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NPC Expands Capacity For its PCB's Substitute

Nippon Petrochemicals Company (NPC) has expanded production capacity for its polychlorinated biphenyls (PCB) substitute "Nisseki Hisol SAS," which was developed and introduced by the company in 1971.

The capacity is now 5,000 tons a year and further increases are feasible, depending on the demand, which has increased annually. The product is now reportedly selling at a rate of 3,000 tons a year.

"Nisseki Hisol SAS" was developed and commercialized solely by NPC's own technology. This is also true of the plant engineering for this reportedly unique PCB substitute. The product uses other NPC products as raw materials and is produced through compounding.

"It is absolutely free of substances thought to be harmful to the human body, such as chlorine, sulfur, and heavy metals – both in its raw materials form and during the manufacturing process," the company states.

SAFETY CLAIMS

"Hisol SAS" is a high boiling aromatic hydrocarbon, consisting solely of diaryl alkane and triaryl alkane, and is physically and chemically stable. It is also colorless and odorless. The product is available in three grades – low-viscosity "SAS-295" and "SAS-296"; and high-viscosity "SAS-LH".

Testing with animals is said to have shown that – unlike PCB, which is bioaccumulative – due to the body's inability to metabolize chlorinated aromatics – "Hisol SAS" is quickly metabolized and is completely non-accumulative. "It also has good biodegradability, which means that it rarely becomes an environment-polluting substance, even when – for example – it is discharged into a river," the company claims.

"The chemical structure of this PCB-substitute provides excellent solubility, compatibility and resistance to heat, and weather resistance. The absence of ester bonds means superior resistance to water, alkalis, and acids," it adds.

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