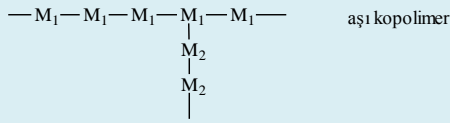
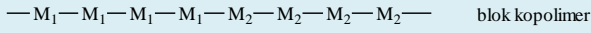
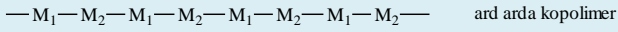
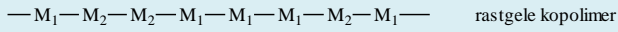
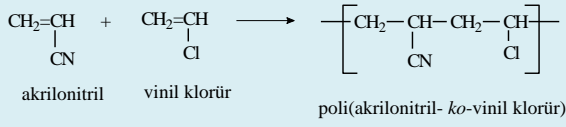


# HAFTA-14

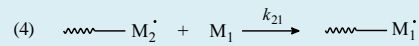
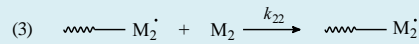
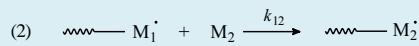
## KOPOLİMERİZASYON KİNETİĞİ



**Biçimlendirilmiş:** denklemler, Satır aralığı: Birden çok 1,3 satır

**Biçimlendirilmiş:** denklemler, Sola, Satır aralığı: Birden çok 1,05 satır

### RADİKALİK KOPOLİMERİZASYON KİNETİĞİ



**Biçimlendirilmiş:** Heceleme yok

**Biçimlendirilmiş:** denklemler, Sola

### kopolimer eşitliği

$$-\frac{d[M_1]}{dt} = k_{11}[M_1\cdot][M_1] + k_{21}[M_2\cdot][M_1]$$

$$-\frac{d[M_2]}{dt} = k_{22}[M_2\cdot][M_2] + k_{12}[M_1\cdot][M_2]$$

**Biçimlendirilmiş:** ara madde, Satır aralığı: 1,5 satır

**Biçimlendirilmiş:** ..., Ortadan, Satır aralığı: 1,5 satır

$$\frac{d[M_1]}{d[M_2]} = \frac{[M_1]}{[M_2]} \left( \frac{k_{11}[M_1^*] + k_{21}[M_2^*]}{k_{12}[M_1^*] + k_{22}[M_2^*]} \right)$$

$$\frac{d[M_1^*]}{dt} = k_{21}[M_2^*][M_1] - k_{12}[M_1^*][M_2] = 0$$

$$\frac{d[M_2^*]}{dt} = k_{21}[M_2^*][M_1] - k_{12}[M_1^*][M_2] = 0$$

$$k_{12}[M_1^*][M_2] = k_{21}[M_2^*][M_1]$$

$$[M_1^*] = \frac{k_{21}[M_2^*][M_1]}{k_{12}[M_2]}$$

$$\frac{d[M_1]}{d[M_2]} = \frac{[M_1]}{[M_2]} \left( \frac{k_{11} \frac{k_{21}[M_1] + k_{21}[M_2]}{k_{12}} + k_{21}[M_2]}{k_{21}[M_1] + k_{22}[M_2]} \right)$$

$$\frac{d[M_1]}{d[M_2]} = \frac{[M_1]}{[M_2]} \left( \frac{\frac{k_{11}[M_1] + [M_2]}{k_{12}}}{\frac{[M_1] + \frac{k_{22}[M_2]}{k_{21}}}{k_{21}}} \right)$$

$$r_1 = \frac{k_{11}}{k_{12}}$$

$$r_2 = \frac{k_{22}}{k_{21}}$$

$$\frac{d[M_1]}{d[M_2]} = \frac{[M_1]}{[M_2]} \left( \frac{r_1[M_1] + [M_2]}{[M_1] + r_2[M_2]} \right)$$