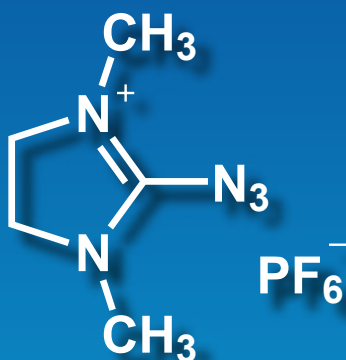


# Stable Diazotransfer Reagent against Heat and Impact/Friction



**2-Azido-1,3-dimethylimidazolium  
Hexafluorophosphate**

5g

[A2457]

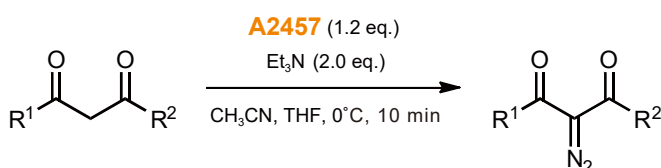
## Advantages

- **Stable crystalline solid against heat, impact, and friction**
- **Reaction proceeds under mild conditions**
- **By-products can be easily removed by ordinary extraction procedures**

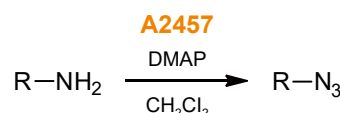
2-Azido-1,3-dimethylimidazolium Hexafluorophosphate [A2457], which was developed by Kitamura *et al.*, is a crystalline diazotransfer reagent having high thermal stability and low explosibility. The differential scanning calorimetry (DSC) experiment of A2457 has revealed that the exothermic decomposition temperature was approximately 200°C. Moreover, A2457 has tested negative for the impact and friction-sensitivity tests.<sup>1)</sup>

## Applications

### Reaction of 1,3-Dicarbonyl Compounds<sup>1)</sup>



### Reaction of Aromatic and Aliphatic Amines<sup>2)</sup>



### References

- 1) M. Kitamura, N. Tashiro, S. Miyagawa, T. Okauchi, *Synthesis* **2011**, 1037.  
<https://doi.org/10.1055/s-0030-1258457>
- 2) M. Kitamura, M. Yano, N. Tashiro, S. Miyagawa, M. Sando, T. Okauchi, *Eur. J. Org. Chem.* **2011**, 458.  
<https://doi.org/10.1002/ejoc.201001509>

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