

Accepted Manuscript

Isothermal crystallization fractionation and fraction characterization of *trans*-1,4-poly(isoprene-*co*-butadiene)

Qingtao Niu, Chen Zou, Xiangyu Liu, Riguo Wang, Aihua He



PII: S0032-3861(16)31116-8

DOI: [10.1016/j.polymer.2016.12.028](https://doi.org/10.1016/j.polymer.2016.12.028)

Reference: JPOL 19264

To appear in: *Polymer*

Received Date: 26 September 2016

Revised Date: 6 December 2016

Accepted Date: 11 December 2016

Please cite this article as: Niu Q, Zou C, Liu X, Wang R, He A, Isothermal crystallization fractionation and fraction characterization of *trans*-1,4-poly(isoprene-*co*-butadiene), *Polymer* (2017), doi: 10.1016/j.polymer.2016.12.028.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

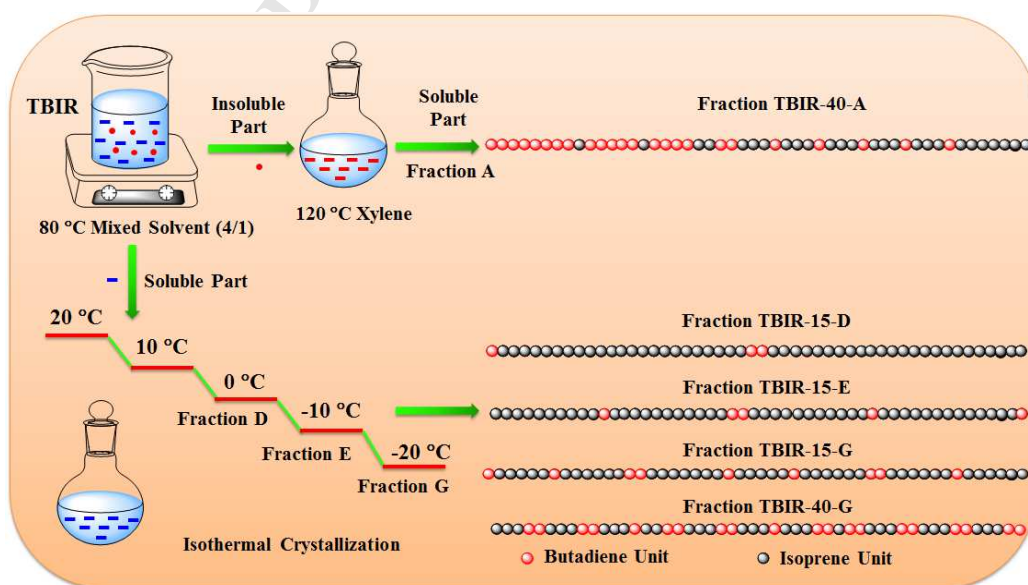
Isothermal Crystallization Fractionation and Fraction

Characterization of *Trans*-1,4-Poly(isoprene-co-butadiene)

Qingtao Niu^{1#}, Chen Zou^{1#}, Xiangyu Liu¹, Riguo Wang², Aihua He^{1*}

1 Shandong Provincial Key Laboratory of Olefin Catalysis and Polymerization , Key Laboratory of Rubber-Plastics (Ministry of Education) , School of Polymer Science and Engineering, Qingdao University of Science and Technology, Qingdao, Shandong 266042, China; 2 Shandong Huaju Polymer Materials Co.,Ltd., Binzhou 256500, China.

Based on the different crystallizability of polymer chain with different chain structures, poly(isoprene-co-butadiene) (TBIR) copolymers were fractionated into eight fractions by isothermal crystallization fractionation. The TBIR-15 is mainly composed by various multi-block copolymers with different length TPI blocks (n_{ip} = 6 ~ 24). The TBIR-40 is mainly composed by random copolymers, among which 69.7wt% are elastomers, 17.1wt% consist a few TPI and TPB blocks that both showing weak crystalline behavior.



Download English Version:

<https://daneshyari.com/en/article/5178551>

Download Persian Version:

<https://daneshyari.com/article/5178551>

[Daneshyari.com](https://daneshyari.com)