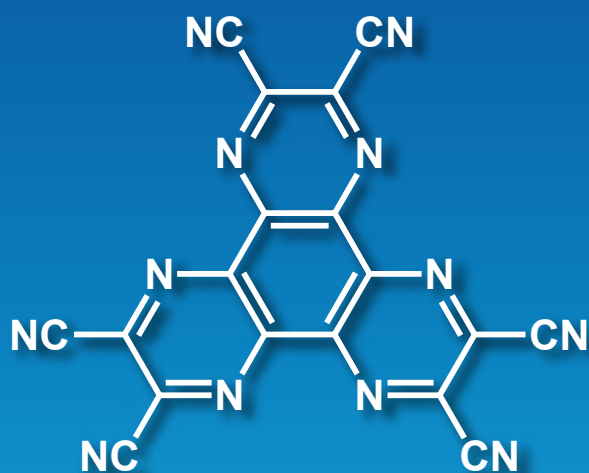


New

Hole-injection and Charge-generation Material with Strong Electron-Accepting Ability HAT-CN 6



HAT-CN 6
200mg / 1g
[D5248]

Advantages

- Strong electron-accepting ability
- Deep LUMO energy level (~-5.5 eV)
- Planar π -conjugated molecules

Applications

- The use of HAT-CN 6 as hole-injection layer realizes efficient hole injection from an electrode to hole-transporting layer and reduces driving voltage.¹⁾
- The combination of HAT-CN 6 and electron-donor molecules forms charge-transfer complexes.²⁾
- The reaction of CN groups with primary amines leads to several derivatives.^{3,4)}
- Crystalline radical-anion salts are formed by the combination of HAT-CN 6 and cations, and the magnetic properties can be greatly changed in the solid state depending on the cation species.⁵⁾

References

- 1) C. Gao, X. Zhu, L. Zhang, D. Zhuo, Z. Wang, L. Liao, *Appl. Phys. Lett.* **2013**, *102*, 153301.
DOI: <https://doi.org/10.1063/1.4802081>
- 2) K. Nakashima, T. Shimizu, Y. Kamakura, A. Hinokimoto, Y. Kitagawa, H. Yoshikawa, D. Tanaka, *Chem. Sci.* **2020**, *11*, 37.
DOI: <https://doi.org/10.1039/C9SC04175C>
- 3) A. Hinokimoto, M. Tashiro, Y. Kitagawa, D. Tanaka, *Chem. Lett.* **2018**, *47*, 1006.
DOI: <https://doi.org/10.1246/cl.180360>
- 4) V. A. Kuehl, P. H. H. Duong, D. Sadrieva, S. A. Amin, Y. She, K. D. Li-Oakey, J. L. Yarger, B. A. Parkinson, J. O. Hoberg, *ACS Appl. Mater. Interfaces* **2021**, *13*, 37494.
DOI: <https://doi.org/10.1021/acscami.1c08854>
- 5) D. V. Konarev, S. S. Khasanov, A. V. Kuzmin, M. V. Mikhailenko, A. Otsuka, H. Yamochi, H. Kitagawa, R. N. Lyubovskaya, *Chem. Eur. J.* **2020**, *26*, 17470.
DOI: <https://doi.org/10.1002/chem.202002967>

Hole-injection and Charge-generation Material with Strong Electron-Accepting Ability: HAT-CN 6

Related Products

| | |
|--|--------------------|
| α-NPB (purified by sublimation) | 1g / 5g [D3970] |
| α-NPB | 1g / 5g [D5126] |
| TAPC | 1g / 5g [B2079] |
| <i>m</i>-MTDATA | 100mg [T2251] |
| Bathophenanthroline (purified by sublimation) | 1g [B2695] |
| Bathophenanthroline | 1g / 5g [D0905] |
| Liq | 1g / 5g [Q0100] |
| TCNQF₄ (purified by sublimation) | 100mg / 1g [T1131] |
| 2,3,6,7,10,11-Hexahydroxytriphenylene | 1g / 5g [H0907] |
| Cryptand 2.2.2 | 1g / 5g [H0932] |

For further information please refer to our website at www.TCIchemicals.com.

tcI molecular conductor



Ordering and Customer Service

TCI AMERICA

Tel : 800-423-8616 / 503-283-1681
Fax : 888-520-1075 / 503-283-1987
E-mail : Sales-US@TCIchemicals.com

TCI EUROPE N.V.

Tel : +32 (0)3 735 07 00
Fax : +32 (0)3 735 07 01
E-mail : Sales-EU@TCIchemicals.com

TCI Deutschland GmbH

Tel : +49 (0)6196 64053-00
Fax : +49 (0)6196 64053-01
E-mail : Sales-DE@TCIchemicals.com

Tokyo Chemical Industry UK Ltd.

Tel : +44 (0)1865 78 45 60
E-mail : Sales-UK@TCIchemicals.com

TCI Chemicals (India) Pvt. Ltd.

Tel : 1800 425 7889 / 044-2262 0909
Fax : 044-2262 8902
E-mail : Sales-IN@TCIchemicals.com

梯希爱(上海)化成工业发展有限公司

Tel : 800-988-0390 / 021-67121386
Fax : 021-6712-1385
E-mail : Sales-CN@TCIchemicals.com

TOKYO CHEMICAL INDUSTRY CO., LTD.

Tel : +81 (0)3-5640-8878
E-mail : globalbusiness@TCIchemicals.com

Availability, price or specification of the listed products are subject to change without prior notice. Reproduction forbidden without the prior written consent of Tokyo Chemical Industry Co., Ltd.