



PRESS RELEASE - EuPR

LIMITED APPROVAL TO USE MITSUBISHI GAS CHEMICAL'S NYLON MXD6 IN MULTILAYER CONTAINERS WITH NO TIE LAYER OR ADHESIVE FOR BOTTLE TO BOTTLE APPLICATIONS UP TO A MAXIMUM OF 2% OF THE COLLECTED BOTTLE STREAM

Brussels, 4th November 2008

Mitsubishi Gas Chemical is a producer of Nylon MXD-6, a barrier material used in packaging applications.

A thin layer of MXD6 is used as the middle layer of a 3-layer construction with no adhesive tie layers to reduce the gas permeability of the PET bottles. Bottles using this construction have been tested using the Petcore bottle to bottle protocol¹. For the test clear, 3-layer, co-injected bottles were used containing approximately 5% of Nylon MXD6.

The PET Working group of EuPR has received the results of the PETcore Protocol and was able to discuss this with the Mitsubishi Gas Chemical. In determining the threshold for the use of this barrier material in a sustainable recycling environment, The PET Working group stipulated that the **required conditions for Limited use** are:

- (a) the preform must be injected so that the **MXD6 layer is only in the bottle wall at a maximum of 5%**;
- (b) the container must be **3 layer** multi-layer with **no tie layers**;
- (c) concentration of **maximum 2%** of these bottles in the **collected stream**.
- (d) there must be good **air elutriation** during the **recycle process**.

The PET Working group, whose mission is to determine the impact of new PET containers and additives on the quality and the sustainability of the recovered PET flake for recycling, has come to the conclusion (taking into consideration local accumulation effects) that Mitsubishi's Nylon MXD6 in multi-layer bottles with no adhesive tie layers will have **no negative impact** on current European PET recycling **if its quantity is limited at levels of up to 2% of the bottle stream** (valid for all kind of bottles in the market inclusive coloured bottles).

The working group recognises the need for innovation. It is also recognised, however, that the introduction of barrier systems is cumulative in the recycle stream. In the event that the introduction of a specific new barrier system or too great a concentration of older barrier materials has an adverse affect on the quality of the resulting RPET (eg colour/haze), the working group reserves the right to re-test and re-evaluate its position with regard to technology approval.

EuPR and its PET working group consists of specialists operating both in the PET Recycling and are working for channelling the industry towards a sustainable PET recycling market. It therefore needs to take position in the field of packaging development and waste management.

¹ June 2006