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PRAYOGX

Uses of Aldehydes & Ketones



years later, no decay. Why?

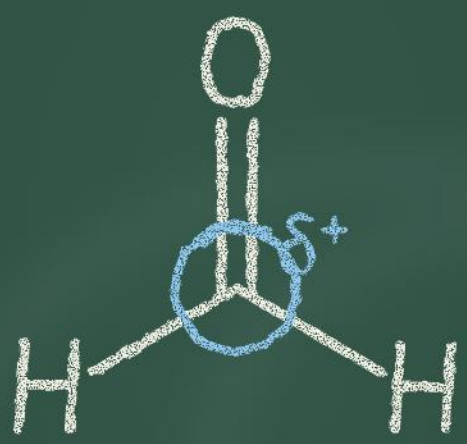
40% HCHO in water

aldehydes & ketones: where?

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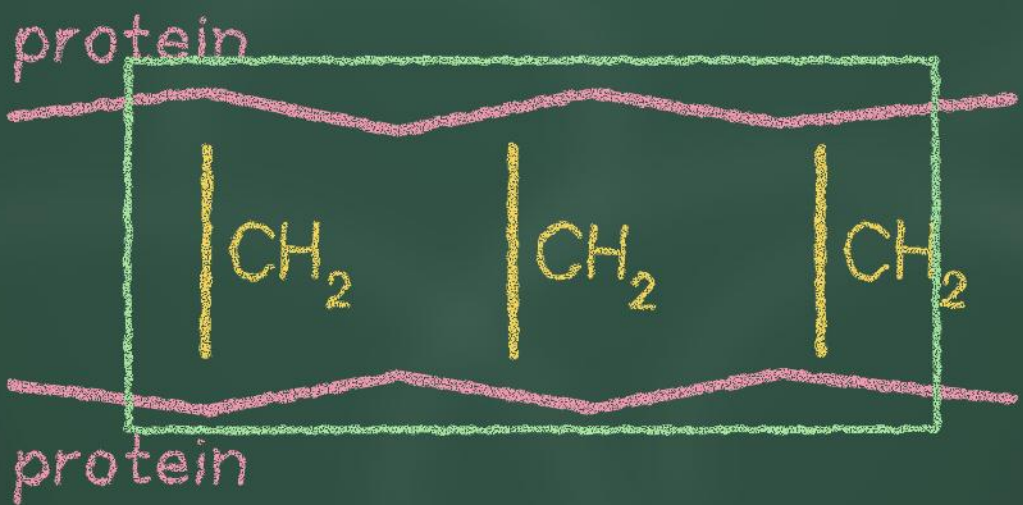
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Uses of Aldehydes & Ketones



HCHO: the smallest aldehyde

no alkyl group to shield the C



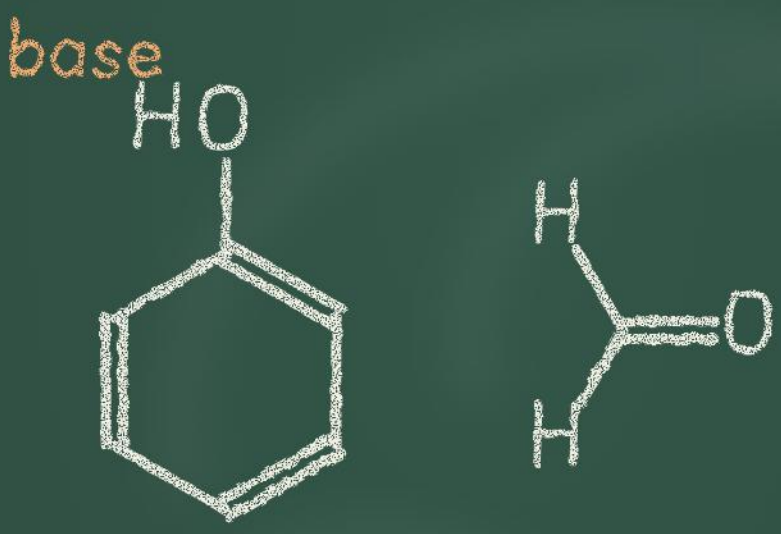
microbes cannot digest it

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Uses of Aldehydes & Ketones

Bakelite, step 1

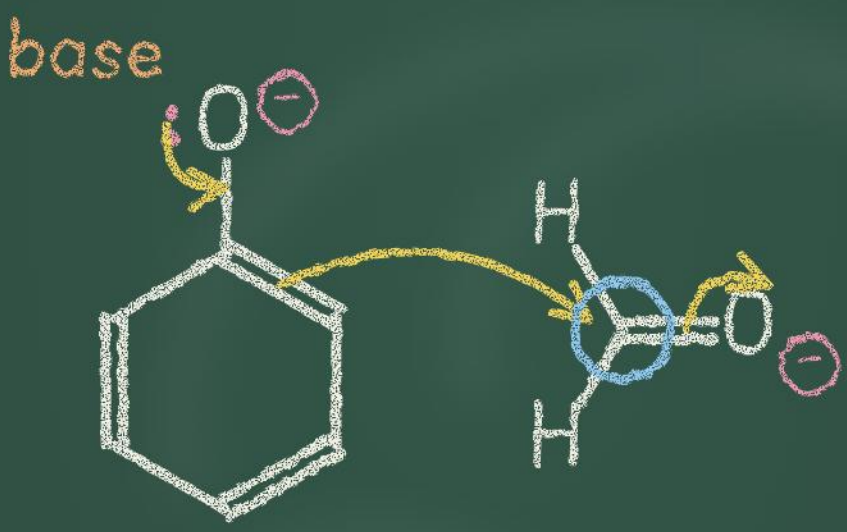


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Uses of Aldehydes & Ketones

Bakelite, step 1



ring C=C attacks the C (ortho)

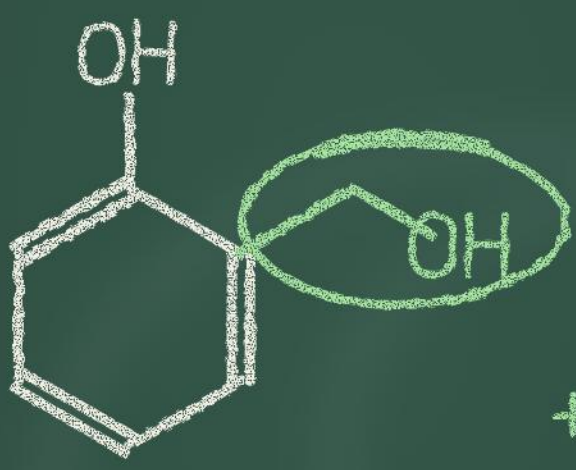
C=O pair moves onto O

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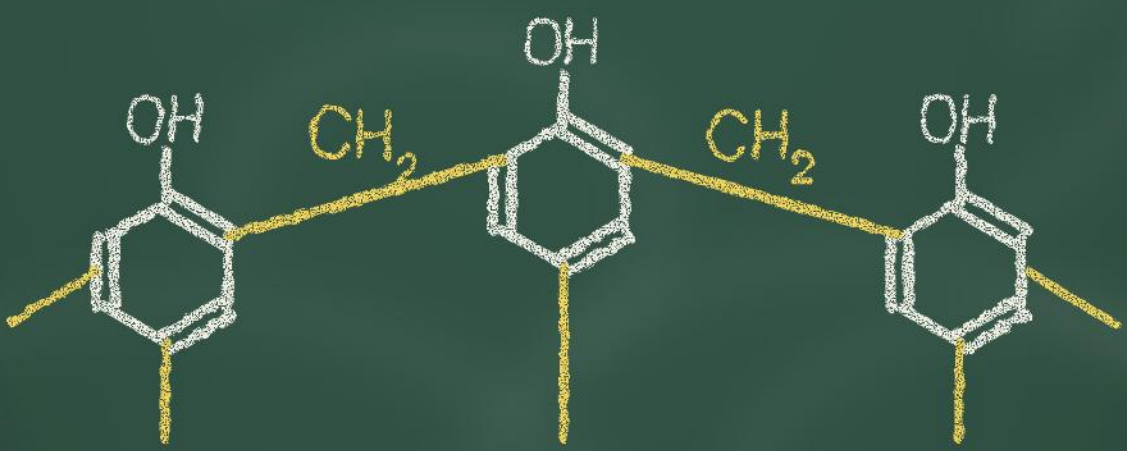
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Uses of Aldehydes & Ketones

H^+ shuffle



+ CH_2OH



Bakelite

switches, handles

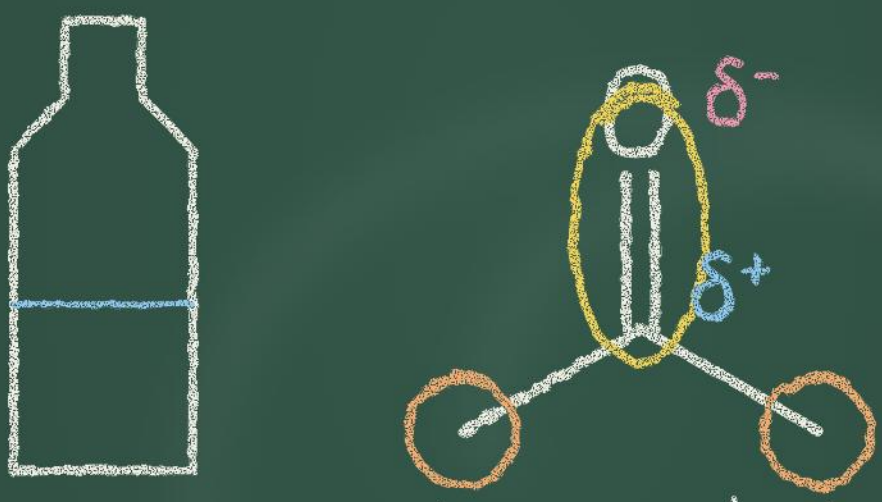
urea + HCHO → glues

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Uses of Aldehydes & Ketones

nail polish remover



acetone: a ketone

CH_3 ends: non-polar

polar part: mixes with water

non-polar part: dissolves oil, paint



ethyl methyl ketone

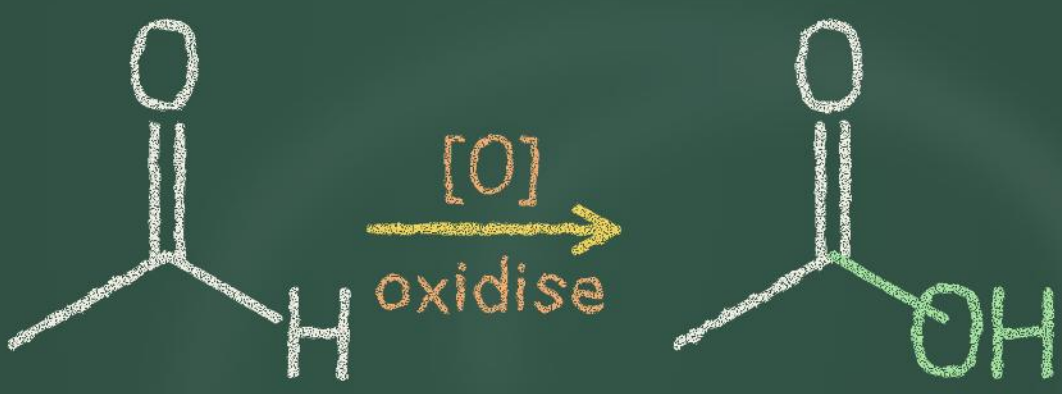
industrial solvents

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Uses of Aldehydes & Ketones

a starting material



acetaldehyde → acetic acid: vinegar

↓

ethyl acetate

polymers

drugs

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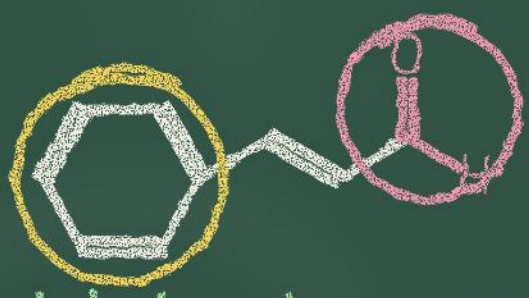
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Uses of Aldehydes & Ketones

smells & flavours



vanillin · vanilla



cinnamaldehyde · cinnamon



benzaldehyde · almond

ring + CHO

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Uses of Aldehydes & Ketones

C=O in daily life

HCHO ⟶ formalin, Bakelite

CH_3CHO ⟶ acetic acid

acetone ⟶ solvent

ring + CHO ⟶ smells, flavours

smells → plastics