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Title: Chemically synthesized polyaniline/polyvinyl chloride blended coatings for the corrosion protection of AA7075 aluminum alloy

Authors: Rafael Marinho Bandeira, Julia van Drunen, Fábio Augusto de Souza Ferreira, Ubirajara Pereira Rodrigues Filho, Germano Tremiliosi-Filho



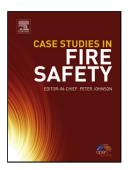
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ACCEPTED MANUSCRIPT

Chemically synthesized polyaniline/polyvinyl chloride blended coatings for the corrosion protection of AA7075 aluminum alloy

Rafael Marinho Bandeira^a*, Julia van Drunen^b, Fábio Augusto de Souza Ferreira^c, Ubirajara Pereira Rodrigues Filho^c, Germano Tremiliosi-Filho^a

^aGrupo de Eletroquímica, Instituto de Química de São Carlos, Universidade de São Paulo,

CEP 13566-590, São Carlos, SP, Brazil.

^bMetrohm Autolab B.V., Kanaalweg 29-G, 3526 KM, Utrecht, The Netherlands.

^cGrupo de Química de Materiais Híbridos e Inorgânicos, Instituto de Química de São Carlos, Universidade de São Paulo, CEP 13563-120, São Carlos, SP, Brazil.

* Corresponding Author: rafael.marinho.bandeira@gmail.com

Highlights:

- Electrochemical analyses showed that there is enhanced protection using blends when compared to pure PANI coatings.
- The porosity of the PANI/PVC 1/1 blend was lower than in the pure PANI coatings.
- The blend showed a distribution of PVC and PANI domains that contributed to its better protection performance.
- Blended coatings with thickness of $26.3 \pm 0.95 \,\mu\text{m}$ have better corrosion protection of the AA7075-T6 aluminum alloy.

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