表5	环保橡胶油NAP10及其原料的F	PCA和PAHs含量	量检测

项 目	环保橡胶油NAP10	原料1(馏分油)	原料2(抽出油)
苯并蒽+崫含量/(μg・g ⁻¹)	0.95	3.87	69.12
苯并 (b, j, k) +蒽含量/ (μg・g ⁻¹)	1.99	9.91	114.78
苯并 (e) 芘含量/ (μg・g ⁻¹)	4.63	20.00	142.64
苯并 (a) 芘含量/ (μg・g ⁻¹)	0.49	4.44	25.40
二苯并(a, h) 蒽含量/ (μg·g ⁻¹)	0.42	8.61	77.73
PAHs总含量/(μg·g ⁻¹)	8.49	46.82	429.70
PCA含量/%	2.85	5.21	8.25

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Lubricating Base Oils and Asphaltene Free Petroleum Fractions–Dimethyl Sulphoxide Extraction[S].

参考文献:

[1] IP 346, Determination of Polycylic Aromatics in Unused

[2] 王光辉, 熊少祥. 有机质谱解析[M]. 北京: 化学工业出版社, 2005: 81-82.

Rapid Determination of PCA and PAHs Contents in Rubber Oil

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Abstract: The PCA and PAHs contents in rubber oil were measured rapidly by TLC/FID and GC-MS, respectively. The experimental testing results showed that the PCAs content of rubber oil measured by TLC/FID was close to the IP 346 method, while the recovery of added standard was 95%~105% by using TLC/FID. The PAHs content of rubber oil detected by GC-MS was close to the result measured by German company BIU, and the recovery of added standard was 97%~104% with GC-MS method. These two detection methods are simple, consume only small amount of testing reagents, and provide high accuracy and good reproducibility.

Keywords: PCA; PAHs; rubber oil; TLC; FID; GC-MS; recovery



2016年美国炭黑市场供应不足

美国理查德森炭业公司发布报告,预测到2016年美国炭黑市场可能会出现供应短缺,需依赖进口。该报告指出,美元强势不利于美国炭黑企业与国外炭黑企业竞争;随着国际油价持续走低,石油系炭黑原料油的价格低于煤焦

油系炭黑原料油的价格,这削弱了中国炭黑企业的市场竞争力,俄罗斯炭黑企业在北美的市场份额或许会扩大,但其供货可靠性可能会受到俄罗斯经济和地缘政治不稳定性的影响。

郭隽奎