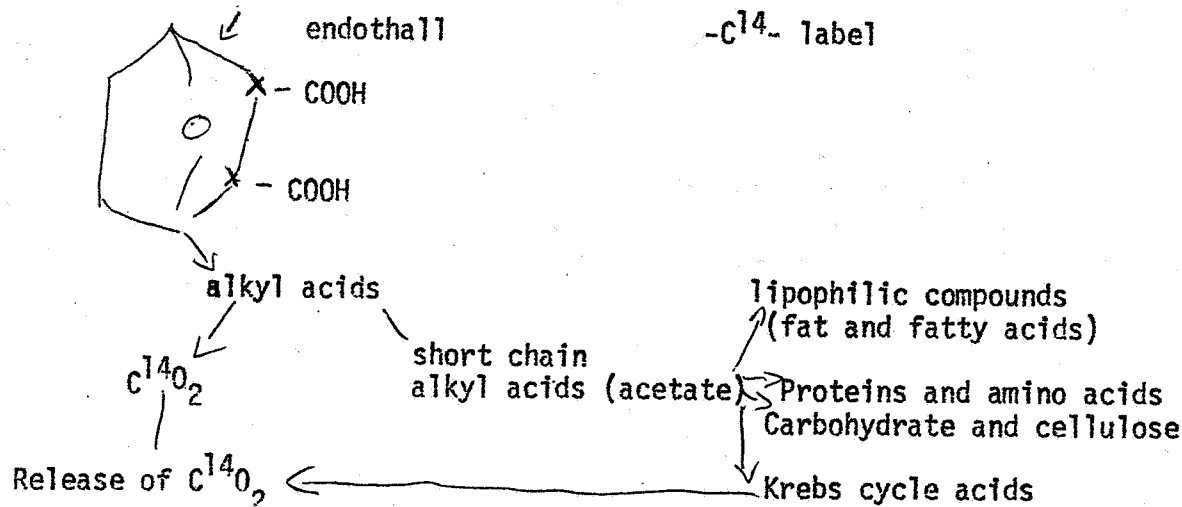


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June 29, 1971

Evaluation of Environmental Data 70-15 for Endothall  
(7-oxabicyclo(2.2.1)heptane-2,3-dicarboxylic acid)  
Submitted by Pennwalt Corporation  
Filed March 29, 1971

# I. Introduction

1. The herbicide, Endothall, is a highly active contact weed killer that has found extensive use in weed control programs in a number of crops.
2. Studies performed by Oregon State University in connection with endothall indicate that plants, fish, and soil microorganisms are capable of completely metabolizing the herbicide, endothall. In plants and fish, the  $C^{14}$  label is widely distributed in various biochemical components of these organisms. These fragments are utilized by the biochemical systems of these organisms. This shows that no metabolic products of endothall will accumulate and be of biological significance.
3. The metabolism of endothall by different organisms suggests the following sequence is the probable pathway for degradation.



## SOIL

4. Studies performed by Oregon State University indicate that endothall is very unstable in the soil. In Ontario soil 70% endothall disappeared as  $\text{CO}_2$  in 7 days and the remaining non-extractable portion was probably not endothall. The non-extractable portion of endothall is in the form of a complex carbohydrate. Endothall is very short lived in the soil as it appears to be readily metabolized.

For additional environmental data see PP No. OF0972 and our evaluation of PP No. OF0972 of June 8, 1970.

Endothall does not appear to have an adverse effect on the environment.