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R2-million injection streamlines factory

PLASTICISER product and food acidulant manufacturer Isegen is in the process of upgrading its phthalic anhydride (PA) plant, with a R2-million injection aimed at streamlining the plant's production. Isegen director **Mark Holtes** says a third switch condenser was installed late last year, and a new, locally manufactured gas cooler will be installed in July.

"Both these pieces of equipment will help to improve efficiency and reduce losses in the manufacturing process," says Holtes. He adds that for the next two years the company will focus on the upgrading of the PA plant.

"The first phase, which will be completed this year, involves upgrading the software and the automatisation of the dosing system, for catalyst and process chemicals. In addition, the process is being modified, which will reduce effluent and improve the quality of the phthalates." Holtes added that 2008 will see the upgrading of the reaction process, by the replacement of the field instrumentation.

Phthalates are used as a plasticiser in the plastics industry to soften plastic used for the manufacture of electric cables, gumboots, tarpaulins, motor cars, toys, hose pipes, floor tiles, conveyor belts, and adhesives.

More than 2 000 t/m is produced at the Isegen factory. Naphthalene and orthoxylene are used as raw materials for PA. Naphthalene is sourced locally and the orthoxylene is imported. Specialised alcohols are imported and sourced locally, which are reacted with PA to produce the various phthalates that are produced.

"With the growing South African economy, especially the motor vehicle manufacturing and the building construction industry preparing for the 2010 soccer World Cup, demand for these products is escalating and we had to streamline our plant to meet local and growing export demand," says Holtes. Products are being exported to Zimbabwe, the Middle East, the US, and South America.

The plasticiser is supplied to, besides others, all the cable manufacturing companies in South Africa. One of the larger end-users is Aberdare Cables. "We use some 3 000 t/y of phthalate plasticiser to produce a wide range of electrical cables. These vary from house wire used to electrify homes to flame-retardant multicore cables used in factories and electrical substations," says Aberdare Cables compound technologist **Denise Venter.**

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