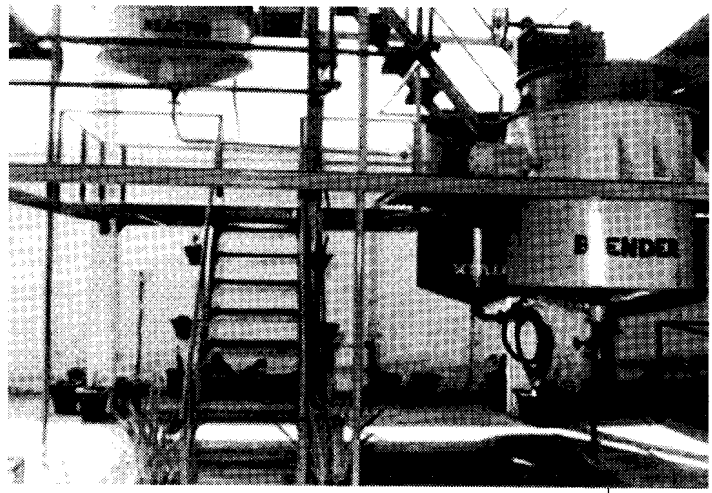
LAB - Kerosene Situation worsening in India

Dr B Patel



Linear Alkyl Benzene (LAB) is widely used as a surfactant globally and a huge growth potential awaits LAB manufacturers world wide.

The article briefs the readers on the Indian manufacturing scenario for LAB against the backdrop of the pricing mechanism for the two key raw materials: benzene and normal paraffin. Anomalies in domestic pricing due to government controls on kerosene and absence of level playing field between public sector and private companies put the Indian LAB manufacturers at a disadvantage. This adds to an already difficult situation due to competitively priced LAB coming from the Gulf. Even in China, Europe and USA, kerosene is not priced or controlled as in India.

The author suggests remedial measures too, provided, ofcourse, the powers that be are prepared to heed such suggestions.

One cannot imagine life without surfactants. The Indian surfactant market has almost doubled in the last decade. Just one chemical entity – Linear Alkyl Benzene (LAB) dominates the surfactant scenario world wide. Apart from the household detergents and liquid cleaners LAB derivatives, primarily the sulphonate (LABSA) as sodium salt, is used for many industrial cleaning and specialty formulations. However, the one single application that determines the viability of the growth and sustainability of LAB production is in the fabric wash / home wash segment. Detergents simply cannot be conceived of without LAB. Its sheer properties, cost and current technology status have not shown any vulnerability of replacement. There have been overtures threatening the mass usage of this chemical from environmentalists and producers of alternatives – Alpha Olefins Sulphonates, Methyl Esters to name a few moieties. The sturdy economics of LAB production has braved all storms worldwide and is perched on a pedestal unchallenged for a long time and will continue to do so. The argument, that internationally the LAB growth has been feeble or static in developed countries is no longer an argument, as this growth is in sync with the general growth of economy, considering a very high level of hygiene in the first place. A small replacement of LAB in the high end segment may appear to dent the growth of the workhorse. The demand for LAB as

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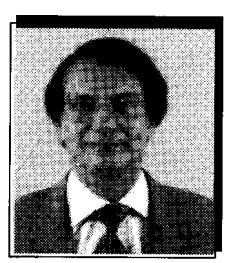

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suphonate (Linear Alkyl Benzene Sulphonate), in North America fell in the 2000-2005 period but that may not have much to do with the sensitivity of the price of LAB used for detergents. It is probably due to static consumption levels and marginal substitutability in the high end of detergent formulation. Besides, the LABSA load in a typical formulation has almost peaked spearheaded also by substantial enzymes usage in the detergent formulations. Having considered that, the consumption in developing regions including Asia, South America and other growing economies is pegged at 2 to 3% annually over the years. The scenario in China, Indonesia, Philippines and of course India is better. Indian growth itself for the last few years has been an enviable 5 % and above p.a.

The domestic kerosene market is government subsidized business also controlled by the Solvents Act of 2000. Currently, the use of kerosene as industrial fuel has poor commercial viability currently.

This growth should ordinarily continue in the foreseeable future, but for the current situation which is Pathetic to say the least, with serious threats looming large.

Analyse this !

We have in our country, five plants by four LAB players with total manufacturing capability of about half a million tonnes of LAB p.a. Indian Oil Corporation Ltd., is the only one in the public sector.

Manufacturer	Capacity	NP/Kerosene Source
RIL : Baroda+Patalganga	180 KTA	Outsourced
Nirma :Baroda	75 KTA	Outsourced
TPL, Chennai	120 KTA	Outsourced
IOC, Baroda	120 KTA	Own PDS Kerosene

Are we self reliant in LAB or not ?. **Yes**, we are capable of meeting the demand in the country and are even equipped to earn forex by export of surplus. And **No,** because the economies are in a Pathetic but pragmatically correctible situation. The Import Parity Price concept is a laudable one, but alas does not seem to apply to LAB situation since it is not a simple one stage proposition. **And why** ? The law makers apparently have many other pressing issues to solve giving this one a pass, at least for now. As Aldous Huxley said, "...corrective action will soon follow" the industry is helplessly waiting to elicit a response from *the powers that be*, to use the cliché. Instead of the conducive environment to foster well deserved export, the country is faced with indecision leading to its reeling under a reverberation of high cost of detergent input *vis a vis* global players. The damage does not stop here, the country has already "suffered" the imports of LAB of the order of about half a lac tonnes already. And if things go uncorrected, the Persian gulf LAB players will soon be reveling on Indian turf at our detriment.

Fabric and dish wash products in India total more than three and half million tonnes, leaving about three and quarter million tonnes of synthetic detergents. About 3,45,000 T of surfactants would be used, primarily LAB based, since AOS's ingress is limited to about 24,000 T. Other surfactants / actives such as fatty alcohols derivatives (primarily sulphates, ethoxy sulphates and ethoxylates) are too miniscule in this application to warrant further consideration.

Clearly then more than 120,000 tonnes of LAB will be available as a supply over load. Add to this figure the imports of say 60,000 t and we will have 180,000 t surplus in a production capability of 460,000 t. Nearly 40% surplus situation is not a sustainable position. LAB is a reaction product of benzene and normal paraffin. The price of benzene is governed by international oil prices and petrochem demand based pricing. So much for the level playing field ! that leaves handling the normal paraffin (NP) situation squarely. NP is about 20% constituent of kerosene. The catch is that the manufacturers, except IOCL, the PDS kerosene distributor, end up buying kerosene from the PDS system process it to take up 20% NP and return the balance 80% stream back to the PSU sellers (IOCL - which is incidentally an interested party by virtue of possessing LAB manufacturing facility as well as BPCL). On level playing field all will be fine. There is an additional burden of the wasteful cost of the transportation from and to remote PDS suppliers. And, who will plug this national wastage is the moot question.

Defining the problem

In a globally flat business situation it is imperative

Prices in US$ /t as in Dec 2007	In the A.Gulf	In India	Difference
Benzene	1,050	1,050	-
Kerosene	911	1,054	143
Specific Consumption	1,075	1,190	115
Conversion Charges	180	240	60
Variable Cost	1,255	1,430	175
Fixed Cost	100	100	-
Total VC + FC	1,355	1,530	**175**

to iron out the cost differences for a level play. Interesting study reveals the undue disadvantage of the Indian manufacturers compared with those in the Gulf. The situation in the EU or even in China is much the same. Can we continue to bear the brunt any longer? The manufacturers abroad have a clear advantage over the Indian counterparts. The table shows the picture more succinctly.

The cost anomaly is accentuated by unique Indian situation which has the following aspects to be addressed:

1. The Domestic kerosene market is Government subsidized business also controlled by the Solvents Act of 2000. Currently, the use of Kerosene as Industrial Fuel has poor commercial viability currently.
2. ATF (from kerosene) can be sold only by refineries to airlines.
3. The price paid by the LAB manufacturers to the PSU kerosene suppliers is anywhere between 8 and 12 % higher than the landed price of kerosene.
4. In China, the price of kerosene is at a discount over the Jet fuel prices. In fact, the price of kerosene has reportedly remained stable over the last 9 months, to the Chinese LAB manufacturers. It is also learnt from the Chinese trade sources that there is a substantial "subsidy" in the kerosene price to the Chinese LAB manufacturer.
5. In comparison to this, the LAB manufacturers in Middle East have the advantage of sourcing kerosene at FOB Arabian Gulf price.
6. The LAB manufacturers in Europe and US also have similar advantage in kerosene pricing.

Month	RIL PG Equi US$ Basic Price Rs PMT	Price to Chinese LAB Mfr	Difference	%
Mar-07	684	638	46	7
Apr-07	737	661	76	10
May-07	804	662	142	18
Jun-07	788	673	115	15
Jul-07	810	673	137	17
Aug-07	830	675	155	19
Sep-07	820	679	141	17
Oct-07	872	701	171	20

If the situation continues to seep in the current format then in near term many small and medium scale syndet manufacturers will face survival challenges. The doors to imports for them will open only through large parcel formation by the traders. However there will be little respite against the large multinational manufacturers' import price advantage. If the SME's ease out then the loss of employment in this sector will be looming large. Currently, exports are about 100 KTA of LAB valued at nearly 140 Million USD, which will be lost. Furthermore, import of LAB by major players (HUL, Nirma, Henkel, Procter and Gamble etc.) would entail a forex burden of a few hundred million USD for every year of delay in rectification of the dire situation.

Solution

Clearly there is a possibility of a pragmatic solution to this unhealthy state of affairs.

The domestic LAB industry could be assured Kerosene at international price parity basis. It is also logical to enable the LAB manufacturers to return the NP removed kerosene, to the nearest refinery, Or better still in a free economy environment the LAB manufacturers could be allowed to sell kerosene within the ambit of the Solvents Order.

Alternatively the import of kerosene could be allowed. Any excess over the actual consumption could be sold to the PSUs to augment PDS kerosene supply. Most complex problems have reasonable simple solutions. But ..... do we have the WILL ?

Infonuggets

China is now ranked as the No.1 producer, exporter and consumer of dyestuff products. In 2007 China's production of dyestuffs and organic pigments totalled 953,200 tonnes, an increase of 8.1% compared to the previous year.