

CHAPTER 5

CONCLUSION

From the results and discussions presented previously, it can be concluded that

(1) Increasing in carbonyl index as a function of exposure time in both outdoor exposure and Xenotest can be represented by exponential model. The coefficient group formation. PP with tert-CH in the structure show fasted degradation compare to those PE samples.

(2) In the case of highly order structure like PP and HDPE. Because of this well packed structure, it will not easily allow oxygen attacking or water molecule diffusion into the structure. Therefore, UV light intensity is believed to be the most important key factor responsible for the degradation.

(3) Natural condition, rain and dew cause same affects on mechanical properties by washing of additives or erosion. This can be easily seen from result of LDPE, the outdoor exposure curves are above the Xenotest curves. It

means that we should take into account of these factors when dealing with photooxidative degradation study.

(4) In outdoor condition, it was found that the limiting time before becoming britting of PP, HDPE and LDPE are 9, 23 and 24 weeks respectively. Similarly in Xenotest condition, it took 114 hrs. 684 hrs. and 912 hrs.



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