

CERTIFICATE OF ANALYSIS

Product Name: 1,3-Diethylimidazolium ethyl sulfate

CAS Number: 516474-04-7

Product Number: IL-0244-HP

Lot:

Supplier: IoLiTec
Ionic Liquids Technologies GmbH
Im Zukunftspark 9
D-74076 Heilbronn
Germany
Phone: +49-(0)7131-89839-0
Fax: +49-(0)7131-89839-109
Email: info@iolitec.de

Analysis:

| | Specification | |
|-----------------------------|----------------------------|--|
| Identity (NMR, IR) | pass | |
| Assay (NMR) | >98% | |
| 1,3-Diethylimidazolium (IC) | >98% | |
| Ethyl sulfate (IC) | >98% | |
| Halides (IC) | <100 ppm | |
| Water (KF) | <500 ppm | |
| Appearance | Colorless to orange liquid | |
| Date | 08.05.2009 | |