An organic material based shaped article

Field of the invention

The presently claimed invention relates to an organic material based shaped article comprising a compound of formula (1), and at least one anti-scratch agent. The presently claimed invention further relates to the organic material based shaped article, which is an automotive interior or exterior material.

Background of the invention

Organic materials namely synthetic polymers such as polyolefins, polyethylenes, polypropylenes, and the like are used in wide variety of applications due to their ease of use in the manufacturing of a variety of extruded and molded articles. However, these articles frequently suffer from general stability due to repeated exposure to the UV light. Further, current stabilization systems i.e., anti-scratch agent improved organic materials, when used to prepare automotive articles, show a blooming/exudation due to repeated exposure of these articles to the UV light. Blooming/exudation is undesirable because it can destroy the aesthetic surface characteristics of articles made with polymers that bloom. It is particularly undesirable for bloom to occur in articles where clarity is desired. Bloom is also undesirable because it can reduce the ability of an article made with the blooming polymer to be securely bound to other article with adhesives. Blooming has been recognized as a serious problem in some applications and an effective means for alleviating it has been sought for years.
Hence, retaining the properties such as stability of the polymer when exposed to the UV light and reducing the tendency of a polymer to bloom is highly desirable.
Thus, an object of the present invention is to provide an organic material based shaped article that is susceptible to oxidative, thermal or light-induced degradation.
Another object of the present invention is to provide an organic material based shaped article that has a surface that shows no stickiness and that shows no blooming/exudation from the organic material articles.

Summary

Surprisingly, it has been found that the organic material based shaped article according to the present disclosure, is susceptible to oxidative, thermal or light-induced degradation. The organic material based shaped article according to the present disclosure, has a surface that shows no stickiness and that shows no blooming/exudation from the organic material articles.
Thus, in an aspect, the present disclosure is directed to an organic material based shaped article comprising

i. a compound of formula (1), and