

OPENED-CELL, LOW-DENSITY POLYURETHANE FOAM**ABSTRACT**

5 A process for preparing an opened – cell low density rigid polyurethane
foam which comprises reacting isocyanate with a polyol component in the
presence of a blowing agent and additives wherein the polyol component
consists of dihydroxystearic acid (DHSA) derived from oleic acids. The oleic
acids are derived from palm oil. The DHSA used in this invention is 9, 10-
10 dihydroxystearic acid (9, 10-dihydroxyoctadecanoic acid). The isocyanate
used is an aromatic isocyanate, polymethylene polyphenyl isocyanate having
functionality of 3.0. The blowing agent is water. Physical blowing agent such
as hydrocarbons can also be used in association with water to generate the
PUF. Examples of the hydrocarbons are HCFC-141b, HCFC-134a, n-
15 pentane, i-pentane and cyclopentane. An opened –cell low density rigid
polyurethane foam having an opened –cell content of exceeding 95% is
produced in the present invention. A opened –cell low density rigid
polyurethane foam produced can be used as packaging material, floral foam
for flower arrangements, energy absorbing or acoustical material.