

**VIII.C ALDEHYDES (RCHO)**

Aldehydes have the family ending 'al' and are named in a similar way to carboxylic acids. Just like the acids, the aldehyde group must be the end of a chain. Thus, the position of the aldehyde group in is not listed in the name, if it is the parent group.

**EXCEPTIONS**

1. If the aldehyde is NOT the parent group then its position must be numbered.
2. If a molecule contains two aldehydes, then the position of both groups are listed.

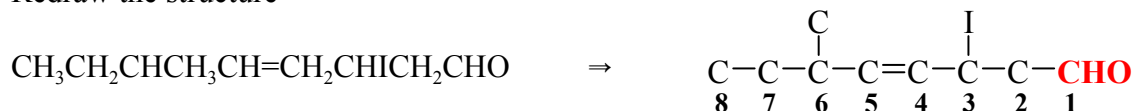
If the aldehyde is a substituent, *i.e.*, if the molecule is a carboxylic acid or a carboxylic acid derivative, the prefix for the aldehyde group is 'oxo'. Finally, if the aldehyde is a substituent on the longest chain, it is called a formyl group.

**Example**

2. Give the IUPAC name for  $\text{CH}_3\text{CH}_2\text{CHCH}_3\text{CH}=\text{CHCHICH}_2\text{CHO}$

**OBSERVATIONS**

Redraw the structure



Fill out the template

	<b>OBSERVATION</b>	<b>IMPLICATION</b>
Parent Group and Site	Aldehyde	-al
Longest Carbon Chain/Ring	8 Carbons	oct...
# C=C or C≡C bonds and Site	1 C=C at C-4	4-octen
Final Word		4-octenal
Substituents and Sites	Iodine at C-3 CH <sub>3</sub> at C=6	3-iodo 6-methyl
Alphabetizing substituents		3-iodo-6-methyl

**SOLUTION** Compound is: 3-iodo-6-methyl-4-octenal