

# Download File PDF Transport Processes And Separation Process Principles Solution Manual Geankoplis

#Jenny



Finally I get this ebook, thanks for all these I can get now!

#Rio



Cool! I'am really happy

#Markus Jensen



I did not think that this would work, my best friend showed me this website, and it does! I get my most wanted eBook

#Hun Tsu



wtf this great ebook for free?!

#Che Salsa



My friends are so mad that they do not know how I have all the high quality ebook which they do not!

#Diego Butler



so many fake sites. this is the first one which worked! Many thanks

PART I - TRANSPORT PROCESSES: MOMENTUM, HEAT, AND MASS

Q.2-1)  
Eq. (1.3-4)  $T = 253.2 = ^\circ\text{C} + 273.15$   $^{\circ}\text{C} = 900.0 = [^{\circ}\text{F}]$   
Eq. (1.3-2)  $^{\circ}\text{C} = 1.8(^{\circ}\text{F} - 32)$   $^{\circ}\text{F} = [174^{\circ}\text{F}]$   
Eq. (1.3-3)  $^{\circ}\text{R} = ^{\circ}\text{F} + 460 = 174 + 460$   $^{\circ}\text{R} = [634^{\circ}\text{R}]$

(1.2-2)  
Eq. (1.3-2)  $^{\circ}\text{C} = (1/1.8)(^{\circ}\text{F} - 32) = (1/1.8)(185 - 32) = [68.33^{\circ}\text{C}]$   
Eq. (1.3-4)  $^{\circ}\text{R} = ^{\circ}\text{C} + 273.15 = 68.33 + 273.15 = [341.5^{\circ}\text{R}]$   
Eq. (1.3-3)  $^{\circ}\text{R} = ^{\circ}\text{F} + 460 = 152 + 460 = [612^{\circ}\text{R}]$

(1.3-1)  $MW(\text{O}_2) = 32.00$   $MW(\text{N}_2) = 28.02$   
 $MW(\text{air}) = 0.21(32.00) + 0.79(28.02) = [28.9 \text{ kg/kg mol}]$

(1.3-2)  
 $2\text{CO} + \text{O}_2 \rightarrow 2\text{CO}_2$   $MW(\text{CO}) = 28.01$   $MW(\text{O}_2) = 32.00$   $MW(\text{CO}_2) = 44.01$   
 $MW(\text{air}) = 1.00$   $100(32.00) = 32.0 \text{ kg O}_2$   $200(44.0) = 88.0 \text{ kg CO}_2$

(1.3-3)

Gas	g	MW	g/mol	Mol frac
N <sub>2</sub>	20	28.02	0.7128	0.1642 mol frac
O <sub>2</sub>	80	32.00	2.5128	0.2990
CO <sub>2</sub>	48	44.01	1.0935	0.2382
Total	148		4.3291 mol	1.0000

Average mol wt =  $\frac{148 \text{ g}}{4.3291 \text{ mol}} = [34.2 \text{ g/g mol}]$   
[34.2 kg/kg mol]

[Download PDF version of :](#)

**Transport Processes And Separation Process Principles Solution Manual Geankoplis**