U.S. PHARMACOPEIA

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Carbomer 940

(Any article currently titled Carbomer 940 that is manufactured without the use of benzene will be officially titled Carbomer Homopolymer after January 1, 2011.)

» Carbomer 940 is a high molecular weight polymer of acrylic acid cross-linked with allyl ethers of pentaerythritol. Carbomer 940, previously dried in vacuum at 80° for 1 hour, contains not less than 56.0 percent and not more than 68.0 percent of carboxylic acid (–COOH) groups. The viscosity of a neutralized 0.5 percent aqueous dispersion of Carbomer 940 is between 40,000 and 60,000 centipoises.

Packaging and storage— Preserve in tight containers.

Change to read:

Labeling— Label it to indicate that it is not intended for internal use. A carbomer homopolymer manufactured using benzene and complying with the unique requirements of this monograph will be officially titled Carbomer 940 and will not be referred to as <u>Carbomer Homopolymer</u>. ANF24

Viscosity— Proceed as directed in the test for *Viscosity* under <u>*Carbomer 934P*</u>, except to use a spindle having a shaft 0.32 cm in diameter, the distance from the top of the shaft to the lower tip of the shaft being 5.04 cm, and the immersion depth being 5.6 cm (No. 7 spindle). The viscosity is between 40,000 and 60,000 centipoises.

Limit of benzene— Proceed as directed in the test for *Limit of benzene* under <u>Carbomer 934P</u>, except to use about 20 mg of Carbomer 940, accurately weighed, instead of about 1 g of Carbomer 934P, to prepare the *Test solution*. Calculate the percentage of benzene in the portion of Carbomer 940 taken by the formula:

 $10(C/W)(r_U / r_S)$

in which *C* is the concentration, in µg per mL, of benzene in the *Standard solution; W* is the weight, in mg, of Carbomer 940 taken to prepare the *Test solution;* and *r_U* and *r_S* are the benzene peak responses obtained from the *Test solution* and the *Standard solution,* respectively: not more than 0.5% is found.

<u>Residual solvents</u> $\langle 467 \rangle$: meets the requirements. (Official January 1, 2007)

Other requirements— It meets the requirements for Identification, Loss on drying, Heavy metals, and Assay for carboxylic acid content under Carbomer 934P.

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