

Effect of Short Glass Fiber on Mechanical and Rheological Properties of PMMA/SBR Vulcanizate

G. M. Mamoor, Nida Qamar, Umer Mehmood, Muhammad Shahzad Kamal

Abstract

Thermoplastic vulcanizates of polymethyl methacrylate (PMMA) and styrene butadiene rubber (SBR) were prepared by melt processing using dicumyl peroxide (DCP) as a vulcanizing agent. Effect of short glass fiber (SGF) on mechanical and rheological properties of PMMA/SBR vulcanizates has been investigated using universal testing machine and melt flow indexer. The results revealed increase in tensile strength and decrease in melt flow index as well as elongation at break on increasing concentration of short glass fiber. It was also scrutinized that with increase in fiber contents consistency index increases. On increasing fiber contents vulcanizates show more pronounced pseudoplastic behaviour.

DOI: 10.3329/ceerb.v13i2.3535

Chemical Engineering Research Bulletin 13 (2009) 51-54

References

Full Text: [PDF](#)

Chemical Engineering Research Bulletin ISSN Print: 0379-7678 Online: 2072-9510

Indexed by *Chemical Abstract Service (CAS)*, *CEABA-VtB*, *Google Scholar* and *DOAJ*

BanglaJOL is supported by [INASP](#)

USER

Username

Password

Remember me

JOURNAL CONTENT

Search

All

Browse

- [By Issue](#)
- [By Author](#)
- [By Title](#)
- [Other Journals](#)

FONT SIZE

INFORMATION

- [For Readers](#)
- [For Authors](#)
- [For Librarians](#)

ABOUT THE
AUTHORS

G. M. Mamoor
Polymer and
Process
Engineering
Department,
University of
Engineering and
Technology,
Lahore, Pakistan
Pakistan

Nida Qamar
Polymer and
Process
Engineering
Department,
University of
Engineering and
Technology,
Lahore, Pakistan
Pakistan

Umer Mehmood
Polymer and
Process
Engineering

Department,
University of
Engineering and
Technology,
Lahore, Pakistan
Pakistan

*Muhammad Shahzad
Kamal*
University of
engineering &
technology lahore
Pakistan

lecturer polymer &
process
engineering
department UET
lahore.

RELATED ITEMS



[Author's
work](#)

[Related
studies](#)

[Book
searches](#)

[Databases](#)

[Relevant
portals](#)

[Pay-per-
view](#)

[Online
forums](#)

[Teaching
files](#)

[Government
policy](#)

[Media
reports](#)

[Web search](#)

ARTICLE TOOLS



[Print this
article](#)



[Indexing
metadata](#)



[How to cite
item](#)



[Finding
References](#)



[Review policy](#)



[Email this
article](#) (Login required)



[Email the
author](#) (Login required)