 2 tablets	2.11	72.0
Diafano 3 tablets	2.11	70.0
Diafano 4 tablets	1.88	70.0

Diesel without FASER	2.14	64.0
Diesel 1 tablet	1.88	62.0
Diesel 2 tablets	1.88	62.0
Diesel 3 tablets	1.88	62.0
Diesel 4 tablets	1.88	62.0

Fuel Oil without FASER	858.70	101.5
Fuel Oil 1 tablet	813.70	98.0
Fuel Oil 2 tablets	794.80	98.0
Fuel Oil 3 tablets	784.60	90.0
Fuel Oil 4 tablets	651.20	90.0

Recommended usage as per the above-mentioned results:

GASOLINE	4 TABLETS (12.2356 gms) for every 100 liters
DIAFANO	4.5 TABLETS (15.0365 gms) for every 100 liters
FUEL OIL	3 TABLETS (8.4267 gms) for every 100 liters
DIESEL	3 TABLETS (8.4267 gms) for every 100 liters

II FIELD TESTS

- a) YIELD IN AN INTERNAL COMBUSTION ENGINE WITH ADEQUATE CARBURATION; TYPE OF VEHICLE- JEEP RAMBLER, 83 MODEL, 4 CYLINDER, RECENTLY TUNED.

Fuel	Liters	Distance Traveled	Km/L	Approx Yield (%)
Gasoline without FASER	35	150.5 km	4.30	-----
Gasoline with FASER (1 tablet)	35	160.3 km	4.58	6.50
Gasoline with FASER (2 tablets)	35	178.5 km	5.10	18.60

The results displayed above show a savings of 18.60% with the use of the FASER product.

- b) PERFORMANCE IN A BOILER, FORGE FURNACE AND REHEATING FURNACE USING DIESEL

BOILER HOURS/WORK	WITHOUT FASER	WITH FASER	AMOUNT USED
Consump/hour	20 hours 65 liters/hour	20 hours 52 liters/hour	2 tablets/65 lts

Total consumption	1,300 liters	1,040 liters	
FORGE FURNACE	WITHOUT FASER	WITH FASER	AMOUNT USED
HOURS/WORK	20 hours	20 hours	
Consump/hour	210 liters/hour	175 liters/hour	6 tablets/210 lts
Total consumption	4,200 liters	3,500 liters	

REHEATING FUR.	WITHOUT FASER	WITH FASER	AMOUNT USED
HOURS/WORK	20 hours	20 hours	
Consump/hour	135 liters/hour	111 liters/hour	4 tablets/135 lts
Total consumption	2,700 liters	2,220 liters	

TOTAL FUEL OIL USED

8,200	6,760
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COMBUSTIBLE SAVINGS:

BOILER:

Consumption without FASER	65 liters/hour	
Consumption with FASER	52 liters/hour	SAVINGS: 20%

FORGE FURNACE

Consumption without FASER	210 liters/hour	
Consumption with FASER	175 liters/hour	SAVINGS: 20%

REHEATING FURNACE

Consumption without FASER	135 liters/hour	
Consumption with FASER	111 liters/hour	SAVINGS: 21%

Average savings in combustible: 22.20%

General working conditions: Atmospheric pressure: 586 MM HG

Temperature: 25o centigrades

CONCLUSIONS:

1. The additive FASER is made of aromatic and aliphatic derivatives of petroleum, which easily dissolved in the different combustibles tested (gasoline, diesel, diafano, fuel oil), improving their combustion, increasing their efficiency and reducing consumption.

2. The organic components of this additive caused no problems within the combustion chamber.
3. The use of the additive in gasoline and diesel increases the production of carbon dioxide (complete combustion) and reduces the production of carbon monoxide (incomplete combustion), thereby reducing pollution by carbon monoxide.
4. The color of the additive does not affect the coloring of the combustibles tested.
5. The presence of molybdenum in the additive may be useful since it contains lubricating properties.

SIGNATURES

	Without FASER	With FASER
Viscosity S.F. at 50oC	97.4	97.1
Carbon residues % in weight.....	4.864	2.122
Sediments % in weight.....	0.015	0.006
Caloric Power BTU/lb.....	14783.57	15126.98