Technical Data Sheet

1-Butyl-3-methylimidazolium trifluoromethanesulfonate

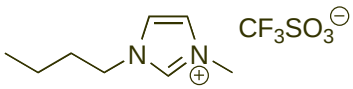
Revision Date: 2/13/2012
Date Issued: 6/24/2013

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product name	1-Butyl-3-methylimidazolium trifluoromethanesulfonate
Product code	IL-0013
CAS	174899-66-2
Supplier	IoLiTec Ionic Liquids Technologies GmbH Salzstrasse 184 D – 74076 Heilbronn Germany
Telephone	+49 (0)7131-89839-0
Fax	+49 (0)7131-89839-109
Emergency telephone	+49 (0)179-5322578
Email	info@iolitec.de

ROCO
Distributor
1816 Parkway View Drive,
Pittsburgh, PA 15205
info@roco.global
724-315-9170
www.roco.global

2 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient name	1-Butyl-3-methylimidazolium trifluoromethanesulfonate
CAS No.	174899-66-2
Empirical Formula	$C_9H_{15}F_3N_2O_3S$
Structure	
Molecular weight	288.29 g/mol
Purity	>99%

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3 PROPERTIES

Color	Yellow to orange
Physical state (25 °C)	Liquid
Melting point	16 °C
Glass transition temperature	-82 °C
Decomposition temperature	>250 °C
Density (24 °C)	1.30 g/cm^3
Viscosity (25 °C)	80 mPa * s
Heat capacity (62 °C)	457 J/(mol * K)
Thermal conductivity (20 °C)	0.147 W/(m * K)
Conductivity (20 °C)	3.05 mS/cm
Electrochemical stability window	not available
Anodic limit	not available
Cathodic limit	not available
Surface tension (25 °C)	not available
Refractive index (25 °C)	1.438

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Viscosity:

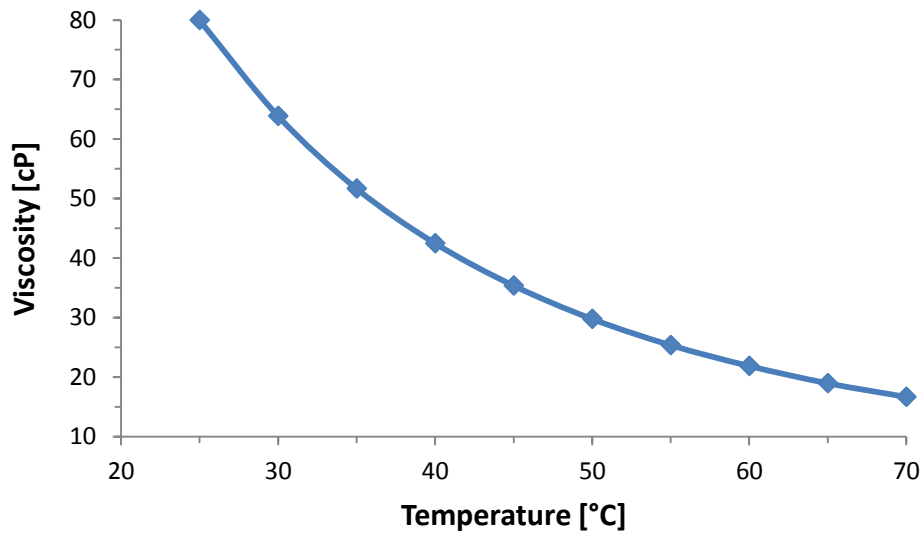

Figure 1: Temperature-dependend viscosity of 1-butyl-3-methylimidazolium trifluoromethanesulfonate.

Heat capacity:

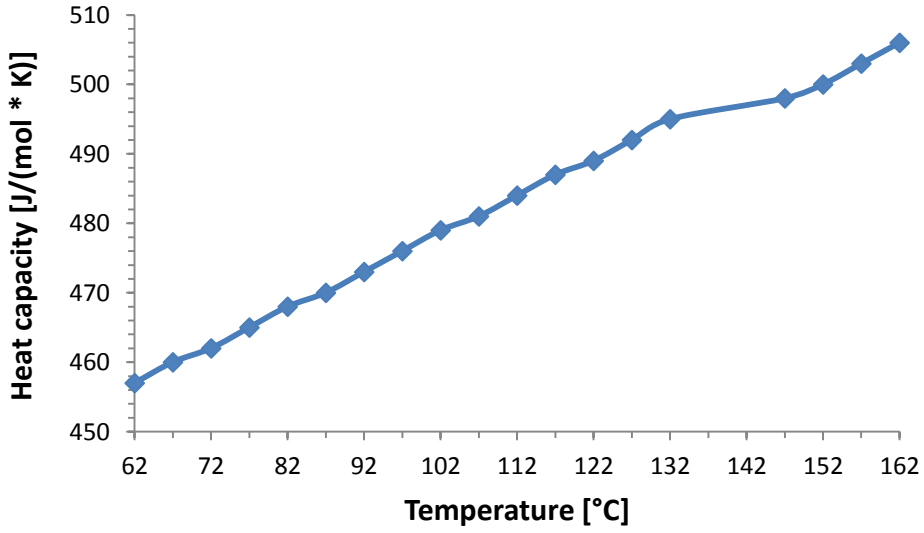

Figure 2: Temperature-dependend heat capacity of 1-butyl-3-methylimidazolium triflate.

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Thermal conductivity:

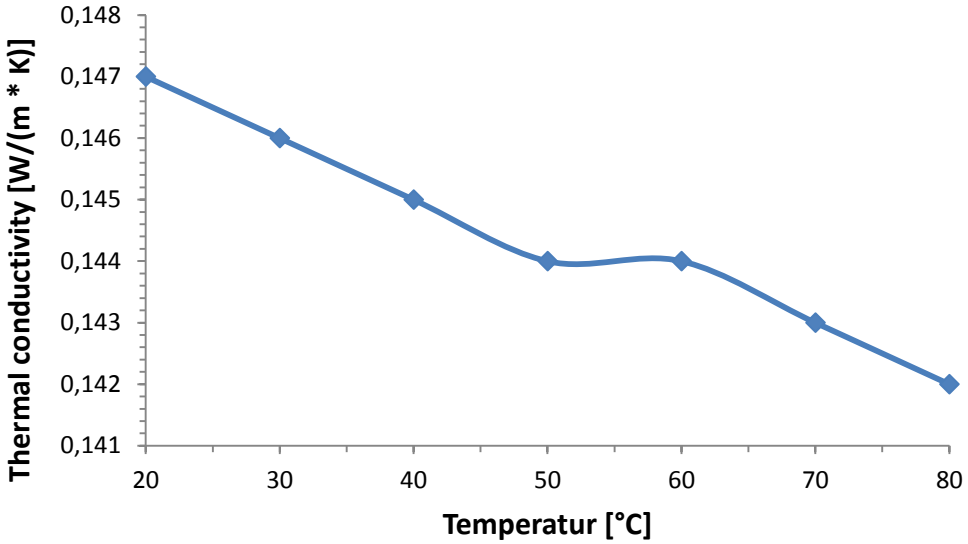

Figure 3: Temperature-dependend thermal conductivity of 1-butyl-3-methylimidazolium trifluoromethanesulfonate.

Thermal stability:

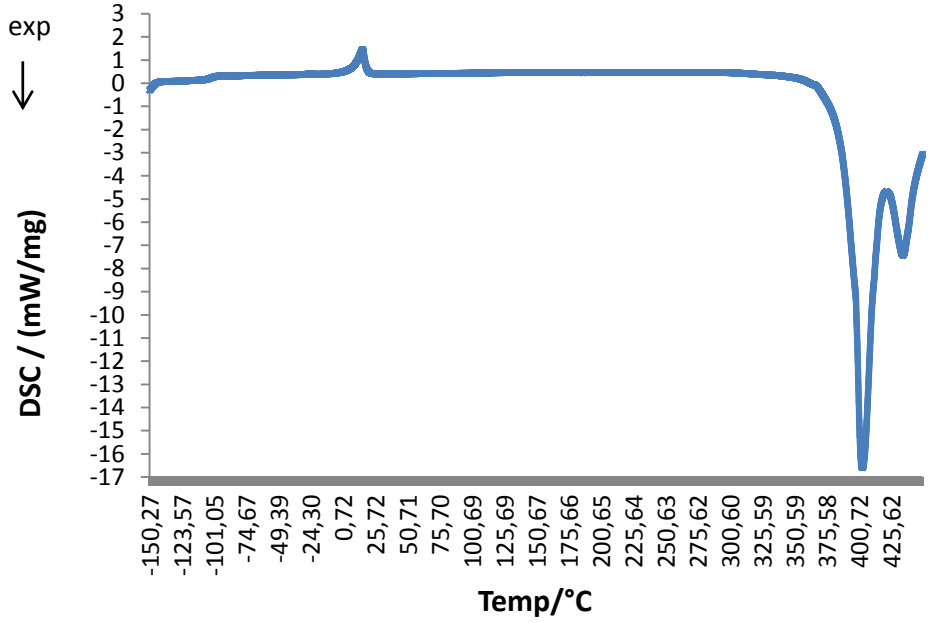

Figure 4: DSC measurement of 1-butyl-3-methylimidazolium trifluoromethanesulfonate.

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4 CO-SOLVENT MISCIBILITY

Water	miscible
Acetone	miscible
Acetonitrile	not available
Isopropanol	miscible
Toluene	miscible
Hexane	not miscible

5 ORDER INFORMATION

IL-0013-HP can be obtained in the following standard quantities:

Quantity	Price
25 g	Please enquire
50 g	Please enquire
100 g	Please enquire
250 g	Please enquire
500 g	Please enquire
1 kg	Please enquire
Bulk	Please enquire

Please send your order via email to order@iolitec.de or fax +49 (0)7131 – 89839109.

6 OTHER INFORMATION

DISCLAIMER

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