

## Plasticiser-free sealing compounds for metal lids and caps

The first lids with Provalin 1241, the PVC- and plasticiser-free TPE compound for metal lids and caps, are being launched on the market. Provalin was unveiled already at Interpack 08, thus marking completion of an important step toward complying with EU regulations on the one hand and, on the other hand, meeting food manufacturers' anticipated need for legally compliant and product-specific, secure closure variants.

Nevertheless, wide use of this new type of sealant required a functioning machine technology. To this end, Actega DS cooperated with closure manufacturers in an accelerated program to develop innovative process technology in order to get the technology and products ready to market.

The development of PVC-free compounds for lug-type twist closures and the corresponding production processes took place before the background of the 4th Amendment 2007/19/ EC of the Plastics Directive 2002/72/EC, which no longer permits the use of some phthalates as plasticisers in PVC-based seals of closures that come into contact with food. This marked an end to the exceptions with which EU and national authorities made allowances for the industry's difficulties in finding solutions to the migration problems. Accordingly, manufacturers of metal lug closures, food producers, bottlers and retailers are under a great deal of pressure to bring products to market that are environmentally friendly, user-friendly and, above all, comply with statutory regulations.

This TPE is free of plasticisers and PVC and is useable with a wide range of lug-type twist caps (from 38 to 82 mm in diameter). Besides those properties that are indispensable in a sealant – good processability, pasturability, compliance with the law – this new PVC-free compound ensures compliance with the valid migration thresholds even for oily foods with longer shelf-lives (e.g., antipasti). This was confirmed \* in multiple individual tests. Thus vacuum twist seals with sealant compounds by Actega DS are the preferred solution for low-migration food storage and help food industry customers keep their products from becoming entangled in the problems associated with unhealthy packaging. Moreover, the new product also addressed the need to maintain a reliable vacuum until the closure is first opened and user-friendly resealability.

Actega DS belongs to the Actega Coatings & Sealants Division of Altana AG and is a worldwide supplier of sealing compounds for plastic and metal closures. Together with its affiliated companies, it covers the entire range of products for finishing metal packaging, sealing compounds, varnishes and sealants for cans.

*\* Institut Nehring, test report excerpt of 30 April 2009: "Under test conditions, no harmful global migration was detected. On the basis of the investigations of the sealing compound, there are no indications that harmful components of the sealing compound can leach into the food in question. Thus the sealing compound complies with the requirements pursuant to Art. 3 Regulation (EC) No. 1935/2004, Art. 30 and 31 para. 1 Foodstuffs and Animal Feed Code and 21 CFR 177.1210 of the US FDA Regulations."*

*In this connection it was also confirmed by Fabes-Forschungs-GmbH, Munich, which has wide-ranging expertise in the area of baby food, that Provalin 1231 and 1241 do not contain any substances that are mentioned on the blacklist of a leading manufacturer of baby food.*

*Furthermore, Provalin 1241 was investigated by the supervisory authority of Baden-Württemberg, the Chemical and Veterinary Investigation Office (CVUA), and was found to be absolutely safe according to food laws, especially with regard to compliance with migration thresholds.*

### Adresse:

<http://www.gupta-verlag.com/general/news/technology/8076/plasticiser-free-sealing-compounds-for-metal-lids-and-caps>