# Article information:

Characteristics and hazards of the cinnamaldehyde oxidation process - RSC Advances (RSC Publishing)  
<https://pubs.rsc.org/en/content/articlelanding/2020/ra/c9ra10820c>

# Article summary:

1. The pressure and temperature behavior of the cinnamaldehyde oxidation process was determined using a custom-designed mini closed pressure vessel test (MCPVT).

2. The results showed that cinnamaldehyde was stable under nitrogen atmosphere but very unstable under oxygen atmosphere.

3. The main products of cinnamaldehyde oxidation are acetaldehyde, benzaldehyde, phenylacetaldehyde, acetophenone, 2-hydroxyphenyl acetone, cinnamaldehyde epoxide, benzoic acid, and cinnamic acid.

# Article rating:

Appears well balanced: The article presents the information in a reliable and balanced way, without biases and prejudices. The claims made in the article are well supported and, where applicable, all sides of the argument are given opportunity to present their point of view. The article appears trustworthy and reliable.

# Article analysis:

The article “Characteristics and Hazards of the Cinnamaldehyde Oxidation Process” published in RSC Advances (RSC Publishing) is an informative and reliable source of information on the characteristics and hazards associated with the oxidation process of cinnamaldehyde. The article provides a comprehensive overview of the research conducted on the oxidation process of cinnamaldehydes as well as its potential hazards. It also presents detailed information on the reaction conditions used to study the oxidation process as well as its kinetics and thermal stability.

The article is written in a clear and concise manner which makes it easy to understand for readers from all backgrounds. Furthermore, it is supported by relevant evidence such as gas chromatography-mass spectrometry (GC-MS) analysis results which provide further credibility to its claims. Additionally, it provides detailed information on the possible explosion conditions associated with the oxidation process which can be useful for those working with or handling cinnamaldehydes in their daily activities.

The article does not present any biases or one-sided reporting as it presents both sides equally when discussing potential risks associated with the oxidation process of cinnamaldehydes. Furthermore, it does not contain any promotional content or partiality towards any particular product or method used in studying this topic.

In conclusion, this article is a reliable source of information on the characteristics and hazards associated with the oxidation process of cinnamaldehydes due to its clear writing style and lack of bias or promotional content.

# Topics for further research:

* Cinnamaldehyde oxidation kinetics
* Cinnamaldehyde oxidation thermal stability
* Cinnamaldehyde oxidation reaction conditions
* Cinnamaldehyde oxidation hazards
* GC-MS analysis of cinnamaldehyde oxidation
* Explosion conditions of cinnamaldehyde oxidation

# Report location:

<https://www.fullpicture.app/item/96fb7c928c466c8fae45387a963c1465>