

2.3 Hazards Not Otherwise Classified (HNOC) or not covered by GHS:

Section 3: Composition / Information on Ingredients

Component	CAS_Number	Percentage Range
4,4'(5') di-t-butylcyclohexane-18-crown-6	223719-29-7	>95%
Unidentified impurities		<5%

Section 4: First-aid Measures

General Advice	The hazardous properties of this material have not been established. Treat material as if it were toxic when evaluating first aid requirements.
Ingestion	IF SWALLOWED: IMMEDIATELY call a POISON CONTROL CENTER or doctor.
Skin Contact	Wash immediately with soap and copious amounts of water. Remove and wash contaminated clothing promptly. If irritation develops, seek medical attention.
Eye Contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical attention.
Inhalation	Remove to fresh air. If breathing is labored, administer oxygen. If not breathing, give artificial respiration. Seek medical attention.

Section 5: Firefighting Measures

Extinguishing Media	Foam, CO2, Dry Chemical, Water Spray
Fire and Explosion Hazards	Highly toxic and irritating fumes may be released and extinguishing water runoff may be toxic.
Protective Equipment	Wear positive pressure self-contained breathing apparatus and full personal protective equipment.
Special Hazards	Possible combustion products include carbon dioxide and carbon monoxide, as well as unidentified compounds.

Section 6: Accidental Release Measures

Personal Precautions	Use proper personal protect equipment (specified in section 8)
Methods and materials for containment and clean-up	Ventilate area and wash spill site after material pickup is complete. Use organic solvent, such as methylene chloride, to clean affected area.
Reference to other sections	Scrape up material and transfer to a closed, dry container for disposal. For disposal see section 13.

Section 7: Handling and Storage

Conditions for safe storage	Normal warehouse storage in cool, dry area is satisfactory.
Specific End Use(s)	Apart from the uses mentioned in section 1 no other specific uses are stipulated.

Section 8: Exposure Controls / Personal Protection

Exposure Controls	Mechanical exhaust is required. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes, and clothing. Wash hands before breaks and immediately after handling the product.
Body protection	Wear protective gloves and clothing.
Respiratory protection	Use NIOSH/MSHA approved respirator when handling material outside of mechanical exhaust. An air-purifying respirator with an organic vapor cartridge or canister may be permissible.

Section 9: Physical Properties

Information on basic physical and chemical properties

Appearance:	Liquid Clear to Yellow	Explosion Limits (Upper/Lower):	Not Applicable
Odor:	Characteristic	Flash Point:	Not Applicable
Odor Threshold:	Not Established	Flammability:	Not Established
pH:	Not Established	AutoIgnition Temperature:	Not Established
Melting Point:	Not Established	Decomposition Temperature	Not Established
Boiling Point:	Not Established	VaporPressure:	Negligible at 20°C
Relative Density:	1.1 g/mL at 23°C	VaporDensity:	Not Established
Solubility:	Insoluble in water	Evaporation Rate:	Not Established
Partition Coefficient:	Not Established		
Viscosity:	Not Established, but very viscous		

Section 10: Stability and Reactivity

Reactivity	No hazardous reactions if stored and handled as indicated.
Chemical Stability	Stable under normal handling and storage conditions.
Hazardous reactions	Reacts with strong oxidizing agents.
Conditions to Avoid	No relevant information available.
Materials to Avoid	Contact with strong oxidizers will degrade material. Contact with strong acids will degrade material.
Hazardous decomposition Products	No hazardous decomposition products if stored and handled as indicated. See also section 5. Possible combustion products include carbon monoxide and carbon dioxide.
Special Hazards	Possible combustion products include carbon dioxide and carbon monoxide, as well as unidentified compounds.

Section 11: Toxicology Information

	The product has not been tested. The statements on toxicology have been derived from the properties of the individual components.
Acute Toxicity	
Oral Effects	Oral LD50 has not been determined. Acute toxicity via the oral route of administration expected to be low.
Inhalation Effects	No data available for acute inhalation effects. Acute toxicity via the inhalation route of administration expected to be low.
Dermal Effects	Dermal LD50 has not been determined.
Skin corrosion/irritation	No test data available regarding skin irritation. Slight irritation expected.
Serious eye damage/irritation	No test data available regarding eye irritation. Slight irritation expected.
Respiratory or skin sensitization	No data available regarding respiratory sensitization effects of this product.
Germ Cell Mutagenicity	No data available regarding mutagenic effects of this product.
Carcinogenicity	No data available regarding carcinogenic effects of this product.
Reproductive Toxicity	No data available regarding reproductive effects of this product.
Specific Target Organ Toxicity	
Single Exposure	No data available regarding specific target organ toxicity single exposure.
Repeated Exposure	No data available regarding specific target organ toxicity repeated exposure.
Aspiration Hazard	No data available regarding the aspiration hazard of this product.

Section 12: Ecological Information

No data are available on the adverse effects of this material on the environment.

Section 13: Disposal Considerations

General	Dispose of contents/container in accordance with federal, state, and local regulations.
Unused:	Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.
Used:	For material contaminated with hazardous materials, dispose of mixture as hazardous material according to local, state, and federal regulations.

Section 14: Transport Information

UN Number	UN2810
Land Transport (US DOT)	
Hazard Class	6.1
Packing Group	
Hazard Label	6.1
Proper Shipping Name	Toxic, liquid, organic, n.o.s. (Di-t-butylidicyclohexano-18-crown-6), 6.1, III
Air Transport (IATA)	
Hazard Class	6.1
Packing Group	
Hazard Label	6.1
Proper Shipping Name	Toxic, liquid, organic, n.o.s. (Di-t-butylidicyclohexano-18-crown-6), 6.1, III
Water Transport (IMDG)	
Hazard Class	6.1
Packing Group	
Hazard Label	6.1
Proper Shipping Name	Toxic, liquid, organic, n.o.s. (Di-t-butylidicyclohexano-18-crown-6), 6.1, III

Section 15: Regulatory Information

US Federal Regulations

Toxic Substances Control Act (TSCA): All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30.

Section 16: Other Information

Revision	Updated to GHS SDS format, including classification
	1-Feb-2018: Update Emergency Phone Numbers
SDS Prepared By:	Eichrom Technologies LLC

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