



MATERIAL INFORMATION SHEET

Bicyclo[2.2.2]octane-2,3,5,6-tetracarboxylic 2,3:5,6-diimide (HBTI)

CAS	no CAS (stereoisomer of 1367346-83-5)
Sum formula	$C_{12}H_{12}N_2O_4$
Mol. weight	248.23 g/mol

PHYSICAL / CHEMICAL PROPERTIES

Appearance	(off)-white crystalline; solid
Melting point	>400°C
Solubility	1.68 g/L in Methanol 1.65 g/L in Acetone >200 g/L in 1M NaOH (decomp.) 1.70 g/L in water >200 g/L in DMSO
Stability	stable under ambient conditions

SPECIFICATION / STRUCTURE proof*

$^1H/^13C$ NMR	conform to reference
IR	conform to reference
Water	<0.5%
q- 1H NMR	≥99%
MS (ESI)*	Pending
X-Ray single crystal*	conform to structure

* data available; not done for each batch

APPLICATION FIELDS

Used in the production of polymers, in halogen-free flame retardants resins, in materials for high temperature applications and in pharmaceuticals as building-block.

[1] An unusual three-dimensional self-penetrating network derived from cross-linking of two-fold interpenetrating nets via ligand-unsupported Ag-Ag bonds: synthesis, structure, luminescence, and theoretical study, Song, Xue-Zhi, 2020.

HAVE WE CAUGHT YOUR INTEREST?

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