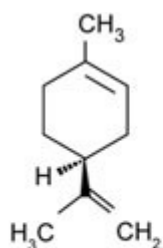
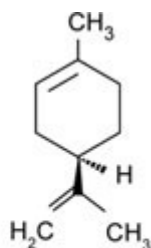


# Properties of stereoisomers



(R) - (+) - Limonene



(S) - (-) - Limonene

Limonene is a terpene present in orange and lemon oils. The enantiomers of limonene have markedly different odours – unscrew the tops of the bottles and sniff.

## Questions

1. Would you expect the two stereoisomers of limonene to behave differently in their:

- reaction with bromine;
- reduction with hydrogen;
- melting point;
- boiling point;
- infrared spectrum;
- effect on plane of polarisation of plane-polarised light;
- combustion; and
- mass spectrum.

Explain your answers.

## Health & Safety

Students must wear eye protection if carrying out steam distillation. Not needed for sniffing the stereoisomers.

## Credits

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*Health & safety checked May 2018*

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