

SUPPORTING INFORMATION

Ionic liquids: a new route for the design of epoxy networks

Thi Khanh Ly Nguyen¹, Sébastien Livi^{1}, Bluma. G. Soares², Sébastien Pruvost¹, Jannick Duchet-Rumeau¹ and Jean-François Gérard¹*

¹Université de Lyon, F-69003, Lyon, France; INSA Lyon, F-69621, Villeurbanne, France CNRS,
UMR 5223, Ingénierie des Matériaux Polymères.

²Universidade Federal do Rio de Janeiro, PEMM-COPPE, Centro de Tecnologia, 21941-972 Rio
de Janeiro, Brazil

*E-mail: sebastien.livi@insa-lyon.fr

Number of pages: 3

Number of Figures: 3

Number of Tables: 1

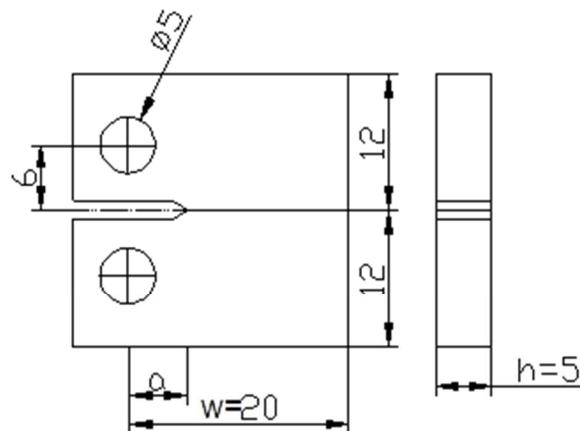


Figure S1. Compact Tension specimen configuration.

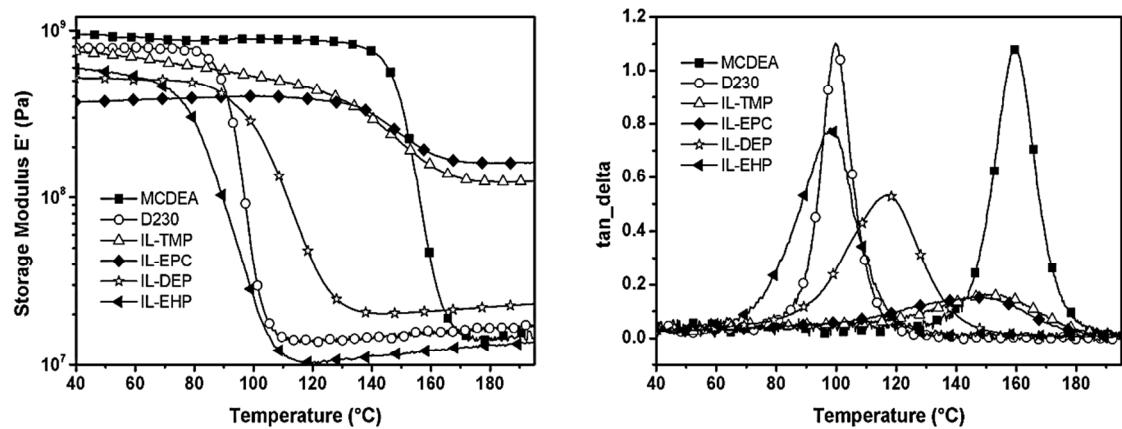


Figure S2. Storage modulus E' and loss factor $\tan \delta$ as a function of temperature of DGEBA-based networks cured with different types of curing agent: MCDEA (■), Jeffamine D230 (○), IL-TMP (△), IL-EPC (◆), IL-DEP (★), and IL-EHP (◀) at 1Hz.

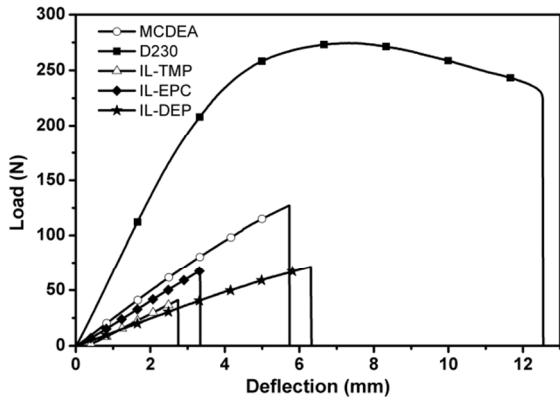


Figure S3. Load-deflection curves of epoxy/different curing agents: MCDEA (○), Jeffamine D230 (■), IL-TMP (Δ), IL-EPC (◆) and IL-DEP (★) ($2 \text{ mm} \cdot \text{min}^{-1}$).

Table S1. Surface tension of DGEBA and different curing agents.

Curing agent	Surface Tension (mJ.m^{-2})
DGEBA	44.6 ^a
MCDEA	52.6
D230	28.6 ± 0.3
IL-TMP	28.3 ± 0.3
IL-EPC	29.4 ± 0.2
IL-DEP	29.3 ± 0.4
IL-EHP	28.16 ± 0.2

^a value from the study of Chen et al⁸⁴