$$Br$$
 N
 Br
 F

REACTANTS TABLE:

structure	amount	condition	equality	formula	id	moles	mw	name
	186.008	solid	1.0	C ₆ H ₄ BrNO	6	1.0	186.01	2-[4-[3- (2- chloro-5- methyl- pyrimidi n-4- yl)pheny l]buto xy] pyridin- 4-amine2-[4-[3- (2- chloro-5- methyl- pyrimid i n-4- yl)pheny l]butoxy] pyridin- 4-amine
	186.008	solid	1.0	C ₆ H ₄ BrNO	6	1.0	186.01	2-[4-[3- (2- chloro-5- methyl- pyrimidi n-4- yl)pheny l]buto xy] pyridin- 4-amine2-[4-[3- (2- chloro-5- methyl- pyrimid i n-4- yl)pheny l]butoxy] pyridin- 4-amine
	208.006	pure	1.0	C ₆ H ₄ BrF ₂ N]C ₆ H ₄ BrF ₂ N-C ₆ H ₄ BrF ₂ N[C ₆ H ₄ BrF ₂ N]C ₆ H ₄ BrF ₂ N-3-bromo-5-(difluoromethyl)pyridine-3-bromo-5-(difluoromethyl)pyridine]3-bromo-5-(difluoromethyl)pyridine]3-bromo-5-(difluoromethyl)pyridine]3-bromo-5-(difluoromethyl)pyridine	6	1.0	208.01	3-bromo-5-(difluoromethyl)pyridine]3-bromo-5-(difluoromethyl)pyridine[3-bromo-5-(difluoromethyl)pyridine-3-bromo-5-(difluoromethyl)pyridine]3-bromo-5-(difluoromethyl)pyridine-3-bromo-5-(difluoromethyl)pyridine
	186.008	solid	1.0	C ₆ H ₄ BrNO	6	1.0	186.01	2-[4-[3- (2- chloro-5- methyl- pyrimidi n-4- yl)pheny l]buto xy] pyridin- 4-amine2-[4-[3- (2- chloro-5- methyl- pyrimid i n-4- yl)pheny l]butoxy] pyridin- 4-amine
	186.008	solid	1.0	C ₆ H ₄ BrNO	6	1.0	186.01	2-[4-[3- (2- chloro-5- methyl- pyrimidi n-4- yl)pheny l]buto xy] pyridin- 4-amine2-[4-[3- (2- chloro-5- methyl- pyrimid i n-4- yl)pheny l]butoxy] pyridin- 4-amine

REAGENTS TABLE:

structure	amount	condition	equality	formula	id	moles	mw	name
	186.008	solid	1.0	C ₆ H ₄ BrNO	6	1.0	186.01	2-[4-[3- (2- chloro-5- methyl- pyrimidi n-4- yl)pheny l]buto xy] pyridin- 4-amine2-[4-[3- (2- chloro-5- methyl- pyrimid i n-4- yl)pheny l]butoxy] pyridin- 4-amine
B_r N B_r N F	150.177	solid	1.0	C ₉ H ₁₀ O ₂	4	1.0	150.18	benzyl acetate
in → in	208.006	pure	1.0	C ₆ H ₄ BrF ₂ N]C< sub>6H ₄ BrF ₂ N-C <su b="">6H₄BrF₂N-C<su b="">6H₄BrF₂N-3-bromo- 5-(difluoromethyl)pyridine-3-bromo-5-(difluoromethyl)pyridine]3-bromo-5-(difluoromethyl)pyridine]3-bromo-5-(difluoromethyl)pyridine</su></su>	6	1.0	208.01	3-bromo-5-(difluoromethyl)pyridine]3-bromo-5-(difluoromethyl)pyridine[3-bromo-5-(difluoromethyl)pyridine-3-bromo-5-(difluoromethyl)pyridine[3-bromo-5-(difluoromethyl)pyridine-3-bromo-5-(difluoromethyl)pyridine-3-bromo-5-(difluoromethyl)pyridine

PRODUCTS TABLE:

structure	amount	condition	equality	formula	id	moles	mw	name
. i	208.006	pure	1.0	C ₆ H ₄ BrF ₂ N]C< sub>6H ₄ BrF ₂ N]C ₆ H ₄ BrF ₂ N[C ₆ H ₄ BrF ₂ N-3-bromo-5-(difluoromethyl)pyridine-3-bromo-5-(difluoromethyl)pyridine]3-bromo-5-(difluoromethyl)pyridine]3-bromo-5-(difluoromethyl)pyridine]3-bromo-5-(difluoromethyl)pyridine	6	1.0	208.01	3-bromo-5-(difluoromethyl)pyridine]3-bromo-5-(difluorom ethyl)pyridine[3-bromo-5-(difluoromethyl)pyridine-3-brom o-5-(difluoromethyl)pyridine[3-bromo-5-(difluoromethyl)p yridine-3-bromo-5-(difluoromethyl)pyridine3-bromo-5-(difl uoromethyl)pyridine

structure	amount	condition	equality	formula	id	moles	mw	name
مِثْء ﴿ مِثْء	208.006	pure	1.0	C ₆ H ₄ BrF ₂ N]C< sub>6H ₄ BrF ₂ N]C ₆ H ₄ BrF ₂ N[C ₆ H ₄ BrF ₂ N]C ₆ H ₄ BrF ₂ N-3-bromo-5-(difluoromethyl)pyridine3-bromo-5-(difluoromethyl)pyridine]3-bromo-5-(difluoromethyl)pyridine]3-bromo-5-(difluoromethyl)pyridine	6	1.0	208.01	3-bromo-5-(difluoromethyl)pyridine]3-bromo-5-(difluorom ethyl)pyridine[3-bromo-5-(difluoromethyl)pyridine-3-brom o-5-(difluoromethyl)pyridine[3-bromo-5-(difluoromethyl)p yridine-3-bromo-5-(difluoromethyl)pyridine3-bromo-5-(difl uoromethyl)pyridine
مِثْء + مثار	208.006	pure	1.0	C ₆ H ₄ BrF ₂ N]C< sub>6H ₄ BrF ₂ N-C <su b="">6H₄BrF₂N[C₆H₄BrF₂N-3-bromo- 5-(difluoromethyl)pyridine-3-bromo-5-(difluoromethyl)pyridine]3-bromo-5-(difluoromethyl)pyridine]3-bromo-5-(difluoromethyl)pyridine</su>	6	1.0	208.01	3-bromo-5-(difluoromethyl)pyridine]3-bromo-5-(difluorom ethyl)pyridine[3-bromo-5-(difluoromethyl)pyridine-3-brom o-5-(difluoromethyl)pyridine[3-bromo-5-(difluoromethyl)p yridine-3-bromo-5-(difluoromethyl)pyridine3-bromo-5-(difl uoromethyl)pyridine

PROCEDURE:

(5-bromonicotinaldehyde; mw=186.01g/mol; amount=186.008g) (benzyl acetate; mw=150.18g/mol; amount=150.177g) (3-bromo-5-(difluoromethyl)pyridine; mw=208.01g/mol; amount=208.006g; crude) 5.19.2.4.3.(iii) N-Substituted amidrazones by N-alkylation of simpler amidrazones The alkylation of amidrazones has been studied by Smith and co-workers <1971J0C1155, 1973J0C1344, 1977J0C1862>. Depending upon the substitution pattern, alkylation can occur on any of the three nitrogen atoms, but in most cases alkylation occurs at N2 or N3 so that an "amidinium like" delocalized cation is formed. Scheme 31 gives an example of N2 alkylation via a delocalized cation, whereas in Scheme 32 amidrazones 108 and 109 are also alkylated to give a delocalized cation but via alkylation at the N3 atom. Further examples are given in chapter 5.19.2.4.3 of <1995C0FGT(5)741>, and there have been no significant advances since the publication of that chapter.