

## IGEPAL® CA-630 (Nonidet P-40 Substitute, Reagent grade)

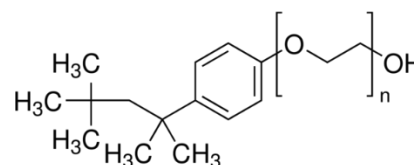
| 产品编号         | 产品名称  | 包装    |
|--------------|---|-------|
| ST2045-100ml | IGEPAL® CA-630 (Nonidet P-40 Substitute, Reagent grade) | 100ml |
| ST2045-500ml | IGEPAL® CA-630 (Nonidet P-40 Substitute, Reagent grade) | 500ml |

### 产品简介:

| CAS Number | Chemical Formula            | Molecular Weight | Purity | Grade         |
|------------|-----------------------------|------------------|--------|---------------|
| 9002-93-1  | $(C_2H_4O)_n C_{14}H_{22}O$ | ~603             | -      | Reagent grade |

### ➤ 基本信息 (General Information):

|                        |   |
|------------------------|---|
| Name (Chinese)         | 聚氧乙烯辛烷基苯酚醚, 分支  |
| Name (English)         | IGEPAL® CA-630  |
| Specifications         | Reagent grade   |
| Chemical Formula       | $(C_2H_4O)_n C_{14}H_{22}O$ , n= average 9  |
| Synonym (Chinese)      | Nonidet™ P 40; 辛基苯基-聚乙二醇; 壬基苯酚-聚乙二醇醚; 辛基苯氧基聚乙二醇乙醇, 支链   |
| Synonym (English)      | Octyl Phenol Ethoxylate; Octylphenoxy Poly [Ethyleneoxy] Ethanol, Branched; Polyethylene glycol octylphenol ether |
| Beilstein Registry No. | -   |
| EINECS Number          | -   |
| MDL Number             | MFCD00132505  |
| UNSPSC Code            | -   |



### ➤ 产品描述 (Description):

|                     |  |
|---------------------|--|
| General description | <p>IGEPAL® CA-630 是一种非离子、非变性去垢剂, 适用于膜蛋白复合物的增溶、分离和纯化。它在化学上与已经退市的Nonidet P-40没有区别。</p> <p>Nonidet P-40 Substitute, CAS号为9016-45-9, 中文化学名称为4-壬基苯基-聚乙二醇, 英文化学名称为4-Nonylphenyl-polyethylene glycol, 为常用非离子性去垢剂, 但由于归类为危险化学品, 受到一定的管制。</p> <p>IGEPAL® CA-630是Nonidet P-40或Nonidet P-40的替代物, 化学性质和Nonidet P-40基本相同, 而Shell Chemical Co的Nonidet P-40已退市。Nonidet P-40有时也简称为Imbentin-N/52或NP-40, 但需区分于另一种表面活性剂NP-40, NP-40是Dow Chemical Company的Tergitol™ NP系列产品之一, CAS号为127087-87-0, 中文化学名称为聚-(氧代-1, 2-乙二亚甲基)-<math>\alpha</math>-壬基苯基-<math>\omega</math>-羟基, 英文化学名称为<math>\alpha</math>-(4-Nonylphenyl)-<math>\omega</math>-hydroxy-poly(oxy-1,2-ethanediyl) branched, 简称为Nonylphenoxy polyethoxyethanol或Nonylphenol ethoxylate。</p> <p>IGEPAL 为以下机构的注册商标: Rhodia Operations。</p> |
| Application         | <p>IGEPAL® CA-630 已可用于:</p> <ul style="list-style-type: none"> <li>o 在小鼠肌肉匀浆的western blot中作为匀浆缓冲液中的中性洗涤剂;</li> <li>o 研究E8.5-E10.5胚胎中lacZ表达的X-gal染色;</li> <li>o 制备可用于RT-qPCR的细胞裂解物的细胞裂解(CL)缓冲液;</li> <li>o 在RNA提取过程中与十二烷基硫酸锂、三盐酸、EDTA、NaCl、脱氧胆酸钠、二硫苏糖醇、硫脲一起作为研磨缓冲液的组分;</li> <li>o 与Tris- HCl一起在vero细胞培养的速殖子培养中的得到应用;</li> <li>o 作为核萃取缓冲液D+的组成部分, 含有HEPES、甘油、KCl、EDTA等用于凝胶迁移分析;</li> <li>o 作为PI缓冲液的组成部分, 配合NaH<sub>2</sub>PO<sub>4</sub> 冲洗FISH(荧光原位杂交)切片。</li> </ul> <p>根据S. Sinha <i>et al.</i>的文章 ‘Use of substitute Nonidet P-40 nonionic detergents in</p>  |

|  |  |
|--|--|
|  | <p>intracellular tubulin polymerization assays for screening of microtubule targeting agents' (Biochem. Cell Biol. 95: 379–384 (2017)), IGEPAL® CA-630是Nonidet P-40最适合的替代物; 同时, 如果需要和Nonidet P-40达到一样的效果, 本产品的使用浓度可能需要根据实验进行一定的调整。</p> <p>IGEPAL, with an HLB number of 13, is the most similar substitute to the Shell Nonidet P-40. Tergitol and the other two detergents consist of nonyl-phenyl polyethylene glycol with an HLB number of 17.8. The HLB number relates to the lipid solubility of the compound, with a lower HLB indicating the more lipophilic substance (HLB = 0 indicating 100% lipophilic and HLB = 20 indicating 100% hydrophilic). All of the 4 substitute detergents, at concentrations around 0.1%–0.15%, demonstrated good, consistent preservation of polymerized tubulin in the hypotonic lysate before separation into soluble and polymerized tubulin fractions.</p> <p>The results of this study indicate that the substitute detergents are approximately 10-fold more potent than the original Shell Nonidet P-40 detergent that was generally used at a 1% working concentration. Given the importance and ubiquitous use of the Shell Nonidet P-40 in various biochemical buffers and assays, it was concluded that all of the laboratories using the new, substitute detergents in their research should in the first instance reduce the concentration of the buffer by about 10-fold to obtain the same result as with the discontinued Shell Nonidet P-40.</p> |
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➤ **性质(Properties):**

|                           |  |
|---------------------------|--|
| Description               | non-ionic                              |
| Appearance (Form)         | viscous liquid                         |
| Appearance (Turbidity)    | clear to slightly hazy                 |
| Appearance (Color)        | colorless to faint yellow              |
| mol wt                    | ~603                                   |
| CMC                       | 0.08 mM (20-25°C)                      |
| Viscosity                 | 250-350 cP, neat (25 °C)(lit.)         |
| Brookfield Viscosity      | 1.06 g/cm <sup>3</sup> at 25 °C (lit.) |
| HLB                       | 13                                     |
| Water (by Karl Fischer)   | ≤0.5 %                                 |
| Cloud Point (1% Solution) | 63.0 - 67.0 °C                         |
| Neutralization Number     | ≤0.5 mg KOH/g (pH7)                    |

➤ **安全信息(Safety Information):**

|                               |   |
|-------------------------------|---|
| Hazard Pictogram Codes        |   |
| Signal Word                   | Danger  |
| Hazard Statements             | H302-H315-H318-H410   |
| Precautionary Statements      | P280-P301 + P312 + P330-P305 + P351 + P338 + P310   |
| Personal Protective Equipment | Eyeshields, full-face respirator (US), Gloves, multi-purpose combination respirator cartridge (US), type ABEK (EN14387) respirator filter |
| Hazard Codes (Europe)         | Xn,N  |
| Risk Codes (Europe)           | 22-36-51/53   |
| Safety Codes (Europe)         | 26-39-61  |
| RIDADR                        | UN 3082 9 / PGIII   |
| WGK Germany                   | 2   |
| RTECS                         | -   |
| Flash Point (F)               | 483.8 °F  |
| Flash Point (C)               | 251 °C  |

**包装清单:**

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|              |   |       |
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| —            | 说明书   | 1份    |

**保存条件：**

室温保存，两年有效。

**注意事项：**

- 本产品仅限于专业人员的科学研究用，不得用于临床诊断或治疗，不得用于食品或药品，不得存放于普通住宅内。
- 为了您的安全和健康，请穿实验服并戴一次性手套操作。

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