

FORM 2

THE PATENTS ACT, 1970
(39 of 1970)
AND
THE PATENTS RULES, 2003

**COMPLETE
SPECIFICATION**

(See Section 10; rule 13)

TITLE OF THE INVENTION

“A ROTOMOLDING COMPOSITION”

APPLICANT

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The following specification particularly describes
the invention and the manner in which
it is to be performed

We Claim:

1. A rotomolding composition comprising:
at least 95 percent by weight of a thermoplastic polymer; and
from 0.1 to 3 percent by weight of metal oxide lamellae;
wherein said rotomolding composition is characterized by at least one of the following properties:
 - (a) having a retention at elongation at break of at least 85 percent after 4000 hours of accelerated aging; or
 - (b) having a ductility improvement of at least 50 percent relative to a similar composition free of said metal oxide lamellae.
2. The rotomolding composition according to Claim 1, wherein said metal oxide is iron oxide.
3. The rotomolding composition according to Claim 1, wherein the platelets of a metal oxide have a purity level of greater than 99 percent.
4. The rotomolding composition according to Claim 1, wherein platelets of a metal oxide have an average size diameter (long axis) in the range of from 2 to 30 μM .
5. The rotomolding composition according to Claim 1, wherein platelets of a metal oxide have an average aspect ratio (long axis/thickness) in the range of from 2 to 30.
6. The rotomolding composition according to Claim 1, wherein said rotomolding composition is further characterized by having a tensile modulus (2%) improvement of at least 10 percent relative to a similar composition free of said metal oxide lamellae.
7. The rotomolding composition of Claim 1, wherein said thermoplastic polymer is an ethylene based polymer or a propylene based polymer.

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