

**What type of reagent?
What application?**

**Recommended
polymer reagent**

Bases

Basic Quenching, Neutralize Ammonium Salts → **MP-Carbonate**

Strong Tertiary Amine Base → **PS-DIEA**
(e. g. mesylate formation)

Tertiary Amine Base → **PS-NMM**
(e.g. formation of amides, sulfonamides, carbamates)

Strong Base → **PS-TBD**
(e.g. alkylation of phenols, amines, activated methylene compounds; esterification of carboxylic acids)

Acids

Acid Quenching → **MP-TsOH
PS-DIEA HCl**

Amine Purification → **MP-TsOH
MP-TsOH Cartridges**

Coupling Agents

Amide Synthesis → **PS-Carbodiimide
PS-HOBt(HL)
PS-HOBt(HL)/ATCU
PS-TFP**

Activated Ester Formation → **PS-Carbodiimide/HOBt
PS-HOBt(HL)/ACTU
PS-TFP**

Protecting Group Transfer → **PS-HOBt(HL)**

Reductants

Carbonyl Reduction → **MP-BH₄**

Reductive Amination → **MP-CNBH₃
MP-BH₄ (with Ti(OⁱPr)₄)
MP-BH(OAc)₃**

**What type of reagent?
What application?**

**Recommended
polymer reagent**

Electrophilic Activation

Halogenation → **PS-Triphenylphosphine**
(Chlorination, bromination, Iodination)

Phenylether Formation → **PS-Triphenylphosphine**
(e. g. Mitsunobu reaction)

Thioester Active intermediate → **PS-Thiophenol**

Alcohol Activation → **PS-TsCl**

Acid and Sulfonyl Chloride Activation → **PS-DMAP**

Nucleophilic Activation

Carbon-Carbon Bond → **PS-Triphenylphosphine**
(e.g. Wittig reaction)

Sulfonyl Hydrazone Formation → **PS-TsNHNH₂**
(e.g. Hurd-Mori thiadiazole synthesis)

Catalysts

Acids → **MP-TsOH**

Acyl Transfer → **PS-DMAP**



Corporate Headquarters
1101 Chess Drive,
Foster City, CA 94404
T: (650) 655-4200
F: (650) 655-4300

Japanese Headquarters
Itsuwa Bldg. 6F,
2-26-9, Nishigotanda,
Shinagawa-ku, Tokyo,
141-0031, Japan
T: +81-3-5719-1239
F: +81-3-5719-1203

European Headquarters
New Road, Hengoed, Mid Glamorgan
United Kingdom, CF82 8AU
T: +44 (0) 1443 811811
F: +44 (0) 1443 816552

Scavengers for Electrophiles

Which compounds to scavenge?

Which compounds to scavenge?	Recommended scavengers
Carbonyls	PS-TsNHNH ₂ PS-Trisamine MP-Trisamine
Alkylating Agents <i>Alkyl halides, Mesylates, Tosylates, α-bromoesters, α-bromoketones</i>	PS-Thiophenol PS-Triphenylphosphine
Acid Chlorides	PS-Trisamine MP-Trisamine PS-NH ₂
Sulfonyl Chlorides	PS-Trisamine MP-Trisamine PS-DMAP PS-NH ₂
Isocyanates	PS-Trisamine MP-Trisamine PS-NH ₂
Epoxides	PS-Thiophenol
Oxophilic inorganic, organometallic complexes (B, Ti, Sn)	PS-DEAM
Lewis Acids, e.g., Ti(IV), Sn(IV)	PS-DEAM

Scavengers for Nucleophiles

Which compounds to scavenge

Which compounds to scavenge	Recommended scavengers
Alcohols	PS-TsCl(HL)
Amines	Primary, Secondary PS-Isocyanate MP-Isocyanate MP-TsOH MP-TsOH Cartridges PS-TsCl(HL)
	Selective for Primary PS-Benzaldehyde
	Anilines (Aromatic) PS-TsCl(HL) MP-TsOH MP-TsOH Cartridges PS-Isocyanate MP-Isocyanate
Hydrazines	PS-Benzaldehyde PS-TsCl(HL)
Enolates	PS-Benzaldehyde
Thiols/Thiolates	PS-Isocyanate MP-Isocyanate PS-Thiophenol
Alkoxides	PS-TsCl(HL) PS-Isocyanate MP-Isocyanate
Organometallics	PS-Benzaldehyde PS-TsCl(HL)
Reducing Agents	PS-Benzaldehyde
Acids/Acidic Phenols	HOBt Pentafluorophenol 4-Nitrophenol Carboxylic Acid Phenol MP-Carbonate PS-Trisamine MP-Trisamine