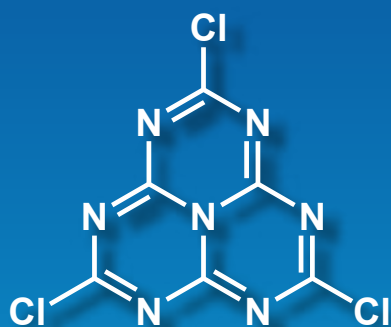


New

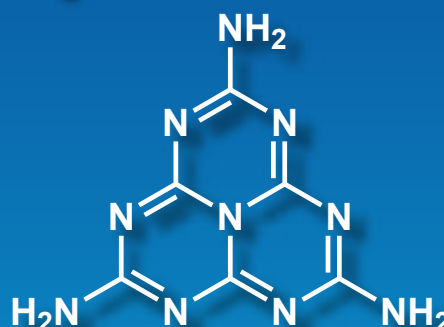
MATERIALS



Heptazine-Bearing Building Blocks for Light-Emitting Materials and Photocatalysts



Heptazine Chloride
1g
[T4145]



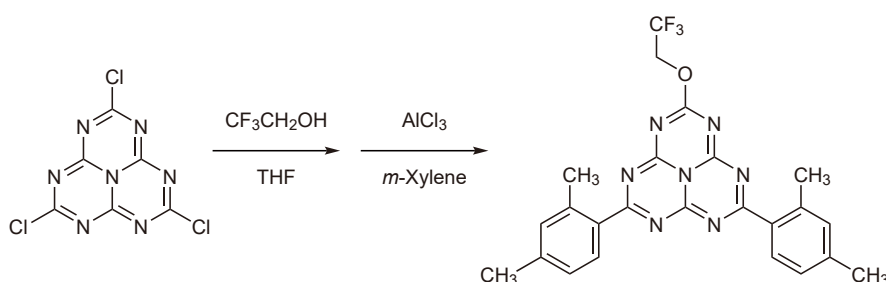
Melem
1g
[M3538]

Advantages

- Partial structures of graphitic carbon nitride ($g\text{-C}_3\text{N}_4$)
- Enables synthesis of high performance light-emitting materials by introducing appropriate substituents

Applications

Light-Emitting material with negative ΔE_{ST}



I_{PL} = 449nm, 476nm
 F_{PL} = 74%
 t_{PF} = 14 ns, t_{DF} = 217 ns
 k_{ISC} = $2.3 \times 10^7 \text{ s}^{-1}$
 k_{RISC} = $4.2 \times 10^7 \text{ s}^{-1}$
 ΔE_{ST} = -11 meV

References Delayed fluorescence from inverted singlet and triplet excited states
N. Aizawa, Y.-J. Pu, D. Miyajima, *et al.*, *Nature* **2022**, 609, 502. <https://doi.org/10.1038/s41586-022-05132-y>

Related Product

Graphitic Carbon Nitride (= $g\text{-C}_3\text{N}_4$)

200mg [G0539]

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