

often be observed by measuring the dissolved oxygen content. If it is low because of the effect of a heavy sewage load, neither BAS nor LAS will degrade. Therefore, in this quadrant, BAS is still acceptable for use because the sewage itself is the overriding pollution problem.

Only in the upper right quadrant, where the sewage is receiving adequate treatment, is LAS needed. This quadrant corresponds to the situation in parts of the United States, Europe, and Japan.

Despite the logic of Figure 3, some developing countries have required the use of LAS simply because the industrialized countries require it. The more intelligent approach has been to study the local situation to see if any serious problem exists with the use of BAS and to decide whether switching from BAS to LAS would produce any observable benefit. For example, studies have been made in Indonesia, India, Malaysia, Mexico, the Philippines, and Thailand (37-39). In many countries, the conclusion was to continue BAS use. Apparently, BAS has cost and/or property advantages over LAS.

There is a corollary to the finding that it is appropriate to use BAS in many countries. If, in the future, the situation in a given country moves toward the upper right quadrant of Figure 3, that country could decide that the level of biodegradability required for the ABS does not need to equal that for countries which are well into the quadrant. That is to say, they could opt for a BAS/LAS mixture or for some other ABS product not quite equal to LAS in biodegradability.

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ERRATUM

In the article, "Synergistic Stabilization of Perfluorocarbon-Pluronic F-68 Emulsion by Perfluoroalkylated Polyhydroxylated Surfactants," which appeared in the October 1989 issue of *JAOCs* (pp. 1515-1523) the trademark appeared without the accompanying company identification of "a product of BSAF, Wyandotte, Michigan."