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# AS CHEMISTRY

7404

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## Data Sheet

This Data Sheet is provided with AQA AS Chemistry question papers.

**Table A**

Infrared absorption data

<b>Bond</b>	<b>Wavenumber / <math>\text{cm}^{-1}</math></b>
N—H (amines)	3300–3500
O—H (alcohols)	3230–3550
C—H	2850–3300
O—H (acids)	2500–3000
$\text{C}\equiv\text{N}$	2220–2260
C=O	1680–1750
C=C	1620–1680
C—O	1000–1300
C—C	750–1100

# The Periodic Table of the Elements

	1	2	3	4	5	6	7	0	
(1)	6.9 <b>Li</b> lithium 3	9.0 <b>Be</b> beryllium 4	23.0 <b>Na</b> sodium 11	39.1 <b>K</b> potassium 19	85.5 <b>Rb</b> rubidium 37	132.9 <b>Cs</b> caesium 55	[223] <b>Fr</b> francium 87	173.1 <b>Yb</b> ytterbium 70	175.0 <b>Lu</b> lutetium 71
(2)									
(3)									
(4)									
(5)									
(6)									
(7)									
(8)									
(9)									
(10)									
(11)									
(12)									
(13)									
(14)									
(15)									
(16)									
(17)									
(18)									

  

relative atomic mass	symbol	name	atomic (proton) number
1.0	<b>H</b>	hydrogen	1
4.0	<b>He</b>	helium	2
20.2	<b>Ne</b>	neon	10
39.9	<b>Ar</b>	argon	18
79.9	<b>Kr</b>	krypton	36
131.3	<b>Xe</b>	xenon	54
222	<b>Rn</b>	radon	86

  

Elements with atomic numbers 112-116 have been reported but not fully authenticated

140.1	<b>Ce</b>	cerium	58
140.9	<b>Pr</b>	praseodymium	59
144.2	<b>Nd</b>	neodymium	60
150.4	<b>Sm</b>	samarium	62
152.0	<b>Eu</b>	europium	63
157.3	<b>Gd</b>	gadolinium	64
158.9	<b>Tb</b>	terbium	65
162.5	<b>Dy</b>	dysprosium	66
164.9	<b>Ho</b>	holmium	67
167.3	<b>Er</b>	erbium	68
168.9	<b>Tm</b>	thulium	69
173.1	<b>Yb</b>	ytterbium	70
175.0	<b>Lu</b>	lutetium	71
232.0	<b>Th</b>	thorium	90
231.0	<b>Pa</b>	protactinium	91
238.0	<b>U</b>	uranium	92
237	<b>Np</b>	neptunium	93
244	<b>Pu</b>	plutonium	94
243	<b>Am</b>	americium	95
247	<b>Cm</b>	curium	96
247	<b>Bk</b>	berkelium	97
251	<b>Cf</b>	californium	98
252	<b>Es</b>	einsteinium	99
257	<b>Fm</b>	fermium	100
258	<b>Md</b>	mendeleevium	101
259	<b>No</b>	nobelium	102
262	<b>Lr</b>	lawrencium	103

\* 58 – 71 Lanthanides

† 90 – 103 Actinides