

Surface Modified Rubber

New Oil Spill Cleanup

Technology

Using Waste Tires

From the

Mineral Resources Research Center

University of Minnesota

What is Surface Modified Rubber?

Surface Modified rubber is a floatable oil absorbent produced from waste tires.

What does it do?

It will absorb up to three times its weight in crude oil within minutes after being applied to an oil spill. It has the capacity to absorb up to eight times its weight in oil if left in contact with the oil for more than one day.

How long will this absorbent float on the water?

Preliminary tests show that after absorbing crude oil, the absorbent will float almost indefinitely.

How long can this absorbent be stored?

The rubber used in this product decomposes at a very slow rate and therefore can be stored for years with no problems.

What are some of the benefits associated with using this type of absorbent?

Not only is this product a very effective oil absorbent, but is also very inexpensive to produce. Also, by using waste tires this absorbent helps to reduce the environmental problems associated with discarding used tires.

How can this product be disposed of after it has been used?

If recovered soon after it is applied, the oil can be extracted from the rubber and the product can be reapplied with up to 80% of its absorbing capacity retained. The rubber/oil mixture also has a very high calorific value and can be burned cleanly and efficiently in existing boiler installations.

When will this absorbent become commercially available?

Development of the equipment required to produce this product commercially is presently being conducted.

For more information, please contact:

MRRRC - University of Minnesota
56 East River Road
Minneapolis, MN 55455
Attn: Wilhelm Reindl
(612) 625-3344