

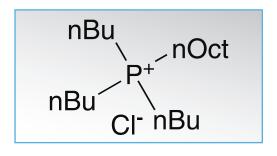
15-7575: CYPHOS® IL 253



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

Sold in collaboration with Solvay.

Tributyl(octyl)phosphonium chloride, min. 93%, CYPHOS® IL 253



Product Details	
Purity	min. 93%
Color and Form	Colorless to pale yellow viscous liquid
Density	0.92
Flash Point	306°F
Boiling Point	>200°C
CAS No.	56315-19-6
Molecular Formula	C ₂₀ H ₄₄ CIP
Molecular Weight	351 g/mol

CYPHOS® IL 253 is a readily available, high purity ionic liquid. CYPHOS® IL 253 has been exploited for a wide variety of applications and is amenable to chemical modification (anion exchange). With high thermal stability, large liquid range and solubility in a variety of common solvents CYPHOS® IL 253 is employed in many different applications. Further features of CYPHOS® IL 253 include: ultra-low vapor pressure, miscible in water, non-flammable and inherent polarity.

Technical Notes:

- 1. CYPHOS[®] IL 253 has found use in a diverse range of applications. These applications include use as a solvent in dehydrohalogenation of halogenated organic compounds. ¹
- 2. Purification (desulfurization) of naphtha using CYPHOS® IL 253 has also been investigated and incorporated in conversion of hydrocarbons ^{2,3}
- 3. It has also shown positive performance in antiwear lubricant applications as an additive. 4
- 4. Materials scientists have investigated it as a solvent for producing nanostructured materials as well as a being incorporated into rare earth containing ionic liquids with luminescent and magnetic properties. ^{5, 6}

References:

- 1. WO Patent 2015014783, 2015.
- 2. US Patent 20150001135, 2015.
- 3. WO Patent 2014193537, 2014.
- 4. ACS Applied Materials & Interfaces, 2014, 6, 22585-22593.
- 5. J. Am. Chem. Soc. 2014, 136, 15465-15468.
- 6. Journal of Physical Chemistry B, **2016**, 120, 5301-5311.

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 253 is stable over long periods of time (12+ months) and will not polymerize. CYPHOS® IL 253 should not be stored in air or near oxidizing agents. Potential hazardous decomposition products are oxides of carbon and/or phosphorus and hydrochloric acid. 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 253 is classified for skin corrosion and can cause serious eye damage. Keep containers tightly sealed, and store in a dry area between 20-30 °C. Rotate stock using the oldest material first.

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

Strem Chemicals, Inc. 7 Mulliken Way Newburyport, MA 01950 U.S.A Tel: 978.499.1600

Tel: 978.499.1600 Fax: 978.465.3104 Email: info@strem.com Strem Chemicals, Inc. 15 rue de l'Atome Zone Industrielle 67800 BISCHHEIM France Tel: (33) 03 88 62 52 60 Fax: (33) 03 88 62 26 81 Email: info.europe@strem.com Strem Chemicals, Inc. Postfach 1215 77672 KEHL Germany Tel: 0 78 51/ 7 58 79

Email: info.europe@strem.com

Strem Chemicals UK Ltd.
An Independent Distributor of Strem Chemicals Products
Newton Hall, Town Street
Newton, Cambridge
England CB22 7ZE
Tel: 0845 643 7263

Fax:0845 643 7362 Email: enquiries@strem.co.uk