

0.0.1 Sauerstoffhaltige Verbindungen im Überblick

Verbindungs- klasse	Allgemeine Struktur	Funktionelle Gruppe	Beispiel
Alkanole	$R-\overline{O}H$	$-\overline{O}-H$ (Hydroxygruppe)	$CH_3-\overline{O}H$ (Methanol)
Ether	$R-\overline{O}-R_1$	$-\overline{C}-\overline{O}-\overline{C}-$ (Etherbrücke)	$CH_3-\overline{O}-CH_3$ (Dimethylether)
Alkanale	$R-\overline{C} \begin{array}{l} // \overline{O} \\ \backslash \\ H \end{array}$	$-\overline{C} \begin{array}{l} // \overline{O} \\ \backslash \\ H \end{array}$ (Carbonyl-/Aldehydgruppe)	$H-\overline{C} \begin{array}{l} // \overline{O} \\ \backslash \\ H \end{array}$ (Methanal)
Alkanone	$R \begin{array}{l} \backslash \\ C=O \\ / \\ R_1 \end{array}$	$-\overline{C} \begin{array}{l} // \overline{O} \\ \backslash \\ \overline{C} \end{array}$ (Carbonyl-/Ketogruppe)	$\begin{array}{c} /O\backslash \\ \quad \quad \\ -C- C -C- \\ \quad \quad \\ \text{(Propanon)} \end{array}$
Carbonsäuren	$R-\overline{C} \begin{array}{l} // \overline{O} \\ \backslash \\ \overline{O}H \end{array}$	$-\overline{C} \begin{array}{l} // \overline{O} \\ \backslash \\ \overline{O}H \end{array}$ (Carboxygruppe)	$H-\overline{C}OOH$ (Methansäure)
Ester	$R-\overline{C} \begin{array}{l} // \overline{O} \\ \backslash \\ \overline{O}-R_1 \end{array}$	$-\overline{C} \begin{array}{l} // \overline{O} \\ \backslash \\ \overline{O}-\overline{C}- \end{array}$ (Estergruppe)	$\begin{array}{c} /O\backslash \\ \quad \quad \\ -C-\overline{O}- C - \\ \\ \text{(Methylmethanoat)} \end{array}$