

时,PA12的熔融温度基本无变化。

3 结论

(1)与相容剂CPE相比,相容剂PP-*g*-MAH对CIIR/PA12共混体系的增容效果较为显著。

(2)在CIIR/PA12共混体系中,当加入10份的PP-*g*-MAH时,锦纶相分散相粒径最小,并均匀地分散在连续的橡胶相中,且此时体系的物理性能达到最佳;当PP-*g*-MAH的用量继续增大时,分散相的粒径大小基本不变,并在一定程度上降低了CIIR/PA12共混体系的物理性能。

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Influence of Compatibilizer on Structure and Properties of CIIR/PA12 Blend

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Abstract: The influence of compatibilizers on the structure and properties of CIIR/PA12 blend was investigated in this paper. The compatibilizers were polypropylene grafted maleic anhydride (PP-*g*-MAH) and chlorinated polyethylene (CPE). Compared with CPE,PP-*g*-MAH showed better compatibilization effect on CIIR/PA12 blend,and the optimum addition level of PP-*g*-MAH was 10 phr.

Key words: CIIR;PA12;compatibilizer;PP-*g*-MAH;CPE

一种低析出热塑性橡胶及其制备方法

中图分类号:TQ334.2 文献标志码:D

由金发科技股份有限公司和上海金发科技发展有限公司申请的专利(公开号 CN 102260392A,公开日期 2011-11-30)“一种低析出热塑性橡胶及其制备方法”,涉及的低析出热塑性橡胶配方为:聚丙烯 5~30,三元乙丙橡胶 10~40,塑弹体(乙烯- α 烯烃共聚物) 10~50,填料(碳酸钙、滑石粉、硫酸钡、云母、硅灰石、玻璃微珠中的1种或几种) 0~40,软化油(石蜡油或/和环烷油) 0~20,加工助剂(硬脂酸、硬脂酸盐、金属氧化物、硅油或聚硅酮中的1种或2种以

上) 0.01~10,抗氧化剂(酚类或/和亚磷酸酯类抗氧化剂) 0.01~2,交联剂(酚醛树脂或过氧化物) 0.5~10。该热塑性橡胶采用熔融共混法制备,即将原料混合在熔融混炼设备中进行动态硫化制得产品。如果采用塑弹体部分替代软化油,可以降低软化油的含量,提高橡胶相与软化油的相容性,抑制软化油从橡胶相向塑料相迁移,使材料的热质量损失率明显降低,析出性能改善;如果采用塑弹体完全替代软化油,则材料的析出性能显著改善,在汽车、建筑、化工和能源等密封领域应用前景广泛。

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