

13 April 2003

## WRc-NSF STUDIES OF THE TOXICITY OF FIRESTONE PONDLINER TO AQUATIC LIFE (REPORT NO. UC 6082/1)

Studies to determine the effects of Firestone Pondliner on rainbow trout (*Oncorhynchus mykiss*) and the freshwater crustacean *Daphnia magna* have been carried out at the WRc-NSF laboratory at Medmenham. The tests were performed according to the methods described in procedures 202 (*Daphnia*, Acute immobilisation) and 203 (Fish, Acute toxicity) of the Organisation for Economic Co-operation and Development (OECD) Guidelines for Testing of Chemicals.

Test animals were introduced after a leaching period of 24 hours. No effects were found for rainbow trout or *Daphnia* at the concentration range 0.002 to 0.01 m<sup>2</sup> l<sup>-1</sup>. This range spans the exposures likely to be encountered in a wide range of pond sizes, down to the smallest practicable garden pond. These results indicate that the Firestone PondLiner geomembrane is safe for use in decorative ponds.

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# Firestone

**BUILDING PRODUCTS**  
**NOBODY COVERS YOU BETTER.®**

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Firestone Building Products Europe Inc. ("Firestone") hereby warrants to Biodesign Pools the Firestone EPDM Geomembrane™ 1.5mm to be free from latent material or manufacturing defects for a period of ten (10) years.

In the event any leak should be discovered in the Firestone EPDM Geomembrane™ within the period of ten (10) years from date of installation, written notice must be given to Firestone if deterioration of the membrane or a manufacturing defect is suspected as the cause of the leak. Firestone or its designee will inspect the installation to determine the cause of the leak within thirty (30) days after receipt of the written notice.

In the event that Firestone reasonably determines that deterioration was caused by a defect in material or manufacturing workmanship, Firestone's liability shall be limited, at its option, to the supply of materials to repair the leak or to a credit for purchase of new materials.

To the extent that any damages are due to acts of God, natural disasters (including, but not limited to winds, hurricanes, lightning, tornadoes, and earthquakes), negligence, abuse, vandalism, insects or animals, repairs or alterations or attachments or additions to the installation, or war or civil disobedience and/or do not directly arise from any defect in material or manufacturing workmanship, such damages are excluded from coverage under this warranty.

Firestone shall have no obligation under this warranty until Firestone has been paid in full for all materials.

This is the entire warranty covering the Firestone EPDM Geomembrane™. There are no other guarantees or warranties expressed or implied.

FIRESTONE BUILDING PRODUCTS EUROPE, INC.

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