15-6378: CYPHOS® IL 102



METALS • INORGANICS • ORGANOMETALLICS • CATALYSTS • LIGANDS • NANOMATERIALS • CUSTOM SYNTHESIS • cGMP FACILITIES

Sold in collaboration with Solvay.

Trihexyl(tetradecyl)phosphonium bromide, min. 95% CYPHOS® IL 102

P+	P+ Br
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Product Details		
Purity	min. 95%	
Color and Form	pale yellow liquid	
Density	0.952	
CAS No.	654057-97-3	
Molecular Formula	C ₃₂ H ₆₈ BrP	
Molecular Weight	563.76 g/mol	

CYPHOS® IL 102 is a readily available, high purity ionic liquid. CYPHOS® IL 102 has been exploited for a wide variety of applications and is amenable to chemical modification (anion exchange). The features of CYPHOS® IL 102 include: ultra-low vapor pressure, hydrophobic, non-flammable, high thermal stability, wide liquid range and inherent polarity.

Technical Notes:

- 1. CYPHOS® IL 102 is currently employed in a wide range of applications. These applications include additives in electrolytes in metal hydride batteries, deep eutectic solvents for preparation of lubricating oils. 1, 2
- 2. Furthermore, CYPHOS® IL 102 has been shown to be effective at in materials for scratch and weather resistant solar reflecting mirrors and selective separation of iron and aluminum. 3,4
- 3. Catalysis is a further area of application as well as CYPHOS® IL 102 has been exploited in phase transfer catalysis (PTC) as well as a solvent for palladium coupling. ^{5, 6}

References:

1. WO Patent 2016077303, 2016.

4. WO Patent 2016019419.

2. WO Patent 2016073149, 2016.

5. Ind. Eng. Chem. Res 2008, 47, 9081-9089.

3. JP Patent 2016057419, 2016.

6. Australian Journal of Chemistry, 2009, 62, 309-321.

Storage and Handling:

Always wear approved safety glasses, protective gloves, and clothing when handling chemical substances. Handle the product in an efficient fume hood and avoid breathing vapor. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Remove and wash contaminated clothing promptly.

Avoid release into the environment. **CYPHOS® IL 102** is stable over long periods of time (12+ months) and will not polymerize. **CYPHOS® IL 102** should not be stored in air or near oxidizing agents. Handle in accordance with good industrial hygiene and safety practices. Avoid unnecessary exposure to the product. For additional health, safety and handling information, refer to the product SDS. **CYPHOS® IL 102** is classified for skin corrosion and can cause serious eye damage. Keep containers tightly sealed, and store in a dry area between 10-30 °C. Rotate stock using the oldest material first.

Visit www.strem.com for new product information and a searchable catalog.

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