Product Profile

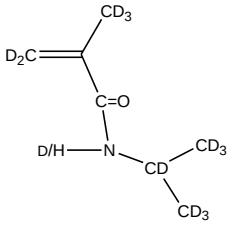
Identification

Product Name: **d12-N-isopropyl methacrylamide**

Sample # **d12-NIPMAMD**

Product Lot Number: P44860-d12NIPAMD

Product Chemical Architecture:



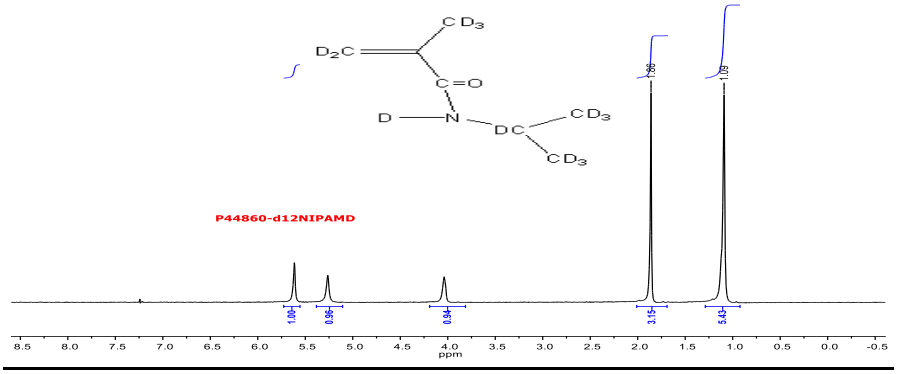
Composition:
purity ≥ 98% (from NMR)
Chemical purity > 99%
Variation of Melting points of such monomer depending on the degree of deuteration

Composition:

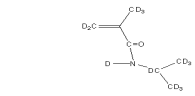
CAS#	Purity by GC-FID	Purity by ^{H}NMR	Appearance at ambient temperature	Empirical Formula	B.P or m.p	Mol. Weight
13749-61-6	Over 98%	+98%	White powder	$C_7D_{12}H_1NO$	NA	140

Validation of Architecture:

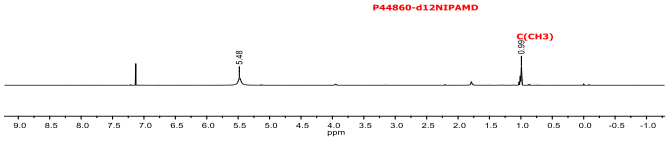
A. <u>NMR (^{D}NMR) of the product:</u>



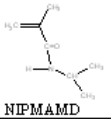
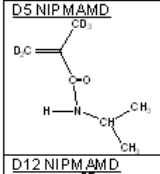
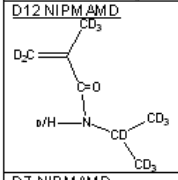
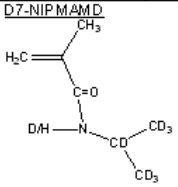
B. **HNMR of the product run in CdCl3**



D/H exchange on CH3 protons<2%



Thermal analysis of the product

Chemical Structure	Tm oC	N-isopropyl methacrylamide
 NIPMAMD	69.34 oC	No deuteration Protonated
D5 NIPMAMD 	76.26 oC	Back bone deuterated
D12 NIPMAMD 	88.26 oC	N-isopropyl and back bone Deuterated
D7-NIPMAMD 	73.5 oC	N-isopropyl group Deuterated

FTIR profile