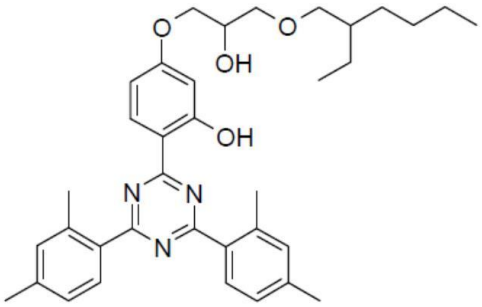
Stabilizing a shaped polymer article against degradation induced by artificial UV-C light

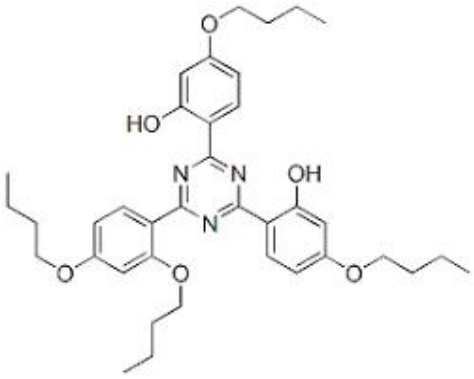
The present invention relates to a use of a stabilizer selected from compound (1) to (23) or micronized metal oxide salts for stabilizing a shaped polymer article against degradation induced by artificial UV-C light; and to a method for stabilizing a shaped polymer article against degradation induced by artificial UV-C light, which comprises incorporating into the shaped polymer articles a stabilizer selected from the stabilizers.

Artificial UV-C light is increasingly used for disinfection of polymer articles. As a result an increase of yellowing, microcracks, or blooming was observed in such polymer articles. Thus, there is a need for the development of suitable plastic additives which offer a low application rate, which are compatible with other plastic additives, and which reduce yellowing, microcracks, or blooming.

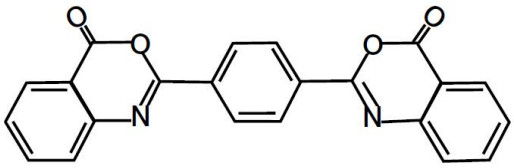
The objects were achieved by, in an aspect, a use of a stabilizer selected from compound (1)



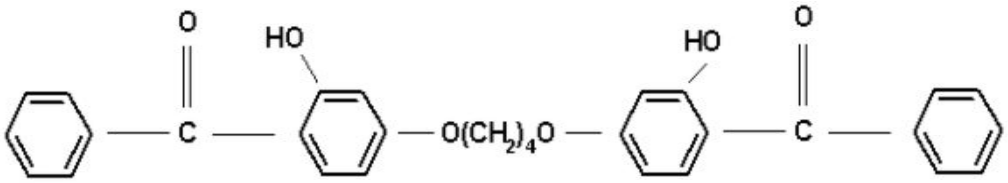
compound (2)



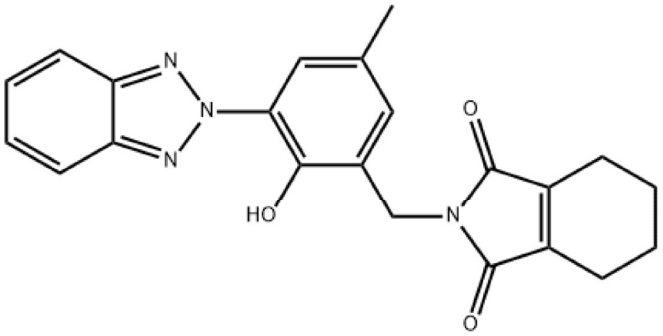
compound (20)



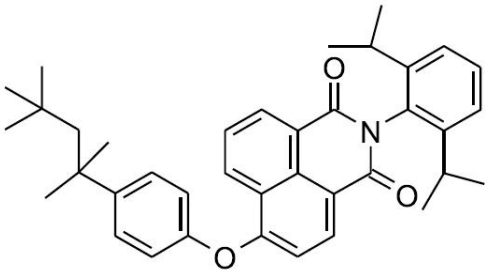
compound (21)



compound (22)



compound (23)



or

micronized metal oxide salts

for stabilizing a shaped polymer article against degradation induced by artificial UV-C light.

The objects were also achieved by a method for stabilizing a shaped polymer article against degradation induced by artificial UV-C light, which comprises incorporating into the shaped polymer articles a stabilizer selected from the compounds (1) to (23) or micronized metal oxide salts.

In another aspect, there is provided a method for stabilizing a shaped polymer article against degradation induced by artificial UV-C light, which comprises incorporating into the shaped polymer articles a stabilizer selected from the stabilizers as defined above.

Suitable **micronized metal oxide salts** are titanium dioxide, zinc oxide, oxides of iron, of zirconium, of silicon, of manganese, of aluminum or of cerium. Preferred micronized metal oxide