

**Table 3.1 Homolytic Bond Dissociation Energies  $Y-Z \rightarrow Y\cdot + \cdot Z$** 

$DH^\circ$			$DH^\circ$		
Bond	kcal/mol	kJ/mol	Bond	kcal/mol	kJ/mol
$CH_3-H$	105	439	$H-H$	104	435
$CH_3CH_2-H$	101	423	$F-F$	38	159
$CH_3CH_2CH_2-H$	101	423	$Cl-Cl$	58	242
$(CH_3)_2CH-H$	99	414	$Br-Br$	46	192
$(CH_3)_3C-H$	97	406	$I-I$	36	150
			$H-F$	136	571
$CH_3-CH_3$	88	368	$H-Cl$	103	432
$CH_3CH_2-CH_3$	85	355	$H-Br$	87	366
$(CH_3)_2CH-CH_3$	84	351	$H-I$	71	298
$(CH_3)_3C-CH_3$	80	334			
			$CH_3-F$	108	451
$H_2C=CH_2$	174	728	$CH_3-Cl$	84	350
$HC\equiv CH$	231	966	$CH_3CH_2-Cl$	82	343
			$(CH_3)_2CH-Cl$	81	338
$HO-H$	119	497	$(CH_3)_3C-Cl$	79	330
$CH_3O-H$	104	435	$CH_3-Br$	70	294
$CH_3-OH$	92	387	$CH_3CH_2-Br$	69	289
			$(CH_3)_2CH-Br$	68	285
			$(CH_3)_3C-Br$	63	264
			$CH_3-I$	57	239
			$CH_3CH_2-I$	55	230