Photocyclization
of 2-azidobenzophenone

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IR spectrum of 2-azidobenzophenone in nujol mull
Mass-spectrum of 3-phenilantranil
IR spectrum of 9(10H)-acridone in nujol mull.

[Graph showing absorption peaks at various wavenumbers]
UV-Vis Absorption Spectrum of 9(10H)-acridone in ethanol

9,10-Dihydro-9-oxoacridine

UV/VIS SPECTRUM

Logarithm epsilon

Wavelength (nm)

NIST Chemistry WebBook (http://webbook.nist.gov/chemistry)
The thermolysis of 2-azidobenzophenone

1. \( \text{1} \rightarrow \text{2} \) at 140 °C for 25 min.

2. \( \text{2} \rightarrow \text{3} \) at 200 °C for 10 h.

Chemical structures and reactions are shown in detail.
The photolysis of 2-azidobenzoic acid and its esters

\[
\text{X} = \text{OH, OMe, OEt}
\]

Photochemical formation of acridone
Assumed scheme of the photolysis of 2-azidobenzophenone
The singlet photolysis of 2-azidobenzophenone

1 \[\xrightarrow{h\nu \text{ or } -N_2} \]
2
3
The triplet photolysis of 2-azidobenzophenone

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\[ \text{N} \]

\[ \text{N} \]

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