Material Safety Data Sheet

Section 1 - Product and Company Information

Product Name: Igepal CA-630, for molecular biology
Product Number: 18696
Brand: Sigma Chemical
Company: Sigma-Aldrich
Address: 3050 Spruce Street, SAINT LOUIS, MO 63103 US
Technical Phone: 800-325-3632
Emergency Phone: 314-770-6555

Section 2 - Composition/Information on Ingredient

Substance Name: IGEPAL CA-630
CAS #: 9036-19-5
SARA 313: Yes
Ingredient Name: ETHYLENE OXIDE
CAS #: 75-21-8
Percent: 0.032 %
SARA 313: Yes

Formula: \((\text{C}_2\text{H}_4\text{O})_n\)\(\text{C}_2\text{H}_4\text{O}_2\) \((n=9-11)\)
Synonyms: \(\text{oxymethylene polymers, branched poly(ethylene oxide), branched poly(ethylene oxide - 1,2-ethanediol), alpha (oxymethylene) -omega -hydroxy, branched polyoxyethylene glycol, dicyclopentadiene, ibuprofen,}

Section 3 - Hazards Identification

Emergency Overview:
Harmful.
If swallowed, immediate medical assistance required. Risk of serious damage to eyes.
Calif. Prop. 65 carcinogen.

NFPA Rating:
Health: 2
Reactivity: 0

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

Oral Exposure
If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Inhalation Exposure
If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

Section 5 - Fire Fighting Measures

Autoignition Temp: N/A
Extinguishing Media
Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

Firefighting
Protective Equipment
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Specifics Hazard(s)
Emit toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

Procedure to be Followed in Case of Leak or Spill
Evacuate area.

Procedure(s) of Personal Protective(s)
Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

Methods for Cleaning Up
Absorb on sand or vermiculite and place in closed containers for disposal/ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

Handling
User Exposure
Do not breathe vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

Storage
Suitable
Keep tightly closed.

Section 8 - Exposure Controls / PPE

Engineering Controls
Safety shower and eye bath. Mechanical exhaust required.

Personal Protective Equipment
Respiratory
Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows airpurifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.

Hand
Compatible chemical-resistant gloves.

Eye
Chemical safety goggles.

Sigma Chemical - 18696
Sigma-Aldrich Corporation
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General Hygiene Measures
Wash thoroughly after handling.

Section 9 - Physical/Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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<tbody>
<tr>
<td>Molecular Weight</td>
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<tr>
<td>pH</td>
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<tr>
<td>BP/BP Range</td>
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<tr>
<td>M/P/MF Range</td>
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<tr>
<td>Freezing Point</td>
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<tr>
<td>Odor Threshold</td>
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<tr>
<td>Volatility</td>
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<tr>
<td>Solvent Content</td>
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<tr>
<td>Evaporation Rate</td>
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<tr>
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<tr>
<td>Refractive Index</td>
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<tr>
<td>Solubility</td>
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</table>

N/A = not available

Section 10 - Stability and Reactivity

Stability
Stable.

Materials to Avoid
Strong oxidizing agents.

Hazardous Decomposition Products
Carbon monoxide, Carbon dioxide.

Hazardous Polymerization
Will not occur.

Section 11 - Toxicological Information

Route of Exposure
Skin Contact
May cause skin irritation.

Skin Absorption
May be harmful if absorbed through the skin.

Eye Contact
May cause severe eye irritation.

Inhalation
May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

Ingestion
Harmful if swallowed.

Signs and Symptoms of Exposure
Exposure can cause: Nausea. Diarrhea. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

RTECS Number: N/A

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

Appropriate Method of Disposal of Substance or Preparation
Contact a licensed professional waste disposal service to dispose of this material.

Disposal
Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT
Proper Shipping Name: None

Non-Hazardous for Transport
This substance is considered to be nonhazardous for transport.

IATA
Non-Hazardous for Air Transport
Non-hazardous for air transport.

Section 15 - Regulatory Information

EU Additional Classification
Symbol of Danger: Xn

Indication of Danger
Harmful.

Risk Statements
R: 22 41
Harmful if swallowed. Risk of serious damage to eyes.

Safety Statements
S: 26 39
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice/Wear eye/face protection.

US Classification and Label Text

Indication of Danger
Harmful.

Risk Statements
Harmful if swallowed. Risk of serious damage to eyes.
Safety Statements
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear eye/face protection.

US Statements
Calif. Prop. 65 carcinogen.

United States Regulatory Information
SARA Listed: Yes
Deminimis: 10%
Notes: This product is subject to SARA section 313 reporting requirements to glycol ethers.

United States - State Regulatory Information
California Prop - 65
This product is or contains chemical(s) known to the state of California to cause cancer.

Canada Regulatory Information
WHMIS Classification
This product has been classified in accordance with the hazard criteria of the CPR, and the SDS contains all the information required by the CPR.
DSL: Yes
NDSL: No

Section 16 - Other Information

Disclaimer
For R&D use only. Not for drug, household or other uses.

Warranty
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc. shall not be held liable for any damage resulting from handling or from contact with this above product. See reverse side of invoice packing slip for additional terms and conditions of sale. Copyright©2007 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.