

Home (<https://ipindia.gov.in/>) About Us (<https://ipindia.gov.in/Home/AboutUs>) Policy & Programs (<https://ipindia.gov.in/Home/policypages>)
 Achievements (<https://ipindia.gov.in/Home/achievementspage>) RTI (<https://ipindia.gov.in/Home/righttoinformation>)
 Sitemap (<https://ipindia.gov.in/Home/Sitemap>) Contact Us (<https://ipindia.gov.in/Home/contactus>)

[Skip to Main Content](#)



(<http://ipindia.nic.in/index.htm>)



(<http://ipindia.nic>)

Patent Search

Invention Title	BENZOAZINE - SULFUR COPOLYMER, METHOD FOR PREPARATION THEREOF
Publication Number	01/2024
Publication Date	05/01/2024
Publication Type	INA
Application Number	202311076304
Application Filing Date	08/11/2023
Priority Number	
Priority Country	
Priority Date	
Field Of Invention	ELECTRICAL
Classification (IPC)	H01M0004020000, C09J0011060000, H01M0004040000, H01M0004360000, B01D0053520000

Inventor

Name	Address	Country
Bimlesh Lochab	Professor, Materials Chemistry Laboratory, Research Block, Department of Chemistry, Shiv Nadar (Institution of Eminence Deemed to be University), NH91, Tehsil Dadri, Gautam Buddha Nagar, Uttar Pradesh, India-201314, India	India
Sangeeta Sahu	PhD Scholar, Materials Chemistry Laboratory, Research Block, Department of Chemistry, Shiv Nadar (Institution of Eminence Deemed to be University), NH91, Tehsil Dadri, Gautam Buddha Nagar, Uttar Pradesh, India-201314, India	India

Applicant

Name	Address	Country
Shiv Nadar (Institution of Eminence Deemed to be University)	NH91, Tehsil Dadri, Gautam Buddha Nagar, Uttar Pradesh, India-201314, INDIA	India

Abstract:

The present disclosure provides a benzoxazine-sulfur copolymer formed by polymerization of benzoxazine monomer represented by formula (1) and elemental sulfur. The present disclosure also relates to the method of preparing the same. Further, the present disclosure discloses a reusable adhesive composition.

Complete Specification

Description:FIELD OF INVENTION

[001] The present disclosure relates to the field of polymer. The present disclosure particularly relates to a copolymer of benzoxazine sulfur and its method of preparing thereof. The present disclosure also relates to reusable adhesive composition comprising benzoxazine sulfur copolymer.

BACKGROUND OF THE INVENTION

[002] Structural adhesives have been used in weld seams and weld flanges in automotive vehicles. Welding is a time-consuming and expensive process and in a automobile assembly, hundreds of spot welds are required. Furthermore, it is not possible to weld dissimilar materials like aluminum and steel. It is also not possible to weld certain polymers and composites. Therefore, structural adhesives are applied now days in the manufacturing of household or industrial appliances, furniture, containers, buildings, structures or the like. Thermosets cannot be reprocessed thus after their use they are discarded either as in landfills or incineration. Presently polymer industry looking forward for circular economy of polymers, with importance of reprocessability and reusability, and phase out single-use polymeric material. In this context, polymers containing dynamic linkages have been developed which are capable of undergoing reversible formation allowing them to recycle.

[003] Phenolic thermosets, especially phenol-formaldehyde (PF) resin, are widely used in applications ranging from advanced composite matrices, coatings, pack

[View Application Status](#)



Terms & conditions (<https://ipindia.gov.in/Home/Termsconditions>) Privacy Policy (<https://ipindia.gov.in/Home/Privacypolicy>)
 Copyright (<https://ipindia.gov.in/Home/copyright>) Hyperlinking Policy (<https://ipindia.gov.in/Home/hyperlinkingpolicy>)

