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ACCEPTED MANUSCRIPT

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

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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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