

Calculating Molar Mass Review

Molar Mass $V_2(SO_4)_3$

V: 2 x 50.94 g/mol

S: 3 x 32.07 g/mol

O: 12 x 16.00 g/mol

$V_2(SO_4)_3$: 390.09 g/mol

Remember

$(SO_4)_3 = 3 "SO_4"$

$(SO_4)_3$

↪

S: 1 · 3 = 3

O: 4 · 3 = 12

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Molar Mass Conversions (Mol and Mass)

Molar Mass

Mass (g) of 1 mol
of a substance.

(1 mol = 6.022×10^{23} particles)

MM = g/mol

Molar Mass Conversion

$$MM = \frac{\text{Mass A (g)}}{1 \text{ mol A (mol)}}$$

MM = — g/mol

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Molar Mass T-Chart Conversion Method

Start (unit A)	Conversion B	<u>Unit A (starting)</u> Mass (g) <u>or</u> Mol* (mol)
	Conversion A	Convert (change) <u>Unit B (final)</u> Mass (g) <u>or</u> Mol (mol)*
	molar mass = end (unit B)	* Amount

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Molar Mass T-Chart Conversion Method

Two main "T-Charts"

mol A → mass A	
Start mol A	MM g A
1 mol A	
= ___ g A	

mass A → mol A	
start g A	1 mol A
MM g A	
= ___ mol A	

Show all units (g or mol) and labels (A) in T-Chart

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