毛细管气相色谱法测定苯并三唑衍生物中有机溶剂残留量

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摘　要：建立毛细管气相色谱法测定苯并三唑衍生物(Tir)中有机溶剂残留量。采用DB-Wax毛细管色谱柱，FID检测器，二甲亚砜为溶剂，程序升温，外标法同时检测Tir原料药中甲醇、乙酸、DMF等3种有机溶剂残留量。各待测组分完全分离，线性响应良好，曲线相关系数≥0.999，检测限分别为0.4ng，2.1ng，1.0ng，精密度RSD均小于3%，平均回收率为96.0%~104.0%，方法简便灵敏，结果准确可靠，适用于Tir中有机溶剂残留量的检测。

关键词：苯并三唑衍生物,有机溶剂残留,毛细管气相色谱法

Determination of methanol, acetic acid and dimethylformamide in benzotriazine derivate by capillary gas chromatography

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Abstract：To establish a method for determination of three residual solvents in benzotriazine derivate (Tir). The residual solvents which are methanol, acetic acid and N,N-dimethylformamide (DMF) were quantitatively determined by capillary GC on DB-Wax column, Dimethyl Sulfoxide as solvent media, with FID detector. Three residual solvents were completely separated. There was a good linearity(r:≥0.999). The detected limits of methanol, acetic acid and DMF were 0.4, 2.1, 1.0ng; the RSD of precision was less than 3%; the average recovery rate of the preparation was in the range of 96.0%~104.0%. The method is simple, sensitive and accurate and can be used for the quality control of Tir.

Key words：Benzotriazine derivate,Residual solvents,Capillary gas chromatography