The USDOC expects industry shipments of surfactants to increase 8% in 1989 over 1988 levels (measured in constant 1982 dollars). Exports are predicted to grow 24% above the 1988 level to $310 million (U.S.). The growth in surfactants will be due to the increased demand for heavy-duty liquid detergents. Growth in the specialty surfactant area will be due to the increased demand for fibre surfactants which are used to improve the quality of fibre and speed production. These surfactants act as emulsifiers, lubricants, softeners and antistatics.

The USDOC expects that the value of shipments of surfactants will increase at an annual rate of 8% through 1993 after adjustments for price changes. U.S. production is expected to reach 10 billion pounds annually by 1994. Environmental concerns and government regulations will affect the future use of surfactants for consumer products. Linear alkylbenzene sulfonates (LAS) are expected to increase in volume, on average, exceeding 3% per year through 1993. This growth will be due to the use of LAS in a wider variety of detergents, particularly those in which phosphates are restricted or excluded. The specialty surfactants market is expected to grow to 4.2 billion pounds through 1993 at a growth rate of 10% a year. The USDOC notes that future research will seek to perfect polymer surfactants that thicken as well as clean, surfactants with good biodegradability and enzymes that complement surfactants.

Pesticides

Pesticides are classified as herbicides (including plant-growth regulators), insecticides (including rodenticides, soil conditioners, and fumigants), and fungicides. Herbicides accounted for 61% of total sales in 1987, with insecticides and fungicides accounting for 30% and 9%, respectively.

The USDOC notes that pesticide demand in the United States dropped between 7 and 8% due to a corresponding reduction in planting of major crops. Between 1987-1988, the value of industry shipments fell 2.2% to $5.24 billion (U.S).

The USDOC notes that three obstacles hinder growth in the U.S. pesticide industry. These factors are: the increasing cost of R&D, environmental regulation and the abuse of intellectual property rights. The expense of conducting toxicity tests in compliance with environmental regulations, for example and the increasing difficulty of finding new products have boosted average R&D costs for a single new pesticide to more than eight times the average cost in 1976.