TECHNICAL AOK™ BULLETIN

AOK Manufacturing Materials

Duralon™ – A Combination of PVC and Safe Plasticisers

AOK air filled products are made from Duralon™ and do not contain BPA and Phthalates. It is classiofied as non toxic via skin contact or injestion, although eating our products is not recommended. We use natural lemon and citronella oil to give our products a fresh non chemical odour. This may give a strong odour when first used in confined spaces. Simply leave the products in a warm well ventilated room for a couple of days and the scent will diminish quickly.

We can't give you the exact names of our product constituents as they are a trade secret.

Our ball products are manufactured in Australia and not sourced from Asia.

As you are aware BPA (bisphenol A) and Phthalates, are a group chemicals used in the manufacture of flexible/ elastic PVC products such as Swiss Balls, toy balls and clear plastic tubing (such as used in medical devices). Phthalates are a group of colourless, odourless liquids which have very low volatility, are fat soluble, and do not readily dissolve in water. Typically, a flexible PVC product will contain between 30% and 50% phthalate and varying amounts of BPA. Over recent years there has been growing concern about the health implications of injesting Phthalates and more recently about proximal contact with products containing BPA and/or Phthalates.

The Australian Government and the European Union have legislated to limit the amount of the single most common Phthalate (DEHP) in any product to 10%.

Since 2009 AOK products, have used only ISO accredited materials, which after rigorous testing and product development are now classed as BPA and Phthalate Free. Independent tests for BPA and the 7 most key Phthalates (including DEHP) show that our product to contain less than 0.1% in total - In fact they could not be detected at all in most tests.

This keeps AOK well and truly ahead of the European requirements and of the Australian requirement of a limit of only 10% DEHP. It also complies completely with the strictest piece of legislation in the world - the California Proposition 65 (which has banned over 550 chemicals).

Here are some additional links for your information.

California	http://www.prop65news.com/pubs/brochure/madesimple.html
Safety	http://www.ourstolenfuture.org/newscience/oncompounds/phthalates/phthalates.htm
Europe	http://www.phthalates.com/
Safety	http://www.chemicalbodyburden.org/cs_phthalate.htm
Aus Govt	http://www.environment.gov.au/atmosphere/airquality/publications/sok/phthalates.html
DEHP	http://www.wcaslab.com/tech/dehp.htm

Some History of PVC

PVC (which is also known as PVC or polyvinyl chloride) is an exceptionally versatile material because its properties can be modified so easily using additives. The additives which make PVC soft and flexible are called plasticisers. Plasticisers have been used from the beginning of civilisation when water was used to plasticise clay to make pottery. Today plasticisers are used in many products, including PVC.

A number of different materials can plasticise PVC. Members of the phthalate family have been used since the 1930s. One phthalate in particular, diethylhexyl phthalate (DEHP) was the plasticiser of choice in many applications. Soft PVC products for building, automotive, medical and packaging applications still commonly contain phthalates. Phthalates have been carefully researched for their impact on the environment and health. This has led to risk reduction policy in many jurisdictions where it has been decided to eliminate these chemicals in manufacturing.