

JAMA's Comment to the DEH of Australia on BDF

< Diesel Oil with 5% FAME (B5) >

- * The prerequisite for the introduction of FAME-mixed diesel oil is to test its effects on vehicles so as to verify that the FAME-mixed diesel oil does not cause problems with regard to the safety, emission and running performances of vehicles.
- * Japan conducted tests on B5 but has not carried out any systematic studies on BDF with FAME content exceeding 5%. Under this circumstance, we considered B5 to be the highest recommendable biological fuel at present.
- * Nevertheless, even B5 is not totally problem-free, as Japan's test data show some cases of vehicle malfunctions attributable to B5 quality deterioration caused by oxidation. To prevent such deterioration, Japan has established a standard for the chemical properties of B5. When a B5 fuel is to be introduced into the Australian market, JAMA hopes that the B5 will be in agreement with Japan's amended diesel standard which includes the new B5 standard.
- * Although a neat FAME (B100) standard is essential for the production of FAME, a B100 standard alone will not be able to ensure the quality of B5 at the service station level. A B5 standard (such as Japan's amended diesel standard) is imperative to prevent B5 quality deteriorations which may occur during the distribution process from the mixing of diesel oil with neat FAME to the storing of B5 at service stations. Additionally, there should be a monitoring scheme to check if the B5 fuels at the service stations are conforming to the B5 standard. As Japan's regulation makes the B5 standard and monitoring mandatory, the neat FAME standard is left as a voluntary standard within the JASO/JIS framework.
- * While Australia is reportedly considering a BDF standard which will exempt density specification, we would like to advise not to exempt any items of BDF properties including density. For example, if a density specification is exempted, there will be the risks that an excessive-density BDF may be supplied by mixing FAME into a diesel oil measuring at the upper limit of diesel density. As similar risks are valid for other items of BDF properties, we are opposed to the exemption of any item.

< Diesel Oil with More Than 5% FAME (B5) >

- * With a lack of test data on BDF exceeding 5% FAME, we believe that B10, B20, etc. should be treated as substitute fuels to be used only by certain qualified users under certain controlled conditions.
- * In view of Japan's mandatory B5 standard, the draft B20 specifications shown by DEH do not include all the necessary items of properties. Consequently we cannot have any assurance that the draft specifications will make B20 problem-free.
- * Although Japan lacks test data on the properties of BDF exceeding 5% FAME, it is imperative to test and verify each property item of B10, B20, etc. in order to ensure that the use of BDF with a higher FAME content will not cause vehicle malfunctions.

< Labeling >

- * When an appropriate B5 standard is established, the B5 fuels complying with the standard can be regarded as identical with the existing diesel oil. Accordingly there will be no need to introducing a labeling for B5.
- * In the case of BDF exceeding 5% FAME, however, they cannot be treated as identical with the conventional diesel oil. A labeling is therefore necessary to prevent misfueling.