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Laboratory and engine testing of your products

"Engine Flush" and "Oil Booster"

1. "Engine Flush"

A closed tin of "Engine Flush" was submitted to us for testing. It is claimed that the product contains a powerful anti-friction additive for protection of the engine during flushing operation.

The "Engine Flush" was used according to the printed instructions: added to the oil due to be changed, the engine then being run at idling speed for 10', and the oil drained. The results of friction tests, and on the used oil before and after flushing, are given in Tables I and II and enclosures.

1.1. The friction test was carried out on a friction testing machine, operating on the principle of "Timken".

A neutral oil (ISO 46) was compared with the same oil containing 10% of the "Engine Flush". Test No.2, Table I, confirms the excellent anti-friction properties of the product, when compared to test No.1, same Table I.

We wish to point out, that this anti-friction property is important: when flushing an engine, a low viscosity product is used, which could otherwise cause some engine wear.

1.2. The cleansing efficiency of "Engine Flush".

The following analyses were carried out in order to ascertain the cleansing capability of the product. (see Table II).

The oil drained from the engine after flushing, contained 2.55% of deposits (sludge) instead of the original 1.66%. These figures attest to the cleaning effect of the product.

1.3. The spectrometric analysis of the oil, before and after flushing, shows no increase in wear metals: the cleaning operation went on very smoothly, without any side-effects on the engine. (see Table III, samples Nos. 5382 and 5383)

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1.4. The chemical built-up of the "Engine Flush" has not been investigated. The spectro-chemical analysis in Table III (No. 5380) shows the product to be an uncontaminated chemical compound.

2. The "Oil Booster"

A dissolution of the product at 5% in a neutral oil (ISO 46) was prepared, and submitted to some tests.

2.1. The spectro-chemical analysis (See Table III, sample 5381)
The product contains the regular engine-oil additives (Zn and P), besides others which are not included in above analysis.

2.2. Friction test.

The anti-friction property of the product is shown in Table I (No.3) as compared to the neutral oil. It gives a wear loss of 0.2mg. (in a 5% mixture with Neutral Oil) instead of the 18.8mg., obtained for the Neutral Oil alone. This result is very good.

2.3. Engine test.

The engine which has undergone the flushing operation, has been filled with an engine oil CD/SF, which was analysed (see Table IV - No.5385), and a tin of 375ml "Oil Booster" was added to the 4L engine oil.

It is intended to take a sample every 2000Km, in order to get information on the operation of the product.

Dr. E. Guinat

