



SIGMA-ALDRICH

Material Safety Data Sheet

Date Printed: 01/27/2007
Date Updated: 02/16/2006
Version 1.50

Section 1 - Product and Company Information

Product Name Igepal® CO-620
Product Number 238643
Brand Aldrich Chemical

Company Sigma-Aldrich
Street Address 3050 Spruce Street
City, State, Zip, Country SAINT LOUIS, MO 63103 US
Technical Phone: 800-325-5632
Fax: 800-325-5052

Emergency Phone: 314-776-6555

Section 2 - Composition/Information on Ingredient

Substance Name	CAS #	SARA 313	EC no	Annex I Index Number
IGEPAI CO.*	68412-54-4	No		

Ingredient Name	CAS #	Percent	SARA 313
1,4-DIOXANE	123-91-1	< 0.003 %	Yes
ETHYLENE OXIDE	75-21-8	< 0.000 %	Yes

Formula (C₂H₄O)_n-C₁₅H₂₄O
Synonyms Alkylphenol ethoxylate nonylphenoxy poly(ethyleneoxy)ethanol, branched ethoxylated nonylphenol, branched

Section 3 - Hazards Identification

Emergency Overview
Irritant.
Irritating to skin.
Calif. Prop. 65 carcinogen & reproductive hazard.

HMS Rating
Health: 2 Flammability: 1 Reactivity: 0

NFPA Rating
Health: 2 Flammability: 1 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 not breathing give artificial respiration. If breathing is difficult, give oxygen.

Dermal Exposure
In case of contact, immediately wash skin with soap and copious amounts of water.

Eye Exposure
In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

Section 5 - Fire Fighting Measures

Flash Point: 212 °F 100 °C

Autoignition Temp: N/A

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

Section 6 - Accidental Release Measures

Procedure(s) of Personal Precaution(s)
Wear respirator, chemical safety goggles, 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
Mechanical exhaust required. Safety shower and eye bath.

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 air-purifying respirators are appropriate use a full-face respirator with multi-purpose 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.

General Hygiene Measures
Wash thoroughly after handling.

Section 9 - Physical/Chemical Properties

Appearance
Physical State
Clear viscous liquid
Color
Colorless

Molecular Weight: N/A

<u>Property</u>	<u>Value</u>	<u>At Temperature or Pressure</u>	<u>Other</u>
pH	6 - 8		Concentration: 100 g/l
BP/BP Range	> 200 °C	760 mmHg	
MP/MP Range	N/A		
Freezing Point	N/A		
Vapor Pressure	< 0.01 mmHg	25 °C	
Vapor Density	N/A		
Saturated Vapor Conc.	N/A		
SG/Density	0.96 g/cm ³		
Bulk Density	N/A		
Odor Threshold	N/A		
Volatile%	< 0.5 %		
VOC Content	N/A		
Water Content	N/A		
Solvent Content	N/A		
Evaporation Rate	N/A		
Viscosity	0.012 - 0.014 Pas	100 °C	
Partition Coefficient	N/A		
Decomposition Temp.	N/A		
Flash Point °F	212 °F		Method, closed cup
Flash Point °C	100 °C		Method: closed cup

Explosion Limits N/A

Flammability N/A
Autoignition Temp N/A
Refractive Index 1.505
Solubility
Solubility in Water: Soluble.

N/A = not available

Section 10 - Stability and Reactivity

Stability
Stable
Stable.
Conditions to Avoid
Heat, spark, open flame
Materials to Avoid
Strong oxidizing agents, Strong reducing agents.

Hazardous Decomposition Products
Hazardous Decomposition Products
Carbon monoxide, Carbon dioxide.

Hazardous Polymerization
Hazardous Polymerization
Will not occur.

Section 11 - Toxicological Information

Route of Exposure
Skin Contact
Causes skin irritation.
Skin Absorption
May be harmful if absorbed through the skin.
Eye Contact
May cause eye irritation.
Inhalation
Material is irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.
Ingestion
May be harmful if swallowed.

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

RTECS Number:

Toxicity Data
Oral - Rat: 4000 mg/kg (LD50)

Irritation Data
Skin - :
Remarks: Moderate irritation effect
Eyes - :
Remarks: Severe irritation effect, Mild irritation effect

Section 12 - Ecological Information

Accumulation
Bioaccumulation Potential
Indication of bioaccumulation.

Acute Ecotoxicity Tests
Test Type
LC50 Fish
Species
Lepomis macrochirus (Bluegill)
Time: 96.0 h
Value: > 10 mg/l

Section 13 - Disposal Considerations

Appropriate Method of Disposal of Substance or Preparation
Contact a licensed professional waste disposal service to dispose of this material.
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: Environmentally hazardous substances, liquid, n.o.s.
UN#: 3082

Class: 9
Packing Group: Packing Group III
Hazard Label: Class 9
PIH: Not PIH

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

Section 15 - Regulatory Information

EU Additional Classification

Symbol of Danger: Xi
Indication of Danger
Irritant.
Risk Statements R: 36
Irritating to skin.

US Classification and Label Text

Indication of Danger
Irritant.
Risk Statements
Irritating to skin.
US Statements
Calif. Prop. 65 carcinogen & reproductive hazard.

United States Regulatory Information

SARA Listed: No

TSCA Inventory Item: Yes

United States - State Regulatory Information

California Prop - 65
This product is or contains chemical(s) known to the state of California to cause cancer. This product is or contains chemical(s) known to the state of California to cause female reproductive toxicity.

Canada Regulatory Information

WHMIS Classification
This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS 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 the above product. See reverse side of invoice or 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.

