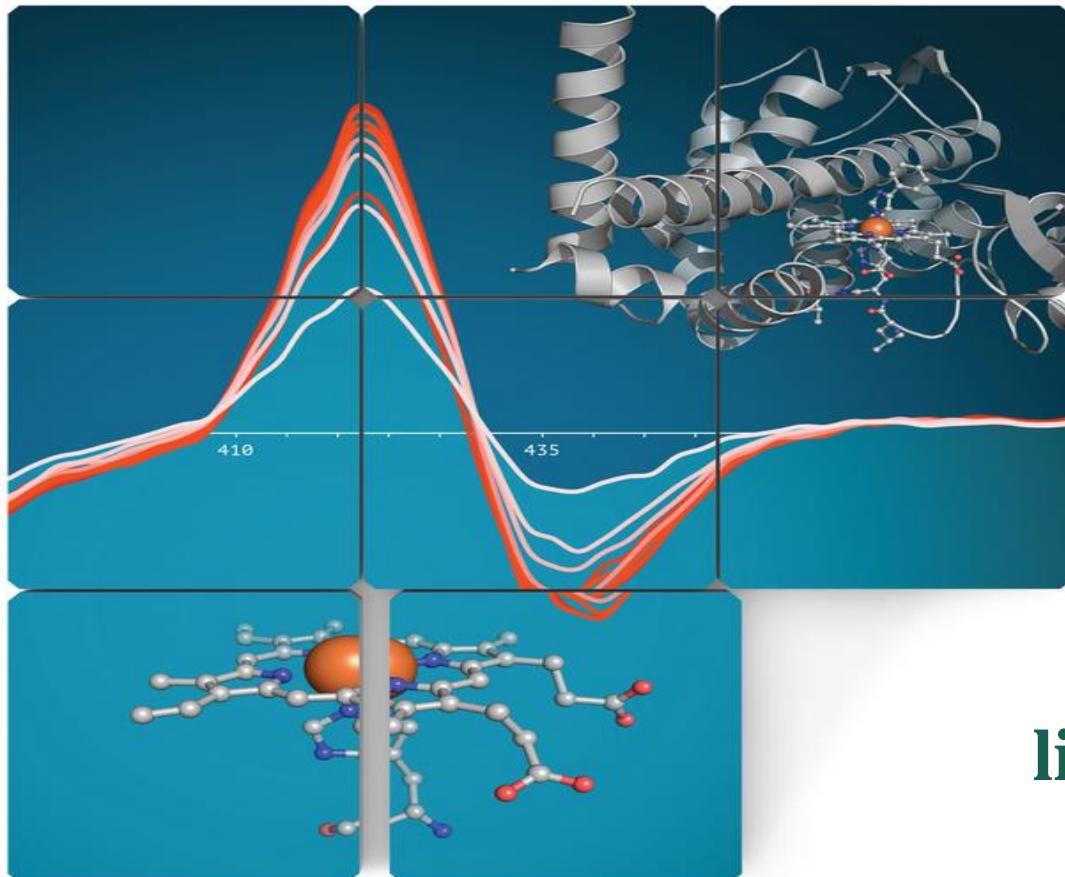


# 化学研究中的数据与事实检索



清华大学图书馆

林佳

[linjia@lib.tsinghua.edu.cn](mailto:linjia@lib.tsinghua.edu.cn)

# 主要内容



为何需要数据事实检索



各类参考工具及其特点



如何检索所需数据事实



交流

# I. 为何需要数据与事实检索

## The Nobel Prize in Physiology or Medicine 2015



III. N. Elmehed. © Nobel Media AB 2015.

William C. Campbell  
Prize share: 1/4



III. N. Elmehed. © Nobel Media AB 2015.

Satoshi Ōmura  
Prize share: 1/4



III. N. Elmehed. © Nobel Media AB 2015.

Youyou Tu  
Prize share: 1/2

Youyou Tu

Born: 1930, Zhejiang Ningpo, China

Affiliation at the time of the  
award: China Academy of  
Traditional Chinese Medicine,  
Beijing, China

Prize motivation: "for her  
discoveries concerning a novel  
therapy against Malaria"

Prize share: 1/2



# 如何查找

- 屠呦呦简历
- 第一时间找到其获诺奖演讲视频及幻灯片
- 青蒿素、疟疾的英文拼写
- 青蒿素和双氢青蒿素的  
◆ 系统命名、CASRN
- ◆ 结构
- ◆ 理化性质
- ◆ 光谱数据
- ◆ 药理毒性
- ◆ 药物代谢动力学数据
- ◆ 人工合成方法
- ◆ 药品的研制、生产、使用、  
管理规范

## 2. 各类参考工具及其特点

参考工具

Reference Works

Reference Tools

Reference Book

用于查找特定信息而不是供系统学习某方面  
知识的信息资源

## 2. 各类参考工具及其特点

### 参考工具常见形式

- 百科全书
- 辞典（词典）
- 年鉴
- 手册
- 法律法规及案例
- 技术标准
- 传记资料
- 表谱
- 地图
- 指南
- 名录
- .....

## 2. 各类参考工具及其特点

### 参考工具常见形式

- 印刷型工具书
- 参考工具数据库
- 网站
- 搜索引擎
- .....

O1 数学

O3 力学

O4 物理学

O6 化学

O61 无机化学

O611 化学元素与无机化合物

O611.2 结构

O611.6 无机化合物

O611.66 复盐

O611.7 同位素及同位素的化合物

O612 周期系统各族元素

O62 有机化学

O63 高分子化学 (高聚物)

O65 分析化学

O7 晶体学

## 2. 各类参考工具及其特点

### 《中国图书馆分类法》(第五版) —— 总论复分表

- -0 理论与研究方法
- -1 概况、现状、进展
- -2 机构、团体、会议
- -3 研究方法、工作方法
- -4 教育与普及
- -5 丛书、文集、连续出版物
- -6 参考工具书
- -8 通用概念

- 6 参考工具书
- 61 名词术语、词典、百科全书
- 62 手册、名录、指南、一览表、年表
- 63 产品目录、产品样本、产品说明书
- 64 表解、图解、图册、谱录、数据、公式、地图
- 65 条例、规程、标准
- 66 统计资料
- 67 参考资料

O62-6\* 有机化学各类参考工具

-43 习题集

## 2. 各类参考工具及其特点

### 百科全书

- 一切知识门类或某一知识门类概述性的著述。
- “百科”，言知识之广；“全书”，言内容之博。
- 供人们查检**知识和事实**资料，还具有扩大读者知识视野和帮助人们系统求知的教育作用。常被誉为“没有围墙的大学”

*encyclopædia; encyclopedia; encyclopaedia*

## 2. 各类参考工具及其特点

### 百科全书

- 印刷版
- 数字版

- ✓ 综合百科  
收集、整理人类所积累的一切学科知识，涉及各个领域，兼收并蓄。
- ✓ 专科大全  
更加深入地揭示某一学科领域或某一学术门类的知识。

## 2. 各类参考工具及其特点

### 百科全书

清华大学图书馆 馆藏目录

English Version 图书馆主页 馆藏目录 | 咨询台 | 联系我们

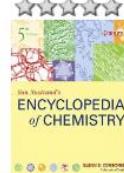
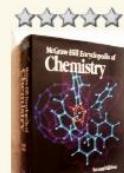
重新开始 返回列表 限定/排序 其他检索 (历史) 中·半简

索书号 O6-61 全部馆藏 出版时间 排序 检索

限定为: 题名关键字 encyclopedia

保存标记记录 保存本页所有记录

索书号 (1-9 共 9)

1	<input type="checkbox"/> Van Nostrand's <u>encyclopedia of chemistry.</u> Hoboken, N.J. : Wiley-Interscience, c2005.	c2005 
2	<input type="checkbox"/> McGraw-Hill <u>encyclopedia of chemistry / Sybil P. Parker, editor in chief.</u> New York : McGraw-Hill, c1993.	c1993 

## 2. 各类参考工具及其特点

### 百科全书

关键字 ti:(encyclopedia and chem\*) 全部馆藏 检索

找到 65 条记录 按日期排序  
结果页 1 2 3 4 5 6 后一页

保存标记记录 保存本页所有记录

关键字 (1-12 共 65)

1	<a href="#">Innovations in Green Chemistry and Green Engineering [electronic resource] : Selected Entries from t</a> Anastas, Paul T. New York, NY : Springer New York : Imprint: Springer, 2013.	2013	 
2	<a href="#">中国化工产品大全 zhong guo hua gong chan pin da quan = = Encyclopedia of Chinese chemical pr</a> 北京 : 化学工业出版社, 2012	2012	 
3	<a href="#">Transport and Fate of Chemicals in the Environment [electronic resource] : Selected Entries from the</a> Gulliver, John S. New York, NY : Springer New York : Imprint: Springer, 2012.	2012	 

## 2. 各类参考工具及其特点

### 百科全书

SpringerLink

Search

Home • Contact Us

 » Download Book (PDF, 8415 KB)  Search within this book

Book 2013

### Innovations in Green Chemistry and Green Engineering

Selected Entries from the Encyclopedia of Sustainability Science and Technology

Editors: Paul T. Anastas, Julie B. Zimmerman  
ISBN: 978-1-4614-5816-6 (Print) 978-1-4614-5817-3 (Online)

 Download Book (PDF, 8415 KB)  Download Book (ePub, 3084 KB)

 Look Inside

Book Metrics

 Citations	5
 Readers	10
 Downloads	12K

Provided by Bookmetrix

Other actions

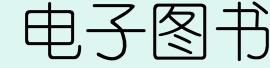
[» About this](#)  [Share](#)

Table of contents (10 chapters)

Front Matter

[» Download PDF \(38KB\)](#) Pages i-v

Chapter

Green Chemistry and Chemical Engineering, Introduction  
Robert A. Meyers, Paul T. Anastas, Julie B. Zimmerman  
[» Download PDF \(48KB\)](#) [» View Chapter](#) Pages 1-4

Chapter

Gas Expanded Liquids for Sustainable Catalysis  
Bala Subramaniam  
[» Download PDF \(691KB\)](#) [» View Chapter](#) Pages 5-36

## 2. 各类参考工具及其特点

### 百科全书

Encyclopedia  
Britannica Online

The screenshot shows the Britannica Academic homepage with a search bar containing "Tu Youyou". The main content area displays the article "Tu Youyou" with a blue header. The sidebar on the left includes links for Video, Images & Audio, Related Articles, Ebooks & More, Web Links, Article History, Contributors, Dictionary & Thesaurus, Workspace, and Widgets. The right side features sharing options like Get involved, Share, and Print.

**Tu Youyou**

Primary Contributor: **Kara Rogers**

ARTICLE from the Encyclopædia Britannica

**Tu Youyou**, (born December 30, 1930, Ningbo, Zhejiang province, China), Chinese scientist and phytochemist known for her isolation and study of the antimalarial substance qinghaosu, later known as **artemisinin**, one of the world's most-effective **malaria**-fighting drugs. For her discoveries, **Tu** received the 2015 **Nobel Prize** for Physiology or Medicine (shared with Irish-born American parasitologist **William Campbell** and Japanese microbiologist **Ōmura Satoshi**).

**Tu** studied at the department of pharmaceutics of Beijing Medical College. After earning a degree there in 1955, she was chosen to join the Institute of Materia Medica at the Academy of Traditional Chinese Medicine (later the China Academy of Chinese Medical Sciences). From 1959 to 1962, she participated in a full-time training course in the use of **traditional Chinese medicine** that was geared toward researchers with knowledge of Western medicine. The course provided a foundation for her later application of traditional Chinese medical knowledge to modern drug discovery.

During the **Vietnam War** (1954–75), **Tu** was appointed to lead Project 523, which sought to develop a treatment for malaria. The project was

欢迎 THLIB | 退出 | 注册 | 充值 | 使用帮助



# 中国大百科

中国大百科全书  
(Ed. 1) 数据库

高分子

高级检索  
浏览卷册

条头检索

全文检索

今日简明词条： 天赋观念   《诗光》   《水调歌头·明月几时有》

大百科出版社 | 关于我们 | 联系方式 | 版权声明

版权所有 北京百科在线网络出版有限公司

在线发行 同方知网(北京)技术有限公司

<http://ecph.cnki.net/>

## 2. 各类参考工具及其特点

### 词典（辞典）

- 印刷版
  - ✓ 语言对照
- 数字版
  - ✓ 专业术语（词汇、缩略语）

## 2. 各类参考工具及其特点

### 年鉴 (Year Book, Almanac, ....)

- 汇集年度重要时事、文献和统计资料，按年度连续出版的参考工具。
- 具有系统全面、客观正确以及浓缩精炼等特点。
- 通过年鉴，可查找国内国际时事、各部门各行业的进展、各学科各专业的研究动态、政府颁布的重要法规文献、逐年可比的统计数据等。

## 2. 各类参考工具及其特点

### 年鉴

- 印刷版                      ✓ 行业年鉴
- 数字版                      ✓ 机构年鉴
- ✓ 百科年鉴

## 2. 各类参考工具及其特点

年鉴

The screenshot shows the homepage of Tsinghua University Library. At the top right, there is a logo and the text "清华大学图书馆" (Tsinghua University Library) in Chinese and "Tsinghua University Library" in English. Below the logo, there are links for "English Version" and "图书馆主页". On the right side of the header, there is a red button labeled "馆藏目录" (Collection Catalog). The main search area features a search bar with the placeholder "关键字" (Key Word) and a dropdown menu set to "ti:年鉴" (ti:年鉴). Below the search bar are three orange buttons labeled "重新开始" (Reset), "修改检索式" (Modify Search Criterion), and "其他检索" (Other Search). To the left of the search area, there is a sidebar with a blue border containing the text "中国电子政务年鉴 zhong guo dian zi zheng wu nian jian. 2014 e-government yearboo" and "北京 : 社会科学文献出版社, 2015. 9".

2015中国房地产年鉴 2015 zhong guo fang di chan nian jian / 中国房地产研究会, 中国  
企

: 企业管理出版社 北京, 2015. 5 1

印刷版年鉴

国医年鉴 guo yi nian jian / 孙涛主编

: 中医古籍出版社 北京, 2015. 5 1

## 2. 各类参考工具及其特点

年鉴

The screenshot shows the CNKI website's yearbook search interface. On the left, there is a sidebar titled '文献分类目录' (Document Category Catalog) with a tree view of various industry categories like Agriculture, Mining, Manufacturing, Electricity, Gas, and Water Supply; Construction; Transportation; Information Transmission; Wholesale and Retail Trade; Accommodation and Catering; Finance; Real Estate; Leasing and Business Services; Scientific Research; and Education. At the top right, there is a search bar with dropdown menus for '检索' (Search), '高级检索' (Advanced Search), and '专业检索' (Professional Search). Below the search bar, there are checkboxes for selecting document types such as '总结报告' (Summary Report), '领导讲话' (Speech by Leader), '远景规划' (Prospective Planning), '事实类' (Factual), '法律法规类' (Law and Regulations), '统计公报' (Statistical Bulletin), '统计图表' (Statistical Chart), '文件' (Document), '标准' (Standard), '人物' (Person), '科研论文' (Research Paper), '大事记' (Chronicle), '图片' (Image), '机构' (Institution), '作品' (Work), and '其他' (Others). There is also a field for entering a title and a dropdown menu for '精确' (Exact). Below the search bar, there are dropdown menus for '从' (From) and '到' (To) years, and a dropdown for '年鉴级别' (Yearbook Level) with '全部' (All) selected. A large blue button labeled '检索' (Search) is at the bottom right. To the right of the search area, there is a box containing the text '中国年鉴网络出版总库(中国知网)'.

可分类浏览，可全文检索

## 2. 各类参考工具及其特点

### 手册 (handbook)

- 印刷版
  - ✓ 参数
  - ✓ 常数
  - ✓ 性能
  - ✓ .....
- 数字版

## 2. 各类参考工具及其特点

手册

印刷版手册

关键字  全部馆藏

找到 389 条记录 按日期排序 .  
结果页 1 2 3 4 5 6 7 8 9 10 11 ... 33 后一页

关键字 (1-12 共 389)

1 精细化工配方常用原料手册 Jing Xi Hua Gong Pei Fang Chang Yong Yuan Liao Shou Ce /  
侯滨  
侯滨  
北京 : 化学工业出版社, 2015

2 常用化工原料手册 chang yong hua gong yuan liao shou ce / 赵晨阳主编  
赵晨阳  
北京 : 化学工业出版社, 2015

关键字  全部馆藏

找到 169 条记录 按日期排序 .  
结果页 1 2 3 4 5 6 7 8 9 10 11 ... 15 后一页

59 The Handbook of Lithium-Ion Battery Pack Design : Chemistry, Components, Types and Terminology  
John T Warner  
: Elsevier Science, 2015

2 A handbook for DNA-encoded chemistry [electronic resource] : theory and applications for exploring c  
Hoboken, New Jersey : Wiley, [2014]

Chemical Structure of Pelagic Redox Interfaces [electronic resource] : Observation and Modeling / ed  
Yakushev, Evgeniy V.  
Berlin, Heidelberg : Springer Berlin Heidelberg : Imprint: Springer, 2013.

## 2. 各类参考工具及其特点

### 手册

The screenshot shows the Reaxys search interface. At the top, there is a red navigation bar with tabs: Query, Results, Synthesis Plans, History, Report, My Alerts, My Settings, and Help. Below the navigation bar is a search bar with placeholder text "e.g. Ask Reaxys about the substance 'Atenolol'". Underneath the search bar, there is a link "Smart searching with Ask Reaxys. See examples >". Below the search bar are several icons: Reactions, Substances, Literature, ReaxysTree, Physical, Spectra, Natural Product, and Advanced. A large modal window titled "Structure" is open. It contains a "selected query editor" section with a MarvinSketch logo and "by ChemAxon". There are two columns of search options: "As drawn", "Substructure", "on heteroatoms", "on all atoms", "Similarity" on the left, and "Include tautomers", "Ignore stereo", "No salts", "No mixtures", "No isotopes", "No charges", "No radicals", "No ring closures", and "Align results with query" on the right. At the bottom of the modal, there is a "More options" link. At the very bottom of the interface, there is a "Create Structure Template from Name" button.

Reaxys数据库，以德国化学会出版的“盖默林无机与金属有机化学手册”和“贝尔斯坦有机化学手册”为基础

## 2. 各类参考工具及其特点

### 法律法规、案例、判决文书

- 印刷版                      ✓ 不同法律层级
- 数字版                      ✓ 不同主题
- ✓ 不同颁布机关
- ✓ 不同效力状态
- ✓ .....

## 2. 各类参考工具及其特点

### 法律法规、案例、判决文书

各种法律法规数据库

The screenshot shows the Westlaw China website. At the top, there's a navigation bar with links to English, Content Description, Help, Contact Us, and Client Feedback. Below that is a secondary navigation bar with links to Home, Legal Rules, Judgments, Legal Specialties, Judgment Points, Commentaries, Contract Texts, Legal News, Legal Vocabulary, and Special Topic Modules. On the left, there's a sidebar for 'Legal Rules' with sections for 'Query' (containing fields for Title/Number/Issuing Authority, Full Text, and Search Mode), 'Browse' (with categories like Constitutional Law, Administrative Law, Judicial Interpretations, Local Laws, Party and Organization Documents, International Treaties, and more), and 'Topics' (with categories like Free Trade Zones, Bilateral Investment Agreements, and Civil Basis). The main content area is titled 'Query Results' and shows a search result for '危险化学品'. It displays 2827 results found. The first two results are listed: 1. '全国人民代表大会常务委员会关于批准《关于在国际贸易中对某些危险化学品和农药采用事先知情同意程序的鹿特丹公约》的决定 English Chinese-English' (Approved by the Standing Committee of the National People's Congress on December 29, 2004) and 2. '危险化学品安全管理条例 English Chinese-English' (Regulations on the Safety Management of Hazardous Chemicals, Approved by the State Council on March 2, 2011).

## 2. 各类参考工具及其特点

### 法律法规、案例、判决文书

The screenshot shows the Tsinghua University Database Navigation System interface. At the top, there is a logo and the text "清华大学数据库导航系统". Below the logo, there are links for "学术信息资源门户", "电子期刊导航", "资源动态", "校外访问", "多媒体资源", "中外文核心期刊", and "首 页". There is also a "版权公告" button. A search bar with the placeholder "按数据库名称检索:" and a "查找" button is present. Below the search bar, there is a link "按字顺浏览数据库: A B C D E F G H I J K L M N O P Q R S T U V W X Y Z 中文库". The main content area displays a table with 12 records. The columns are "资源名称", "年限范围", "资源类型", "访问方式", "资源简介", and "详细信息". The "资源类型" column for the first five entries is circled in red. The table rows are:

资源名称	年限范围	资源类型	访问方式	资源简介	详细信息
高校财经数据库—中国法律法规库	1949 -	法律/法规	登录出校	收集中华人民共和国自1949年以来的各类法律法规及条例案 例全文 (包括地方及行业法律法规)。...[更多]	<a href="#">more</a>
中国法律资源全互动数据库 (北大法意)		法律/法规	登录出校	是从建国至今最为完备的法规数据库之一。专门为司法机构、各行业、各领域的法律、法学工作者，以及法学院的师生提供专业系统的法...[更多]	<a href="#">more</a>
HeinOnline - Treaties and Agreements Library	1776 -	法律/法规		HeinOnline是美国著名法律期刊全文数据库，所收录期刊大多从创刊开始，是许多学术期刊回溯查询的重要资源。 HeinO...[更多]	<a href="#">more</a>
北大法宝 - 法律法规检索系统	1949 -	法律/法规	登录出校	收录自1949年起至今的法律法规，包括中央法规司法解释、地方法规规章、合同与文书范本、港澳台法律法规、中外条约、外国法律...[更多]	<a href="#">more</a>
Westlaw		法律/法规		Westlaw 是国际领先的法律检索数据库，发布于 1975 年。 经过 30 多年的发展，Westlaw? 已经成为世...[更多]	<a href="#">more</a>
HeinOnline - Code of Federal	1949 -	法律/		HeinOnline 's CFR coverage is comprehensive and	

各种法律法规数据库

## 2. 各类参考工具及其特点

### 技术标准 (standard)

- 对重复性的技术事项在一定范围内的统一规定。
- 经协商一致制定并经一个公认机构的批准。

## 2. 各类参考工具及其特点

### 技术标准

- 印刷版
  - 数字版
- ✓ 不同应用目的
  - ✓ 不同使用范围
  - ✓ 强制/推荐



# 中华人民共和国国家标准

GB/T 22388—2008

## 原料乳与乳制品中三聚氰胺检测方法

Determination of melamine in raw milk and dairy products

2008-10-07 发布

2008-10-07 实施

中华人民共和国国家质量监督检验检疫总局  
中国国家标准化管理委员会 发布

### 原料乳与乳制品中三聚氰胺检测方法

#### 1 范围

本标准规定了原料乳、乳制品以及含乳制品中三聚氰胺的三种测定方法，即高效液相色谱法(HPLC 法)、液相色谱-质谱法(LC-MS/MS 法)和气相色谱-质谱联用法[包括气相色谱-质谱法(GC-MS 法)、气相色谱-质谱/质谱法(GC-MS/MS 法)]。

本标准适用于原料乳、乳制品以及含乳制品中三聚氰胺的定量测定；液相色谱-质谱法、气相色谱-质谱联用法(包括气相色谱-质谱/质谱法)同时适用于原料乳、乳制品以及含乳制品中三聚氰胺的定性确认。

本标准高效液相色谱法的定量限为 2 mg/kg，液相色谱-质谱/质谱法的定量限为 0.01 mg/kg，气相色谱-质谱法的定量限为 0.05 mg/kg(其中气相色谱-质谱/质谱法的定量限为 0.005 mg/kg)。

#### 2 规范性引用文件

下列文件中的条款通过本标准的引用而成为本标准的条款。凡是注日期的引用文件，其随后所有的修改单(不包括勘误的内容)或修订版均不适用于本标准，然而，鼓励根据本标准达成协议的各方研究是否可使用这些文件的最新版本。凡是不注日期的引用文件，其最新版本适用于本标准。

GB/T 6682 分析实验室用水规格和试验方法(GB/T 6682—2008, ISO 3696:1987, MOD)

#### 3 第一法 高效液相色谱法(HPLC 法)

##### 3.1 原理

试样用三氯乙酸溶液-乙腈提取，经阳离子交换固相萃取柱净化后，用高效液相色谱测定，外标法定量。

##### 3.2 试剂与材料

除非另有说明，所有试剂均为分析纯，水为 GB/T 6682 规定的一级水。

3.2.1 甲醇：色谱纯。

3.2.2 乙腈：色谱纯。

3.2.3 氨水：含量为 25%~28%。

3.2.4 三氯乙酸。

3.2.5 柠檬酸。

3.2.6 辛烷磺酸钠：色谱纯。

3.2.7 甲醇水溶液：准确量取 50 mL 甲醇和 50 mL 水，混匀后备用。

3.2.8 三氯乙酸溶液(1%)：准确称取 10 g 三氯乙酸于 1 L 容量瓶中，用水溶解并定容至刻度，混匀后备用。

3.2.9 氨化甲醇溶液(5%)：准确量取 5 mL 氨水和 95 mL 甲醇，混匀后备用。

3.2.10 离子对试剂缓冲液：准确称取 2.10 g 柠檬酸和 2.16 g 辛烷磺酸钠，加入约 980 mL 水溶解，调节 pH 至 3.0 后，定容至 1 L 备用。

3.2.11 三聚氰胺标准品：CAS 108-78-01，纯度大于 99.0%。

3.2.12 三聚氰胺标准储备液：准确称取 100 mg(精确到 0.1 mg) 三聚氰胺标准品于 100 mL 容量瓶中，用甲醇水溶液(3.2.7)溶解并定容至刻度，配制成浓度为 1 mg/mL 的标准储备液，于 4 °C 避光保存。

## 2. 各类参考工具及其特点

### 技术标准

标准数据库  
(中国知网)

手机版 | English | 网站地图 | 帮助中心 欢迎 清华大学 的朋友！ 我的机构馆 [退出] | 充值中心 | 购买知网卡 | 首页

**Cnki 中国知网 cnki.net**

标准  国家标准全文/ 行业标准全文/ 国内外标准题录

文献分类目录

中标分类 国标分类 学科导航

全选 清除

+ 综合  
+ 农业、林业  
+ 医药、卫生、劳动保护  
+ 矿业  
+ 石油  
+ 能源、核技术  
+ 化工  
+ 冶金  
+ 机械  
+ 电工  
+ 电子元器件与信息技术  
+ 通信、广播  
+ 仪器、仪表  
+ 土木、建筑  
+ 建材  
+ 公路、水路运输  
+ 铁路  
+ 车辆  
+ 船舶

检索 高级检索 专业检索

输入检索条件：

（标准名称 三聚氰胺 并含 精确）  
并且 （标准名称 检测 或含 测定 精确）

发布日期：从 [ ] 到 [ ]  
实施日期：从 [ ] 到 [ ]

仅检索有全文文献 搜索 结果中检索

分组浏览：来源数据库 学科 年 研究层次

2011(7) 2010(2) 2009(2) 2008(6) 2007(1) 2000(2) 1999(2) 1995(1) 1989(1) 1978(1) 1977(1) X

排序：主题排序 更新日期 每页记录数：10 20 50

(0) 清除 导出 / 参考文献 分析 / 阅读 找到 26 条结果 1/2 下一 用户建议 用户交流

	标准名称	标准号	更新日期	来源	分	
1	原料乳与乳制品中三聚氰胺检测方法	GB/T 22388-2008	2009-07-23	国家标准		
2	原料乳中三聚氰胺快速检测 液相色谱法	GB/T 22400-2008	2009-07-23	国家标准		
3	植物源产品中三聚氰胺、三聚氰酸一酰胺、三聚氰酸二酰胺和三聚氰酸的测定 气相色谱-质谱法	GB/T 22288-2008	2009-07-23	国家标准		
4	食品接触材料 高分子材料 食品模拟物中2,4,6-三氨基-1,3,5-三嗪(三聚氰胺)的测定 高效液相色谱法	GB/T 23296.15-2009	2009-11-18	国家标准		
5	三聚氰胺甲醛模塑制品中可提取甲醛测定方法	GB/T 11996-1989	2008-09-16	中国标准		
6	饲料中三聚氰胺的测定	NY/T 1372-2007	2008-09-16	中国标准		
7	三聚氰胺甲醛模塑制品中可提取甲醛测定方法	HG/T 3032-1999	2009-10-14	中国标准		
8	原料乳中三聚氰胺快速检测 液相色谱法	GB/T 22400-2008	2010-04-06	中国标准		

### 3. 如何检索各种数据与事实

#### 分析检索需求

- 概念/事实/术语                           百科全书、词典、年鉴……
- 理化常数/器件参数/性能               手册、……
- 法律文件                                  法律文书
- 技术标准                                  标准文书
- 统计数据                                  年鉴、统计资料、官网……
- 人物传记                                  传记资料、百科全书、……
- 名录                                        各种名录、……

### 3. 如何查找各种数据与事实

#### 应用实例

- 屠呦呦简历

[网页](#) [新闻](#) [贴吧](#) [知道](#) [音乐](#) [图片](#) [视频](#) [地图](#) [文库](#) [更多»](#)

百度为您找到相关结果约1,270,000个

搜索工具

**屠呦呦\_百度百科**

姓名 : 屠呦呦

生日 : 1930年(庚午年)12月30日 职业 : 药学家

简介 : 屠呦呦,女,药学家。1930年12月30日生于浙江宁波,...

[人物经历](#) [学  
baike.baidu.](#)[+ 收藏](#) [3913](#) [2023](#)

# 屠呦呦

[编辑](#)

屠呦呦,女,药学家。1930年12月30日生于浙江宁波,1951年考入北京大学,在医学院药学系生药专业学习。<sup>[1]</sup> 1955年,毕业于北京医学院(今北京大学医学部)。毕业后曾接受中医培训两年半,并一直在中国中医研究院(2005年更名为中国中医科学院)工作,期间前后晋升为硕士生导师、博士生导师,现为中国中医科学院的首席科学家。<sup>[2-3]</sup> <sup>[4]</sup> 中国中医研究院终身研究员兼首席研究员,青蒿素研究开发中心主任,博士生导师、药学家,诺贝尔医学奖获得者。

屠呦呦多年从事中药和中西药结合研究,突出贡献是创制新型抗疟药青蒿素和双氢青蒿素。1972年成功提取到了一种分子式为C<sub>15</sub>H<sub>22</sub>O<sub>5</sub>的无色结晶体,命名为青蒿素。2011年9月,因为发现青蒿素——一种用于治疗疟疾的药物,挽救了全球特别是发展中国家的数百万人的生命获得拉斯克奖和葛兰素史克中国研发中心“生命科学杰出成就奖”<sup>[5]</sup>。2015年10月,屠呦呦获得诺贝尔生理学或医学奖,理由是她发现了青蒿素,这种药品可以有效降低疟疾患者的死亡率。她成为首获科学类诺贝尔奖的中国人。

屠呦呦是第一位获得诺贝尔科学奖项的中国本土科学家、第一位获得诺贝尔生理医学奖的华人科学家。<sup>[2]</sup> 是中国医学界迄今为止获得的最高奖项,也是中医药成果获得的最高奖项。<sup>[6]</sup>

中文名	屠呦呦	毕业院校	北京大学医学部 <sup>[2]</sup>
外文名	Tu Youyou	主要成就	创制抗疟药—青蒿素和双氢青蒿素
国籍	中华人民共和国		拉斯克临床医学奖(2011年9月)
民族	汉族		葛兰素史克中国研发中心“生命科学杰出成就奖”(2011年) <sup>[5]</sup>
出生地	浙江省宁波市		诺贝尔医学奖(2015年10月)
出生日期	1930年(庚午年)12月30日	代表作品	发现青蒿素
职业	药学家		

 为您推荐 : [屠呦呦](#) [青蒿素](#) [屠呦呦为什么没有获得诺贝尔](#)

屠呦呦为什么没有获得诺贝尔  
3个回答 - 提问时间: 2014年11月27日  
2011年美国最具声望的生物医学奖项  
素研究开发中心主任屠呦呦获奖,成为  
[www.zybang.com/question...](http://www.zybang.com/question...) 3 -

中国女药学家屠呦呦获2015年



2015年10月  
间10月5日下午  
女药学家屠呦  
[tech.qq.com](http://tech.qq.com)

周小平:屠呦呦所得到的,远超青



[Browse People](#)[Search Results](#) \ [Document](#)

## Tu Youyou

*Gale Biography in Context, October 1, 2015***Born:** December 30, 1930 in Ningbo, China**Nationality:** Chinese**Occupation:** Medical researcher

National Science Congress Prize (1978), National Inventor's Prize (1979), Albert Einstein World Science Prize (1987), GlaxoSmithKline Outstanding Achievement Award in Life Science, (2011), Albert Lasker Award for Clinical Medical Research (2011), Outstanding Contribution Award of the China Academy of Chinese Medical Sciences (2011), Warren Alpert Foundation Prize (2015), Nobel Prize in Physiology or Medicine (2015)

Tu was awarded a share of the 2015 Nobel Prize in Physiology or Medicine for her discovery of artemisinin, a drug that has proved to be a highly effective treatment against malaria, one of the world's most serious health problems.

### Early Life and Career

Tu was born on December 30, 1930, in Ningbo, Zhejiang province, on the east coast of China, south of Shanghai. She attended Xiaoshi and Ningbo middle schools before matriculating at Peking University Medical School (now Peking University Health Science Center) in 1951. She graduated four years later with a degree in pharmaceutical sciences. She then decided to continue her studies in Traditional Chinese Medicine (TCM) in India, a decision she later regretted. After returning to China, Tu became a research assistant at the Chinese Academy of Medical Sciences. In 1972, she began working on a team to find a cure for malaria, a disease that had been plaguing China for centuries. Her team eventually discovered artemisinin, a compound derived from the sweet wormwood plant that proved to be an effective treatment for malaria. This discovery earned her the Nobel Prize in Physiology or Medicine in 2015, along with two other scientists.

### 3. 如何查找各种数据与事实

#### 应用实例

- 什么是多聚酶链式反应 (Polymerase Chain Reaction, PCR) ?
- 青蒿素 (Artemisinin) 是什么?



# polymerase chain reaction

ARTICLE from the Encyclopædia Britannica

Get involved

Share

**polymerase chain reaction**, (PCR), a technique used to make numerous copies of a specific segment of **DNA** quickly and accurately. The polymerase chain reaction enables investigators to obtain the large quantities of **DNA** that are required for various experiments and procedures in **molecular biology**, forensic analysis, evolutionary **biology**, and medical diagnostics.



PCR was developed in 1983 by **Kary B. Mullis**, an American biochemist who won the Nobel Prize for Chemistry in 1993 for his invention. Before the development of PCR, the methods used to amplify, or generate copies of, recombinant DNA fragments were time-consuming and labour-intensive. In contrast, a machine designed to carry out PCR reactions can complete many rounds of replication, producing billions of copies of a DNA fragment, in only a few hours.



The PCR technique is based on the natural processes a cell uses to replicate a new DNA strand. Only a few biological ingredients are needed for PCR. The integral component is the **template DNA**—i.e., the DNA that contains the region to be copied, such as a **gene**. As little as one DNA molecule can serve as a template. The only information needed for this fragment to be replicated is the sequence of two short regions of **nucleotides** (the subunits of DNA) at either end of the region of interest. These two short template sequences must be known so that two **primers**—short stretches of nucleotides that correspond to the template sequences—can be synthesized. The primers bind, or anneal, to the template at their complementary sites and serve as the starting point for copying. DNA synthesis at one primer is directed toward the other, resulting in replication of the desired intervening sequence. Also needed are free nucleotides used to build the new DNA strands and a DNA polymerase, an **enzyme** that does the building by sequentially adding on free nucleotides according to the instructions of the template.

PCR is a three-step process that is carried out in repeated cycles. The initial step is the **denaturation**, or separation, of the two strands of the DNA molecule. This is accomplished by heating the starting material to temperatures of about 95° C (203° F). Each strand is a template on which a new strand is built. In the second step the temperature is reduced to about 55° C (131° F) so that the primers can anneal to the template. In the third step the temperature is raised to about 72° C (162° F), and the DNA polymerase begins adding nucleotides onto the ends of the annealed primers. At the end of the cycle, which lasts about five minutes, the temperature is raised and the process begins again. The number of copies doubles after each cycle. Usually 25 to 30 cycles produce a sufficient amount of DNA.

In the original PCR procedure, one problem was that the DNA polymerase had to be replenished after every cycle because it is not stable at the high temperatures needed for denaturation. This problem was solved in 1987 with the discovery of a heat-stable DNA polymerase called **Taq**, an enzyme isolated from the thermophilic bacterium *Thermus aquaticus*, which inhabits hot springs. *Taq* polymerase also led to the invention of the PCR machine.



artemisinin



Advanced Search

Search Results: artemisinin

Britannica:

- Encyclopædia
- Year in Review
- Dictionary
- Thesaurus

Additional Content:

- Magazines
- Ebooks & Primary Sources
- Web Search

**Featured Result****artemisinin (drug)****More Results****Tu Youyou (Chinese scientist and phytochemist)****Applications of synthetic biology** from the article **synthetic biology****antiprotozoal drug****Diagnosis and treatment** from the article **malaria (pathology)**

# artemisinin

**ARTICLE** from the Encyclopædia Britannica

**artemisinin**, also called **qinghaosu**, antimalarial drug derived from the sweet wormwood plant, *Artemisia annua*. **Artemisinin** is a sesquiterpene lactone (a compound made up of three isoprene units bound to cyclic organic esters) and is distilled from the dried leaves or flower clusters of *A. annua*. The antipyretic (fever-reducing) properties of the plant were first recognized in the 4th century CE by Chinese physicians, who called the plant *qinghao* and recommended a natural remedy in the form of *qinghao* tea. In the following centuries, this remedy was commonly prescribed for hemorrhoids and malaria. The active agent, called *qinghaosu*, was isolated from the plant in the 1970s; this compound became widely known as **artemisinin**. Today, there are several derivatives of **artemisinin**, including artesunate and artemether, that are used in the treatment of malaria.

**Artemisinin** is effective against all the malaria-causing protozoal organisms in the genus *Plasmodium*. The drug is particularly useful in the

**SEE MORE...**

### 3. 如何查找各种数据与事实

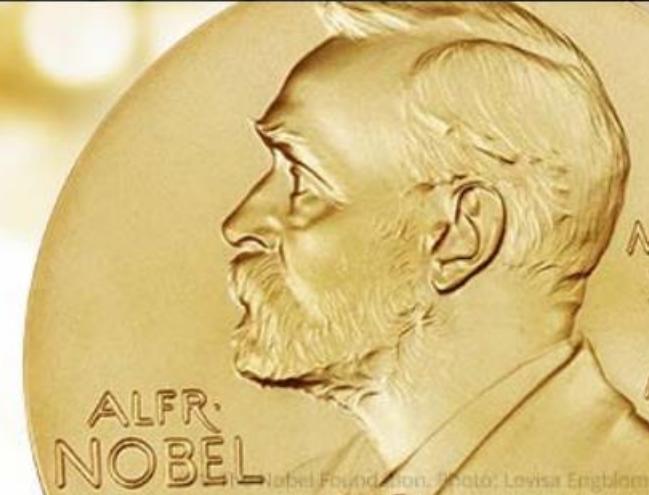
#### 应用实例

- 某诺奖获得者的演讲视频及演示文档

*"For the greatest benefit to mankind"*  
*Alfred Nobel*

## 2015 NOBEL PRIZE IN PHYSIOLOGY OR MEDICINE

# William C. Campbell Satoshi Ōmura Youyou Tu



Medicine Prizes  
and Laureates

Complete list



## The Nobel Prize in Physiology or Medicine

Awarded to 210 Nobel  
Laureates since 1901

### Most Popular Medicine Laureates



1. [Youyou Tu](#)



2. [William C. Campbell](#)



3. [Satoshi Ōmura](#)



4. [Sir Alexander Fleming](#)

## Nobel Prizes and Laureates

[Medicine Prizes](#)

2014



► [About the Nobel Prize in Physiology or Medicine 2014](#)

▼ [John O'Keefe](#)

[Facts](#)[Nobel Lecture](#)[Prize Presentation](#)[Banquet Speech](#)[Interview](#)[Nobel Diploma](#)[Photo Gallery](#)[Other Resources](#)

► [May-Britt Moser](#)

► [Edvard I. Moser](#)

[All Nobel Prizes in Physiology or Medicine](#)

[All Nobel Prizes in 2014](#)



### The Nobel Prize in Physiology or Medicine 2014

John O'Keefe, May-Britt Moser, Edvard I. Moser

Share this:



159



## John O'Keefe - Facts

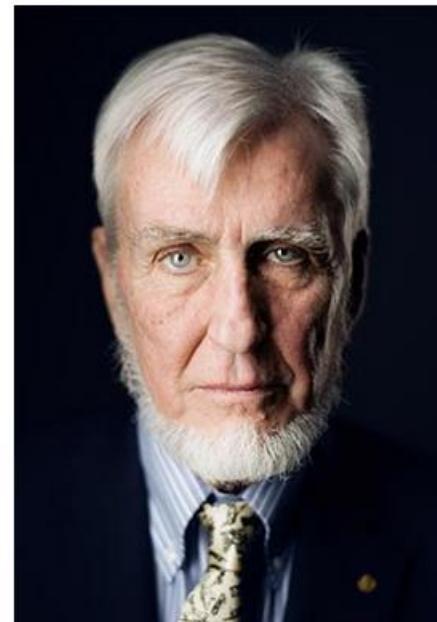


Photo: A. Mahmoud

John O'Keefe

Born: 18 November 1939, New York, NY, USA

Affiliation at the time of the award: University College, London, United Kingdom

Prize motivation: "for their discoveries of cells that constitute a positioning system in the brain"

Field: physiology, spatial behavior

Prize share: 1/2



THE FUTURE OF LEARNING

Watch the live-stream  
5 November



Discover features and trivia about the

### 3. 如何查找各种数据与事实

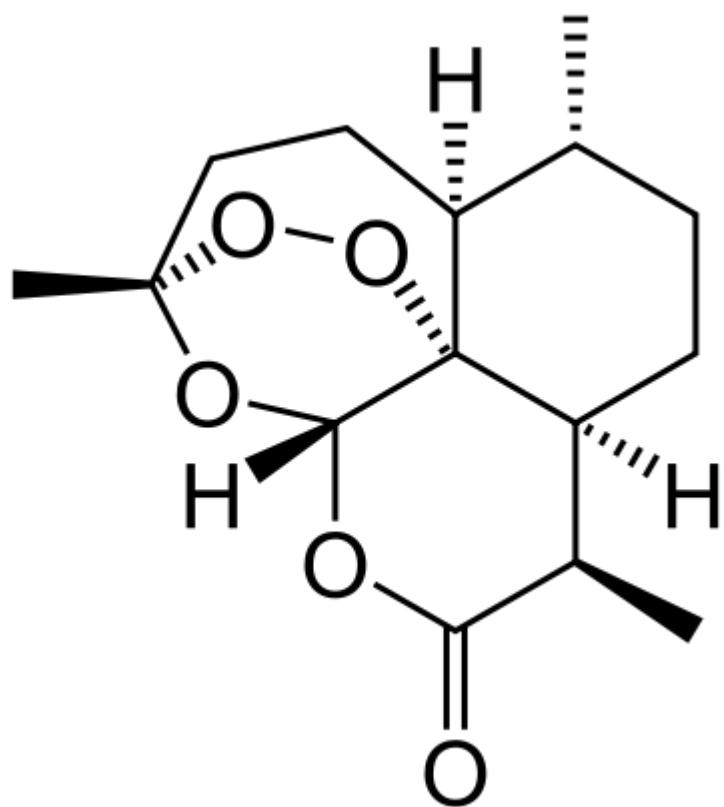
#### 应用实例

- 青蒿素和双氢青蒿素的
  - ◆ 系统命名、**CASRN**、三维结构、手性原子
  - ◆ 理化性质、光谱数据
  - ◆ 药理毒性、药物代谢动力学数据
  - ◆ 人工合成方法
  - ◆ 药品的研制、生产、使用、管理规范

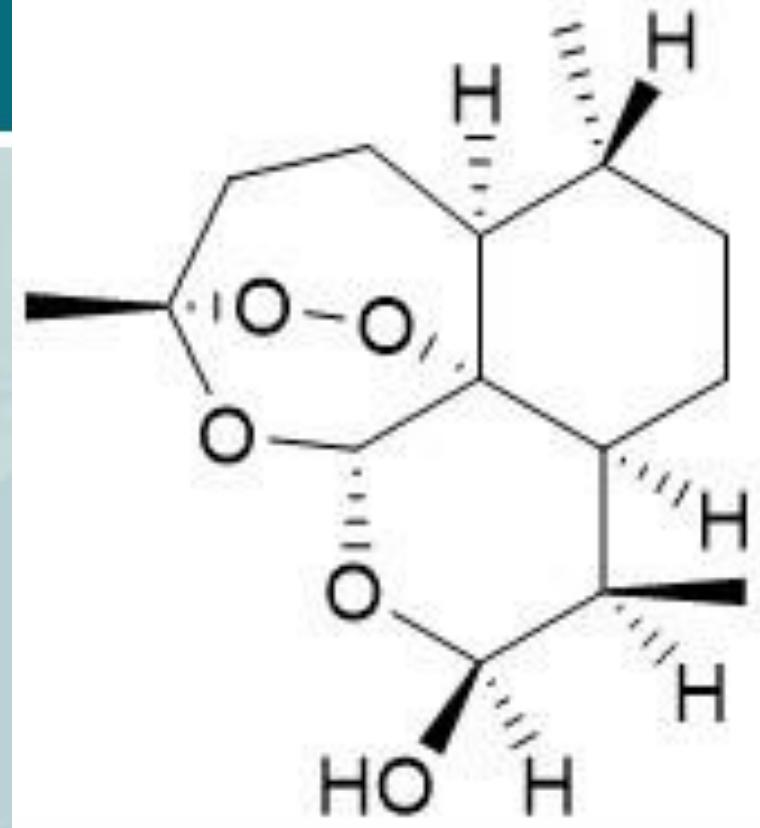
## 基本思路

- ✓ 利用英汉对照词典等工具查出英文拼写
- ✓ 利用百科全书找到结构式及常用理化性质
- ✓ 更多数据可通过专业数据库找到

- 
- 青蒿素
  - 双氢青蒿素
  - 疟疾
  - Artemisinin
  - Dihydroartemisinin
  - Malaria; Helopyra
  - Qinghaosu



青蒿素  
63968-64-9  
等3个



双氢青蒿素  
81496-81-3  
等5个



Reactions



Substances



Literature



ReaxysTree



Physical



Spectra



Natural Product



Advanced

## Structure



selected query editor:

MarvinSketch  
by ChemAxon

PASTE

STRUCTURE EDITOR

Create Structure Template from Name

- As drawn
- Substructure
- on heteroatoms
- on all atoms
- Similarity

- Include tautomers
- Ignore stereo
- No salts
- No mixtures
- No isotopes
- No charges
- No radicals
- No ring closures
- Align results with query

More options

## Identification

Reaxys Registry Number

= Lookup 

CAS Registry Number

is Lookup 

Chemical Name

is  artemisininLookup 

Element Symbols

is Lookup 

Search Substances



Reactions



Substances



Literature



ReaxysTree



Physical



Spectra



Natural Product



Advanced

## Structure



selected query editor:

MarvinSketch  
by ChemAxon

PASTE

STRUCTURE EDITOR

Create Structure Template from Name

- As drawn
- Substructure
- on heteroatoms
- on all atoms
- Similarity

- Include tautomers
- Ignore stereo
- No salts
- No mixtures
- No isotopes
- No charges
- No radicals
- No ring closures
- Align results with query

More options

## Identification

Reaxys Registry Number

= Lookup 

CAS Registry Number

is Lookup 

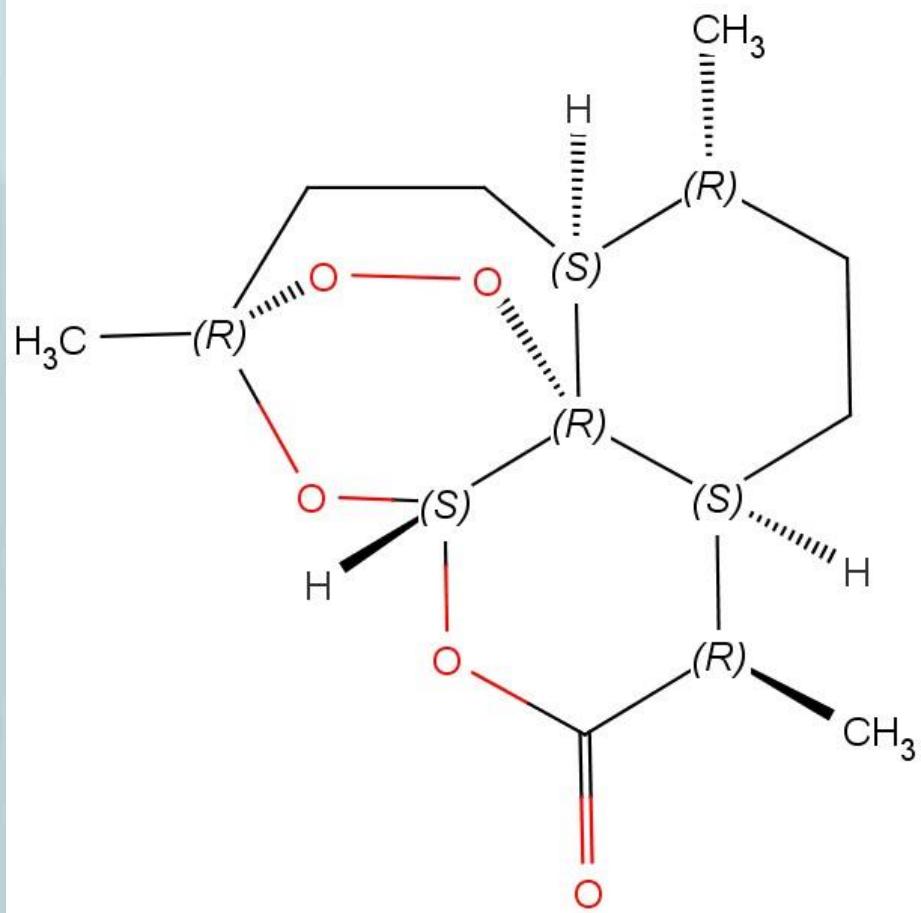
Chemical Name

is Lookup 

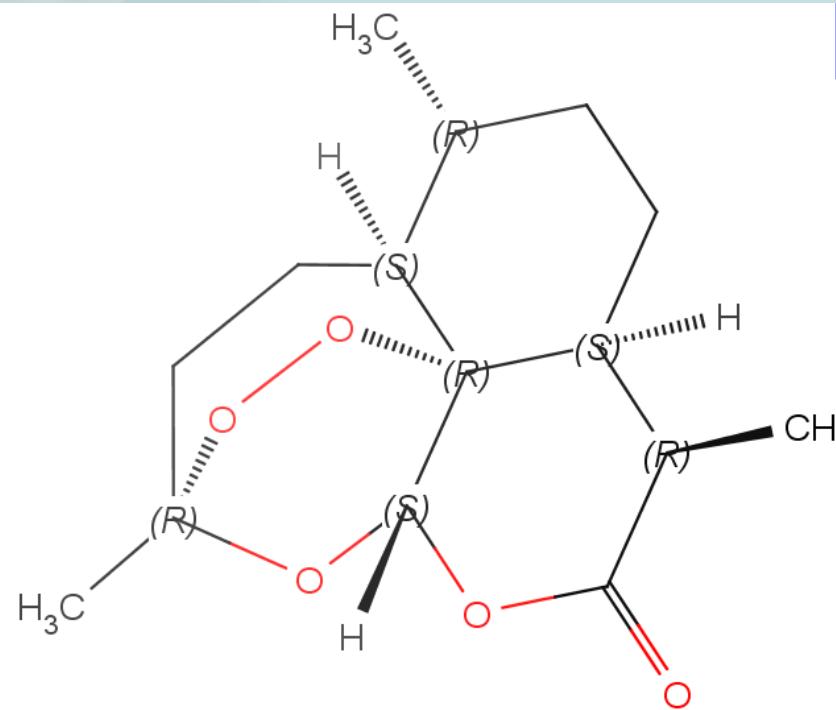
Element Symbols

is Lookup 

Search Substances

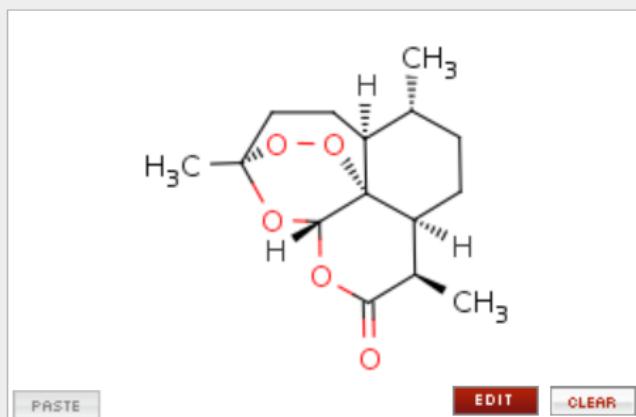


旋转后





## Structure

[Create Structure Template from Name](#)

- As drawn
- Substructure
- on heteroatoms
- on all atoms
- Similarity

- Include tautomers
- Ignore stereo
- No salts
- No mixtures
- No isotopes
- No charges
- No radicals
- No ring closures
- Align results with query

[More options](#)

X

## Identification

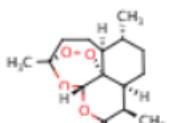
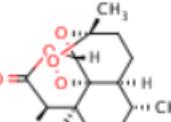
**Search Substances**

Reactions (983)

Substances (9)

Citations (840)

go to Page   Page 1 of 1Sort by No of References  Display as:  Qry  
His  
Rep

	Structure	Structure/Compound Data	Nº of preparations <a href="#">All Preps</a>   <a href="#">All Reactions</a>	Available Data	Nº of ref.
1	 	<p><b>Chemical Name:</b> (3R,5aS,6R,8aS,9R,12S,12aR)-octahydro-3,6,9-trimethyl-3,12-epoxy-12H-pyranolo[4,3-j]-1,2-benzodioxepin-10(3H)-one</p> <p><b>Reaxys Registry Number:</b> 4194670  <b>CAS Registry Number:</b> <a href="#">63968-64-9</a>  <b>Type of Substance:</b> heterocyclic  <b>Molecular Formula:</b> C<sub>15</sub>H<sub>22</sub>O<sub>5</sub>  <b>Linear Structure Formula:</b> C<sub>12</sub>H<sub>13</sub>O<sub>2</sub>(CH<sub>3</sub>)<sub>3</sub>(O)(OO)  <b>Molecular Weight:</b> 282.337  <b>InChI Key:</b> BLUAFEHZUWYNE-NNWCWBAJSA-N</p>	103 prep out of 786 reactions.	Identification Physical Data (339) Spectra (87) Bioactivity (1029) Ecological Data (1) Use/Application (132) Natural Product (18) Quantum Chemical Data (2)	720
2	 	<p><b>Chemical Name:</b> artemisinin</p> <p><b>Reaxys Registry Number:</b> 5754123  <b>CAS Registry Number:</b> <a href="#">63968-64-9</a>, 113472-97-2, 119241-68-8  <b>Type of Substance:</b> heterocyclic  <b>Molecular Formula:</b> C<sub>15</sub>H<sub>22</sub>O<sub>5</sub>  <b>Linear Structure Formula:</b> C<sub>15</sub>H<sub>22</sub>O<sub>5</sub>  <b>Molecular Weight:</b> 282.337  <b>InChI Key:</b> AEEFHZUWYNE-DKGTTOOOSA-N</p>	16 prep out of 149 reactions.	Identification Physical Data (15) Spectra (31) Bioactivity (128) Use/Application (24) Natural Product (8)	100

## ▲ Physical Data

### ▼ Melting Point (13)

### ▼ Density (6)

### ▼ Association (MCS) (10)

### ▼ Chromatographic Data (2)

### ▼ Circular Dichroism (15)

### ▼ Conformation (2)

### ▼ Crystal Phase (5)

### ▼ Crystal Property Description (8)

### ▼ Crystal System (6)

### ▼ Electrochemical Characteristics (2)

### ▼ Enthalpy of Combustion (1)

### ▼ Enthalpy of Formation (1)

### ▼ Henry Constant (MCS) (1)

### ▼ Interatomic Distances and Angles (2)

### ▼ Liquid/Liquid Systems (MCS) (2)

### ▼ Optical Rotatory Dispersion (1)

### ▼ Optical Rotatory Power (15)

### ▼ Partition octan-1-ol/water (MCS) (2)

### ▼ Solubility (MCS) (235)

## ▲ Melting Point (13)

Melting Point	Solvent (Melting Point)	Location	Reference
153 - 154 °C	cyclohexane	Page/Page column 57	<b>MAX-PLANCK-GESELLSCHAFT ZUR FÖRDERUNG DER WISSENSCHAFT</b> <b>David Tyler; SEEBERGER, Peter H.; GILMORE, Kerry</b> <b>Patent: WO2015/7693 A1, 2015 ;</b> <a href="#">Title/Abstract</a> <a href="#">Full Text</a> <a href="#">Show Details</a>
159 °C			<b>Turconi, Joel; Griolet, Frederic; Guevel, Ronan; Oddon, Gilles; Villa, R; Rossen, Kai; Goeller, Rudolf; Burgard, Andreas</b> Organic Process Research and Development, <b>2014</b> , vol. 18, # 3 p. 417 - 42 <a href="#">Title/Abstract</a> <a href="#">Full Text</a> <a href="#">View citing articles</a> <a href="#">Show Details</a>
153 - 154 °C	cyclohexane		<b>Chen, Hui-Jun; Han, Wei-Bo; Hao, Hong-Dong; Wu, Yikang</b> Tetrahedron, <b>2013</b> , vol. 69, # 3 p. 1112 - 1114 <a href="#">Title/Abstract</a> <a href="#">Full Text</a> <a href="#">View citing articles</a> <a href="#">Show Details</a>
153 - 154 °C	cyclohexane	Page/Page column 74	<b>MAX-PLANCK-GESELLSCHAFT ZUR FÖRDERUNG DER WISSENSCHAFT</b> <b>KOPETZKI, Daniel; LÉVESQUE, Francois</b> <b>Patent: WO2013/30247 A1, 2013 ;</b> <a href="#">Title/Abstract</a> <a href="#">Full Text</a> <a href="#">Show Details</a>
153 - 154 °C		Paragraph 0081	<b>Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V.; See Francois, Dr.; Kopetzki, Daniel, Dr.</b> <b>Patent: EP2565197 A1, 2013 ;</b> <a href="#">Title/Abstract</a> <a href="#">Full Text</a> <a href="#">Show Details</a>
154 - 155 °C	cyclohexane ethanol		<b>Kopetzki, Daniel; Levesque, Francois; Seeberger, Peter H.</b> Chemistry - A European Journal, <b>2013</b> , vol. 19, # 17 p. 5450 - 5456 <a href="#">Title/Abstract</a> <a href="#">Full Text</a> <a href="#">View citing articles</a> <a href="#">Show Details</a>
153 -	cyclohexane	sunnorfina	<b>Levesque, Francois; Seeberer, Peter H.</b>

## Chemical Names and Synonyms

(3R,5aS,6R,8aS,9R,12S,12aR)-octahydro-3,6,9-trimethyl-3,

### Identification

#### Substance Label (36)

#### Patent-Specific Data (5)

#### Related Structure (1)

### Physical Data

### Spectra

#### NMR Spectroscopy (43)

#### IR Spectroscopy (13)

#### Mass Spectrometry (26)

#### UV/VIS Spectroscopy (4)

#### Other Spectroscopic Methods (1)

### Bioactivity

### Ecological Data

### Use/Application

### Natural Product

### Quantum Chemical Data

#### IR Spectroscopy (13)

Description (IR Spectroscopy)	Solvent (IR Spectroscopy)	Original Text (IR Spectroscopy)	Location	Comment (IR Spectroscopy)	Reference
Bands	neat (no solvent)				<b>Nowak, Deanne M.; Lansbury, Peter T.</b> Tetrahedron, 1998 , vol. 54, # 3-4 p. 319 - 336 <a href="#">Title/Abstract</a> <a href="#">Full Text</a> <a href="#">View citing articles</a> <a href="#">Show Details</a> <b>Ansari, Muhammad Tayyab; Pervez, Humayun; Shehzad, Muhammad Tariq; Saeed-Ul-Hassan, Syed; Mehmood, Zahid Shah, Syed Nisar Hussain; Razi, Muhammad Tahir; Murtaza, Ghulam</b> Acta Poloniae Pharmaceutica - Drug Research, 2014 , vol. 71, # 3 p. 451 - 462 <a href="#">Title/Abstract</a> <a href="#">Full Text</a> <a href="#">View citing articles</a> <a href="#">Show Details</a> <b>Suresh, Kuthuru; Chaitanya Mannava; Nangia, Ashwini</b> RSC Advances, 2015 , vol. 4, # 102 p. 58357 - 58361 <a href="#">Title/Abstract</a> <a href="#">Full Text</a> <a href="#">View citing articles</a> <a href="#">Show Details</a>
Bands		IR (film) v 2960, 2933, 2860, 1731 , 1112, 991 cm <sup>-1</sup> .	Page/Page column 57	film	<b>MAX-PLANCK-GESELLSCHAFT ZUR FÖRDERUNG DER WISSENSCHAFTEN E.V.; KOPETZKI, Daniel; MCQUADE, David Tyler; SEEBERGER, Peter H.; GILMORE, Kerry</b> <b>Patent:</b> WO2015/7693 A1, 2015 ; <a href="#">Title/Abstract</a> <a href="#">Full Text</a> <a href="#">Show Details</a>
Bands				film	<b>Chen, Hui-Jun; Han, Wei-Bo; Hao, Hong-Dong; Wu, Yikang</b> Tetrahedron, 2013 , vol. 69, # 3 p. 1112 - 1114 <a href="#">Title/Abstract</a> <a href="#">Full Text</a> <a href="#">View citing articles</a> <a href="#">Show Details</a>
Bands		IR (film) v 2960, 2933, 2860, 1731 , 1112, 991 cm <sup>-1</sup> .	Page/Page column 74	film	<b>MAX-PLANCK-GESELLSCHAFT ZUR FÖRDERUNG DER WISSENSCHAFTEN E.V.; SEEBERGER, Peter, H.; KOPETZKI, Daniel; LÉVESQUE, Francois</b> <b>Patent:</b> WO2013/30247 A1, 2013 ; <a href="#">Title/Abstract</a> <a href="#">Full Text</a> <a href="#">Show Details</a>
Bands		IR (film) v 2960, 2933, 2860, 1731, 1112, 991 cm <sup>-1</sup> .	Paragraph 0081		<b>Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V.; Seeger, Peter H., Prof. Dr.; Lévesque, Francois, Dr.; Kopetzki, Daniel, Dr.</b>

## Bioactivity

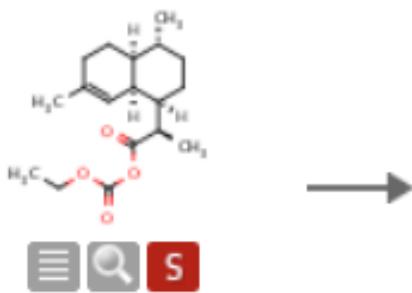
## Pharmacological Data (1025)

## Ecotoxicology (4)

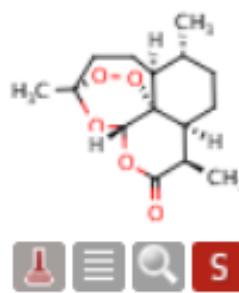
Qry  
His  
Rep

1 of 4

Effect (Ecotoxicology)	antiangiogenic
Species or Test-System (Ecotoxicology)	chick embryos
Concentration (Ecotoxicology)	5 nmol/egg
Kind of Dosing (Ecotoxicology)	samples loaded on coverslip on CAM of individual embryos through window made
Method (Ecotoxicology)	8 fertilized eggs; 80-90 percent relative humidity; 37 deg C; incubated for 6.5 da avascular zone (3-6 mm diameter); number of positive eggs counted
Further Details (Ecotoxicology)	(-)-fumagillin and (-)-thalidomide used as reference comp.
Results	title compound inhibited neovascularization by 25 percent (2/8 positive eggs) vs. (4/8) positive eggs)
Reference	<b>Jung, Mankil; Tak, Jungae; Chung, Won-Yoon; Park, Kwang-Kyun</b> Bioorganic and Medicinal Chemistry Letters 2006 , vol. 16, # 5 p. 1227 - 1230 Title/Abstract    Full Text <a href="#">View Details</a>



Synthesize  
Find similar



Synthesize  
Find similar

Rx-ID: 30396440  
Find similar reactions

62%

With oxygen; trifluoroacetic acid; tetraphenylporphyrin in dichloromethane  
T=-10 - 20°C; 22 h; Photochemical reaction;  
Show Experimental Procedure

**Sanofi-Aventis**

Patent: EP2289897 A1, 2011 ;

Location in patent: Page/Page column 13-14 ;

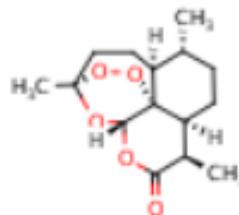
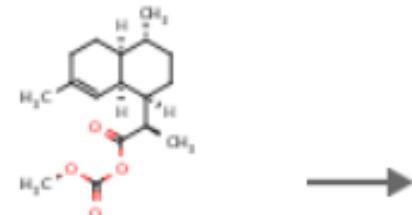
[Title/Abstract](#) [Full Text](#) [Show Details](#)

370 kg

With tetraphenylporphyrin; trifluoroacetic acid in dichloromethane  
T=-15 - -10°C; IrradiationIndustrial scale;

**Turconi, Joel; Griolet, Frederic; Guevel, Ronan; Andrea; Hvala, Massimo; Rossen, Kai; Goeller,**  
Organic Process Research and Development, 2014

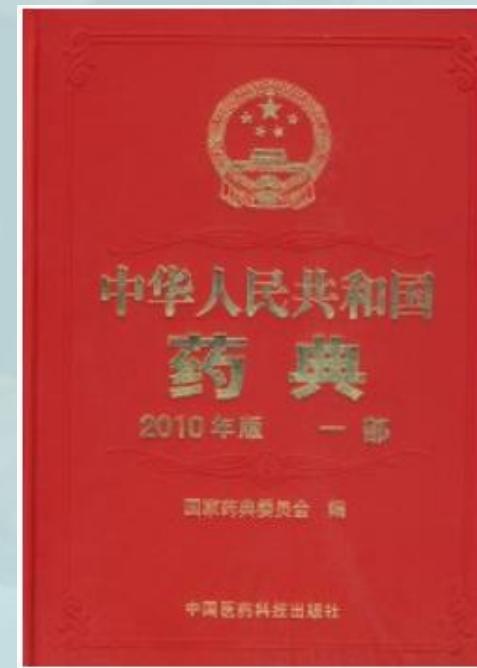
[Title/Abstract](#) [Full Text](#) [View citing articles](#)



### 3. 如何查找各种数据与事实

#### 应用实例

- 青蒿素和双氢青蒿素药品的研制、生产、使用、管理规范



### 3. 如何查找各种数据与事实

#### 应用实例

- 青蒿素购买渠道

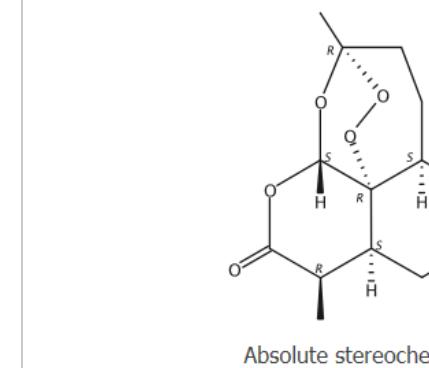
Substance Identifier "artemisinin" &gt; substances (1)

**SUBSTANCES**
[Get References](#)
[Get Reactions](#)
[Get Commercial Sources](#)
[Tools ▾](#)
[Analyze](#)
[Refine](#)

Sort by: CAS Registry Number

[0 of 1 Substance Selected](#)
[1. 63968-64-9](#)

~4126 ~157


**C<sub>15</sub>H<sub>22</sub>O<sub>5</sub>**

3,12-Epoxy-12H-pyranolo[4,3-j]-1,2-benzodioxepin-10(3H)-one, octa-

**Key Physical Properties**
[Regulatory Information](#)
[Spectra](#)
[Experimental Properties](#)
[Show More](#)
**Featured Commercial Sources for 3,12-Epoxy-12H-pyranolo[4,3-j]-1,2-benzodioxepin-10(3H)-one, oct...**

**BOC Sciences**

Limit Commercial Sources to:

[BOC Sciences Product List](#)

Sort by: Commercial Source

[0 of 157 Commercial Sources Selected](#)
[Display Options](#)

Page: 1 of 8

Commercial Source	Substance	Purity	Quantity	Purchasing Details	Stock Status	Ships Within
<a href="#">4C Pharma Scientific Product List</a> Canada <a href="#">Set Preference ▾</a>	63968-64-9  Artemisinin	95-98%	Grams	Order from Source 1g, USD 200	Maintained in stock	1 week
<a href="#">A Chemtek Product List</a> United States <a href="#">Set Preference ▾</a>	63968-64-9  Artemisinin		Grams	1g 5g	Intermittently available	
<a href="#">Abblis Chemicals Product List</a> United States <a href="#">Set Preference ▾</a>	63968-64-9  Artemisinin		Grams	Order from Source 1g, \$170		
<a href="#">Abblis Chemicals Product List</a> United States <a href="#">Set Preference ▾</a>	63968-64-9  Artemisinin		Milligrams	Order from Source 200mg, \$50		

### 3. 如何查找各种数据与事实

#### 应用实例

- 三聚氰胺检测标准



标准

国家标准全文/ 行业标准全文/ 国内外标准题录

## 文献分类目录

[中检分类](#) [国标分类](#) [学科导航](#)[全选](#)[清除](#)[综合](#)[农业、林业](#)[医药、卫生、劳动保护](#)[矿业](#)[石油](#)[能源、核技术](#)[化工](#)[冶金](#)[机械](#)[电工](#)[电子元器件与信息技术](#)[通信、广播](#)[仪器、仪表](#)[土木、建筑](#)[建材](#)[公路、水路运输](#)[铁路](#)[车辆](#)[船舶](#)

检索

高级检索

专业检索

输入检索条件:

 ( 标准名称 ▼ 三聚氰胺 ) 并含  精确 ▼ ) 并且 ▼ ( 标准名称 ▼ 检测 ) 或含  测定 精确 ▼ )发布日期: 从  到 实施日期: 从  到  仅检索有全文文献 [检索](#) 结果中检索

分组浏览: 来源数据库 学科 年 研究层次

[免费订阅](#) [定制检索式](#)[2011\(7\)](#) [2010\(2\)](#) [2009\(2\)](#) [2008\(6\)](#) [2007\(1\)](#) [2000\(2\)](#) [1999\(2\)](#) [1995\(1\)](#) [1989\(1\)](#) [1978\(1\)](#) [1977\(1\)](#) [X](#)排序: [主题排序](#) [更新日期](#)每页记录数: 10 [20](#) 50[\(0\) 清除](#) [导出 / 参考文献](#) [分析 / 阅读](#)找到 26 条结果 1/2 [下一](#)[用户建议](#)[用户交流](#)

	标准名称	标准号	更新日期	来源	分
<input type="checkbox"/>	原料乳与乳制品中三聚氰胺检测方法	GB/T 22388-2008	2009-07-23	国家标准	
<input type="checkbox"/>	原料乳中三聚氰胺快速检测 液相色谱法	GB/T 22400-2008	2009-07-23	国家标准	
<input type="checkbox"/>	植物源产品中三聚氰胺、三聚氯酸一酰胺、三聚氯酸二酰胺和三聚氯酸的测定 气相色谱-质谱法	GB/T 22288-2008	2009-07-23	国家标准	
<input type="checkbox"/>	食品接触材料 高分子材料 食品模拟物中2,4,6-三氨基-1,3,5-三嗪(三聚氰胺)的测定 高效液相色谱法	GB/T 23296.15-2009	2009-11-18	国家标准	
<input type="checkbox"/>	三聚氰胺甲醛模塑制品中可提取甲醛测定方法	GB/T 11996-1989	2008-09-16	中国标准	
<input type="checkbox"/>	饲料中三聚氰胺的测定	NY/T 1372-2007	2008-09-16	中国标准	
<input type="checkbox"/>	三聚氰胺甲醛模塑制品中可提取甲醛测定方法	HG/T 3032-1999	2009-10-14	中国标准	
<input type="checkbox"/>	原料乳中三聚氰胺快速检测 液相色谱法	GB/T 22400-2008	2010-04-06	国家标准	

# 技术标准

标准数据库  
(中国知网)

# 全文加密，需要安裝FileOpen插件

### 3. 如何查找各种数据与事实

#### 应用实例

- 乙炔（acetylene）液体，多少温度时密度为 $0.5\text{g/cm}^3$ ？

# Knovel——多学科、交互式的参考工具

Home Browse Tools Support Center My Knovel Welcome Tsinghua Univer... ▾

BROUGHT TO YOU BY  
 Knovel  
Know More. Search Less.

## Knovel®

author:yaws GO

Looking for a specific material or property? Try our new [Data Search ▶](#)

**Knovel University Challenge 2013**  
Let the games begin! Answer 3 STEM questions for a chance to win Samsung Chromebooks, Roku 3 Media Players, and more. [Play Now!](#)

**Try our new Data Search**  
Retrieve data found in Knovel's interactive graphs, equations and tables by dragging and dropping properties into the query builder. [Learn More](#)

**Chemical Challenges in 'Deepwater'**  
Introduction For some time now the oil and gas industry has been exploring, developing and producing from deep-water reserves of oil and gas. Exploitation of these reserves has presented, and will continue to present, a number of unique engineering challenges. In addition to...

- ◆ Elsevier出版的基于网络的交互式参考工具
- ◆ 可以按主题、按出版物进行浏览
- ◆ 可以在全文中进行主题检索和数据检索
- ◆ 部分图表具有交互式功能
- ◆ 访问入口：<http://app.knovel.com>
- ◆ 参见 <http://www.lib.tsinghua.edu.cn/database/knovel.htm>



Search Knovel

GO

Data Search ▾



All Content My Subscription

## Subject Areas

Aerospace &amp; Radar Technology

Biochemistry, Biology &amp; Biotechnology

Chemistry &amp; Chemical Engineering

Civil Engineering &amp; Construction Materials

Earth Sciences

Electronics &amp; Semiconductors

Promotional Titles

Food Science

General Engineering &amp; Project Administration

Mechanics &amp; Mechanical Engineering

Metals &amp; Metallurgy

Plastics &amp; Rubber

Sustainable Energy &amp; Development



### Spotlight: UW Acad/Aerospace

Learn how Knovel is used by University of Washington-Seattle graduate Zachary Brown as he builds his skills at a world-class aerospace company. "Knovel for me is an irreplaceable resource." Read More

## Engineering Cases

[Chemical Challenges in 'Deepwater'](#)

By Dr. Henry Craddock.

Published Fri, 14 Jun 2013



Search Knovel

GO

Data Search ▾

**Knovel Academic Spotlights:** Knovel helps world-class universities prepare the next generation of engineers. [Discover how](#)

☰ Browse

◆ Chemistry &amp; Chemical Engineering

### TOPICS

[All Topics \(427\)](#)

Analytical Chemistry (33)

Catalysis (18)

Dispersion &amp; Aggregation (2)

Electrochemistry (6)

Environmental Chemistry (15)

General References (90)

Industrial Chemistry &amp; Chemicals (57)

Industrial Safety (20)

Physical Chemistry (51)

Plant Design, Operation &amp; Energy Efficiency (52)

Polymer Chemistry (40)

Separation (22)

Transport Processes (23)

## Chemistry & Chemical Engineering see description »

[A Manual for the Chemical Analysis of Metals: \(MNL 25\)](#)

Dulski, Thomas R. (ASTM International, 1996)

[Acido-Basic Catalysis, Volume 1 - Application to Refining and Petrochemistry](#)

Marcilly, Christian (Editions Technip, 2006)

[Acido-Basic Catalysis, Volume 2 - Application to Refining and Petrochemistry](#)

Marcilly, Christian (Editions Technip, 2006)

Looking for a s...



"uv stabilizers"



Data Search ▾

**Knovel Study Guides:** These professor-approved study guides to solidify your understanding of core engineering concepts. [Start Studying](#)[Home](#)[Search for 'uv stabilizers'](#)

Search within these results



## CONTENT TYPES

[All Content Types](#)[Text Sections \(145\)](#)[Conference Proceedings \(26\)](#)[Interactive Tables \(26\)](#)[Interactive Graphs \(2\)](#)[Save Search](#)[All Content](#)[My Subscription](#)

Showing page 1 of 20



### TEXT SECTIONS

[+ Save to My Knovel](#)

#### 6.1 UV Stabilisers

... antidegradant in a compound is completely unknown analysis of the solvent extract by GC-MS is an excellent method for identification Once the identification has been achieved quantification can be ca... [more »](#)



from **Rubber Analysis - Polymers, Compounds and Products: (Report No. 139), Volume 12 (2001)**

[See more results from this title](#) | [Search within this title »](#)

### TEXT SECTIONS

[+ Save to My Knovel](#)

#### 11.3.5 UV Stabilizers

...113 Stabilizer groups 353 1135 **UV STABILIZERS** 11351 Organic UV absorbers 113511 Properties and applications of commercial stabilizers 113512 Mechanisms of action Phenyl salicylate is... [more »](#)



from **PVC Degradation & Stabilization (2008)**

[See more results from this title](#) | [Search within this title »](#)

### TEXT SECTIONS

[+ Save to My Knovel](#)

#### 20.3 UV Stabilizers

...Degradation by Light 193 Table 202 Classes of **UV Stabilizers** Stabilizer Remark 2-H ydroxybenzophenones 2-hydroxy phenylbenzotriazoles Sterically hindered amines Salic ylates Cinnama... [more »](#)



from **Concise Introduction to Additives for Thermoplastic Polymers (2010)**

[See more results from this title](#) | [Search within this title »](#)

Home Search for 'acetylene AND density exists' Search within these results 

Save Search All Content My Subscription Relevancy Date Data Search Page 1 of 1

**TECHNICAL REFERENCES**

All Technical References  
Interactive Tables (24)  
**Interactive Graphs (7)**

**INTERACTIVE GRAPHS** + Save to My Knovel

**Coefficient of Thermal Expansion of Liquid (Live Eqns.) (5 hits)**

#	material or substance name	equation plotter	synonym	CAS Registry No.	mol. formula
15	acetylene				

 CLICK LINK TO VIEW THE TABLE

from Yaws' Handbook of Thermodynamic and Physical Properties of Chemical Compounds  
[Search within this title »](#)

**INTERACTIVE GRAPHS** + Save to My Knovel

**Density of Liquid (Live Eqns.) (5 hits)**

#	material or substance name	equation plotter	synonym	CAS Registry No.	mol. formula
15	acetylene				

 CLICK LINK TO VIEW THE TABLE

from Yaws' Handbook of Thermodynamic and Physical Properties of Chemical Compounds  
[Search within this title »](#)

**INTERACTIVE GRAPHS** + Save to My Knovel

**Liquid Densities - Organic Compounds (1 hit)**

#	name	equation plotter	formula	CAS No	A	B	C
84	acetylene						

 CLICK LINK TO VIEW THE TABLE

Home Search for 'acetylene AND density exists' Yaws' Handbook o... Density of Liquid (Live Eqns.) material\_or\_substance\_name:

Contents Save Notes Export Unit Converter Page 1 of 1 Rows 1 - 5 of 5 from 4970

equation plotter	material or substance name	synonym	CAS Registry No.	mol. formula	mol. weight	A	B	n
	acetylene	acetylen; ethine; ethyne; narcylen	74-86-2	C <sub>2</sub> H <sub>2</sub>	26.038	0.2302	0.2709	0.2857
	ethynylbenz...	acetylene, phenyl-; ethinylbenzene	536-74-3	C <sub>8</sub> H <sub>6</sub>	102.136	0.3025	0.273	0.2857
	methylacetyl...	acetylene, methyl-; allylene; propine; propyne	74-99-7	C <sub>3</sub> H <sub>4</sub>	40.065	0.2437	0.2645	0.279
	1,1,2,2-tetra...	acetylene tetrachloride; bonoform; cellon; 1,1,2, ...	79-34-5	C <sub>2</sub> H <sub>2</sub> Cl <sub>4</sub>	167.848	0.5165	0.2595	0.2959
	trichloroethyl...	acetylene trichloride; algylen; anamenth; benzino ...	79-01-6	C <sub>2</sub> HCl <sub>3</sub>	131.387	0.5042	0.2695	0.2857



## ▶ How to Use

Equation for: acetylene

$$\text{density} = A \cdot B - \left(1 - \frac{T}{T_C}\right)^N$$

Variable (X)

Temperature

X Range: 192.4 - 308.3 K

X Unit

K

Function (Y)

Liquid Density

Y Unit

g/cm<sup>3</sup>

X Significant Digits

4

Y Significant Digits

4

X ▼

Y ▼

258.6	0.5000
-------	--------

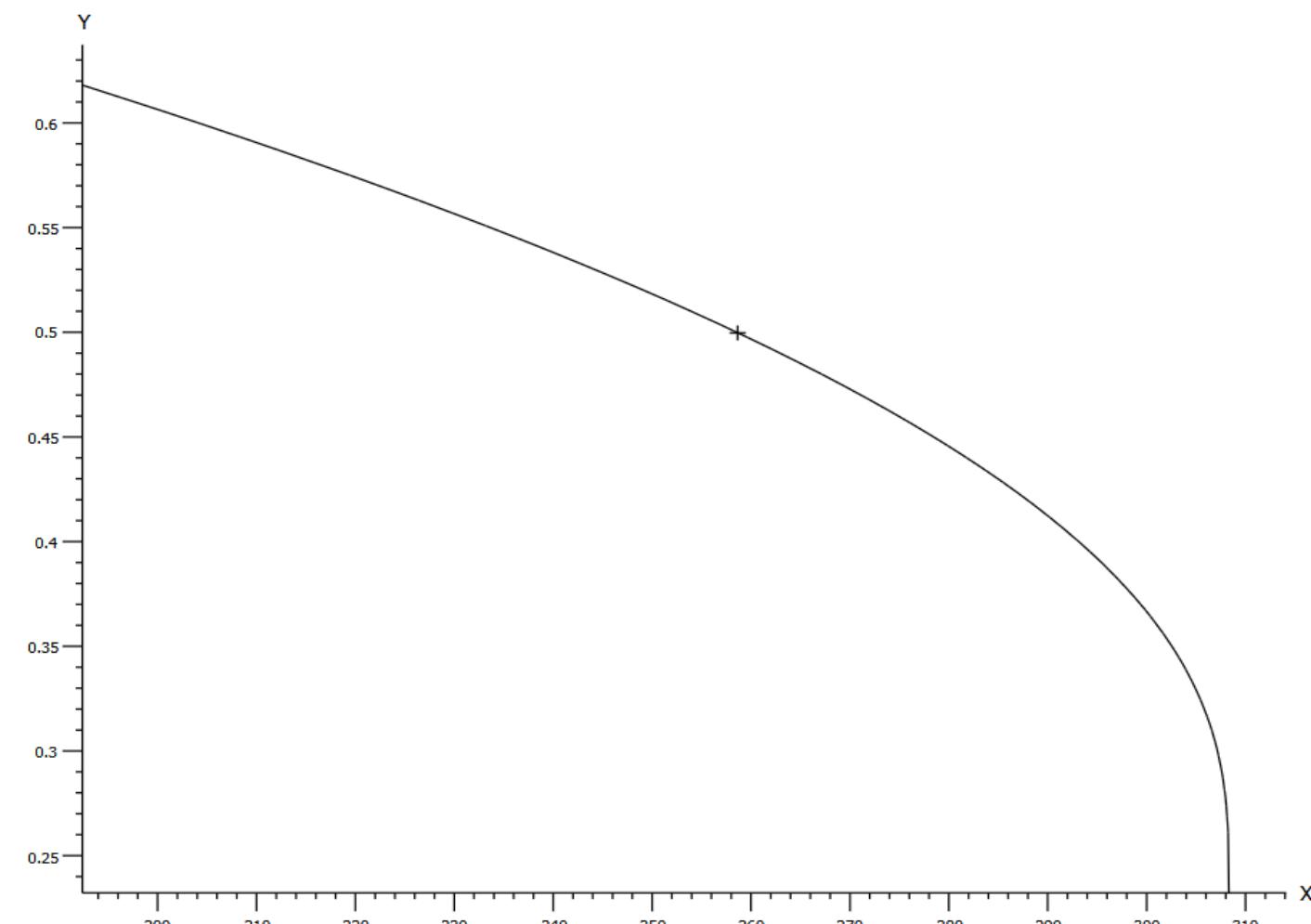
 Grid Lines

Add Point

Clear All

X Axis:  Linear  LogY Axis:  Linear  Log

Zoom (100%)



**谢谢！  
欢迎批评指正！  
欢迎交流讨论！**