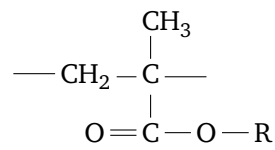
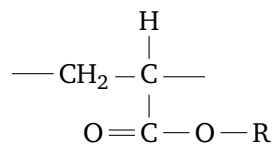
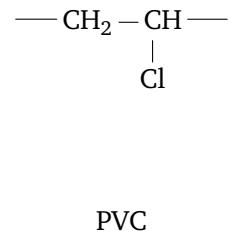
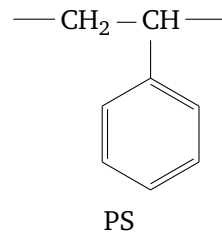
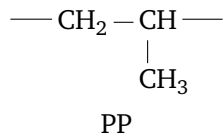
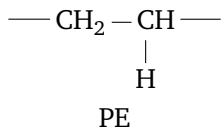
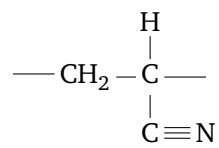


Vinyl class

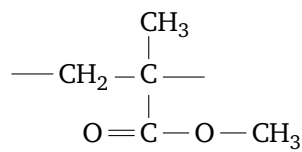


Acrylics class

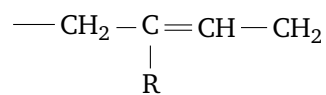
Methacrylics class



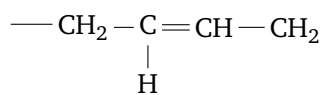
Polyacrylonitrile



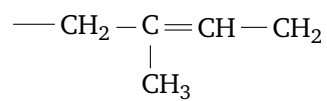
PMMA



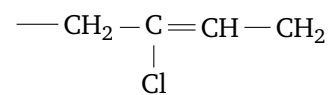
Diene class



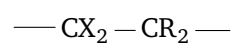
Polybutadiene



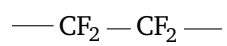
Polyisoprene



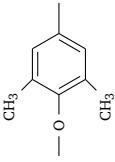
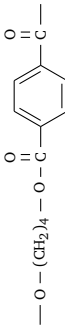
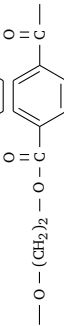
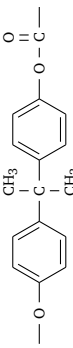
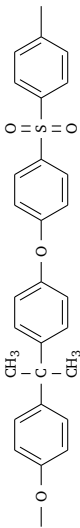
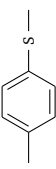
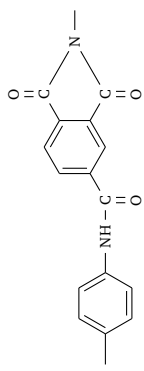
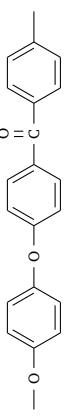
Polychloroprene



Vinylidenes class



Polytetrafluoroethylene

Class	Selected polymer	Structure
Polyoxides (ethers)	Polydimethyl phenylene oxide (PPO)	
	Polyoximethylene (POM)	$-\text{O}-\text{CH}_2-$
Polyesters	Polybutylene terephthalate (PBT)	
	Polyethylene terephthalate (PET)	
Polycarbonates	Polyisopropylidene diphenylene carbonate (PC)	
Polyamides	Polyhexamethylene adipamide (PA 66)	$-\text{NH}-(\text{CH}_2)_6-\text{NH}-\text{C}(=\text{O})-(\text{CH}_2)_4-\text{C}(=\text{O})-$
Polysulfones	Polyether sulfone	
	Polyphenylene sulfide	
Polyimides	Polyamide imide	
Polyketones	Polyether etherketone (PEEK)	

Polymer	T _m (°C)	T _g (°C)
PVC	—	80
a-PS	—	100
PMMA	—	105
PPO	—	210
HDPE	140	−110
LDPE	110	−110
i-PP	165	−10
POM	180	−85
PBT	240	15
PA 66	265	20 − 70
PA 6	225	20 − 70
PET	265	70
PTFE	330	−150
PC	—	150
polyphenylene sulfide	285	85
PEEK	330	140
polyether sulfone	—	190
amide-imide	—	290
polyimide	—	400
ABS (SAN/PAN)	−70	110
COC	—	70 − 180

$$\chi = 1 - e^{-kt^n} \quad (1)$$

$$k = \frac{\nu^3 N \pi}{3} \quad (2)$$

$$M_n = \frac{\sum_x N_x M_x}{\sum_x N_x} = \frac{\sum_x w_x}{\sum_x w_x / M_x} \quad (3)$$

$$M_w = \frac{\sum_x N_x M_x^2}{\sum_x N_x M_x} = \frac{\sum_x w_x M_x}{\sum_x w_x} \quad (4)$$

$$M_z = \frac{\sum_x N_x M_x^3}{\sum_x N_x M_x^2} = \frac{\sum_x w_x M_x^2}{\sum_x w_x M_x} \quad (5)$$

$$M_v = \sqrt[a]{\frac{\sum_x N_x M_x^{1+a}}{\sum_x N_x M_x}} \quad (6)$$

$$T_g = T_g^\infty - \frac{K}{M_n} \quad (7)$$

$$\chi = \frac{\Delta H_m - \Delta H_c}{\Delta H_m^{\text{ref}}} \cdot 100 \quad (8)$$

$$t = A \cdot e^{\frac{E_{\text{iso}}}{2.303 \cdot RT}} \rightarrow \log t = A + \frac{E_{\text{iso}}}{2.303 \cdot RT} \quad (9)$$

$$\text{rate} = A \cdot e^{\frac{-E_{\text{dyn}}}{2.303 \cdot RT}} \rightarrow \log \text{rate} = A - \frac{E_{\text{iso}}}{2.303 \cdot RT} \quad (10)$$

$$p_{\text{gel,C}} = \frac{2}{\bar{f}} \quad (11)$$

$$p_{\text{gel,FS}} = \frac{1}{\bar{f} - 1} \quad (12)$$

$$\bar{f} = \frac{f_{\text{iso}} \cdot \text{MW}_{\text{eq,iso}} + f_{\text{alcohol}} \cdot \text{MW}_{\text{eq,alc}}}{\text{MW}_{\text{eq,iso}} + \text{MW}_{\text{eq,alc}}} \quad (13)$$

