

B. Precursors

(9) Alkyl (Me, Et, n-Pr and i-Pr) phosphonyldifluorides

example:

DF, $\text{CH}_3\text{P}(\text{O})\text{F}_2$

CAS No. 676-99-3

HS No. 29.31.00

NIOSH: RTECS No. TA 184077

Synonyms: Methylphosphonyl difluoride; methylphosphoric difluoride

Physical properties: MW:100.00; bp: 98°C; d_4^{20} 1.3320; n_D^{20} 1.3165; liquid.

Synthesis: The reaction of hydrogen fluoride with methylphosphonyl dichloride. The reaction of methyl tetrafluorophosphine with acetic anhydride gives the difluoride in 80% yield. [V.V. Lysenko et. al., Zh.obshch. Khim., 1966, 36, 1507 (1512 in English translation)].

Suppliers: Two suppliers are listed in the United States.