

Hazardous progress for La Mesta

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La Mesta Chimie Fine, a subsidiary of the AET Group, had two recent developments to publicise at CPhI Worldwide 2009 in Madrid, neither of which had been widely known beforehand. It has begun *in situ* custom phosgenation using its own continuous flow reactor and has also formed a commercial joint venture alliance in hazardous chemistry with Valsynthèse of Switzerland called Valmesta.

According to business development manager Véronique Rossilhol, who spoke to *SCM* in Madrid, the new phosgene generation service started in July and is applied using the Raptor, the continuous flow reactor that the AET Group has developed. To date, three internal products have been made using it, all at laboratory scale for proof-of-concept purposes.

Whilst phosgenation is always in demand, companies are reluctant to invest in it, because of the cost of containing this notoriously dirty reaction. With the Raptor, La Mesta claims, phosgene can be generated in a completely safe and isolated way and need not be stored or accumulated. The use of continuous flow also means that reactions are intensified and there is improved productivity and selectivity.

The first system can generate about 4 kg/hour, equivalent to some 20 tonnes/year; the typical phosgenated product campaign is anything from several kilos to tens of tonnes. The lab- and pilot-scale systems at the La Mesta site in Gilette near Nice are integrated, so scale-up is not an issue, Rossilhol said. In the coming months, reactions with carbonyl chlorides, chloroformates, acid chlorides, carba-



Pilot (left) & industrial-scale (right) versions of the Raptor

mates, isocyanates and urea and the Vilsmeier reaction will all be tested at small scale with a view to larger-scale production as the company's experience grows.

Valmesta, meanwhile, will seek to combine Valsynthèse's expertise in hazardous chemistry with the technical know-how of the AET Group, particularly in custom synthesis using azide chemistry and other hazardous reactions, intermediates and APIs for

generics and building blocks and APIs for tetrazoles and sartans.

Their combined capabilities include development laboratories, pilot plants and a 50 m³ multi-purpose cGMP plant for work-up, plus assistance in generic dossiers and DMF submission. Valsynthèse, a subsidiary of the explosives firm Société Suisse des Explosifs (SSE), is also looking to build a 4 m³ batch reactor dedicated to this work.