



Material Safety Data Sheet

HAZARD WARNINGS	RISK PHRASES	PROTECTIVE CLOTHING
	Flammable material; avoid heat and sources of ignition. The health risks of this compound have not been fully determined. Exposure may cause irritation of the skin, eyes, and respiratory system.	

Section I. Chemical Product and Company Identification

Chemical Name	4-Methyl-1-acetoxycalixarene [mixture of [6] and [8]] (contains 5-10% Acetone)		
Catalog Number	H0889	Supplier	TCI America 9211 N. Harborside St. Portland OR 1-800-423-8616
Synonym	Heptacyclo [31.3.1.13.7.19.13.115.19.121.25.127.31] dotetraconta-1(37),3,5,7(42),9,11,13(41),15,17,19(40),21,23,25(39),27,29,31(38),33,35-octadecaene-37,38,39,40,41,42-hexol, 5,11,17,23,29,35-hexamethyl-, hexaacetate (9 Cl); 1-Acetoxy-4-methylcalixarene; Hexamethyl(hexamethoxy)calixarene		
Chemical Formula	C ₆₀ H ₆₀ O ₁₂		
CAS Number	141137-71-5 67-64-1 (Acetone)	In case of Emergency Call	Chemtrec® (800) 424-9300 (U.S.) (703) 527-3887 (International)

Section II. Composition and Information on Ingredients

Chemical Name	CAS Number	Percent (%)	TLV/PEL	Toxicology Data
4-Methyl-1-acetoxycalixarene [mixture of [6] and [8]] <small>(contains 5-10% Acetone)</small>	141137-71-5 67-64-1 (Acetone)	90.0 - 95.0 5.0 - 10.0 (Acetone)	Not available.	Acetone: Rat LC ₅₀ (inhalation) 50100mg/m ³ 78H Rat LD ₅₀ (oral) 5800mg/kg Guinea Pig LD ₅₀ (dermal) >9400µl/kg

Section III. Hazards Identification

Acute Health Effects	No specific information is available in our data base regarding the toxic effects of this material for humans. However, exposure to any chemical should be kept to a minimum. Skin and eye contact may result in irritation. May be harmful if inhaled or ingested. Always follow safe industrial hygiene practices and wear proper protective equipment when handling this compound. Follow safe industrial hygiene practices and always wear proper protective equipment when handling this compound.
Chronic Health Effects	CARCINOGENIC EFFECTS : Not available. MUTAGENIC EFFECTS : Not available. TERATOGENIC EFFECTS : Not available. DEVELOPMENTAL TOXICITY : REPRODUCTIVE EFFECTS: Acetone: Rat TCLo (inhalation) 30mg/m ³ , female, 1-13 Days of pregnancy. Toxic Effects: Effects on Fertility- Pre-implantation mortality. Effects on Fertility- Post-implantation mortality. Effects on Embryo or Fetus- Fetal death. Rat TDLo (oral) 273gm/kg, male, 13 Weeks prior to mating. Toxic Effects: Paternal Effects- Spermatogenesis. Mammal - Unspecified Species TCLo (inhalation) 31500µg/m ³ /24 Hours, female, 1-13 Days of pregnancy. Toxic Effects: Effects on Fertility- Post-implantation mortality. Repeated or prolonged exposure to this compound is not known to aggravate existing medical conditions.

Section IV. First Aid Measures

Eye Contact	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
Skin Contact	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
Inhalation	If the victim is not breathing, perform mouth-to-mouth resuscitation. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, oxygen can be administered. Seek medical attention if respiration problems do not improve.
Ingestion	INDUCE VOMITING by sticking finger in throat. Lower the head so that the vomit will not reenter the mouth and throat. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive.

Section V. Fire and Explosion Data

Flammability	Flammable.	Auto-Ignition	Not available.
Flash Points	Not available. -20 °C (-4 °F) (Acetone)	Flammable Limits	Not available.
Combustion Products	These products are toxic carbon oxides (CO, CO ₂).		
Fire Hazards	Not available.		
Explosion Hazards	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.		
Fire Fighting Media and Instructions	Solid containing flammable liquid. SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion. Consult with local fire authorities before attempting large scale fire-fighting operations.		


Section VI. Accidental Release Measures

Spill Cleanup Instructions	Solid containing flammable liquid. Stop leak if without risk. DO NOT touch spilled material. Use water spray curtain to divert vapor drift. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all sources of ignition. Consult federal, state, and/or local authorities for assistance on disposal.
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Section VII. Handling and Storage

Handling and Storage Information	SOLID CONTAINING FLAMMABLE LIQUID. Keep away from heat. Mechanical exhaust required. Avoid excessive heat and light. Do not breathe dust. Always store away from incompatible compounds such as oxidizing agents.
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Section VIII. Exposure Controls/Personal Protection

Engineering Controls	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
Personal Protection	Splash goggles. Lab coat. Dust respirator. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product. Be sure to use a MSHA/NIOSH approved respirator or equivalent.
	
Exposure Limits	Not available.

Section IX. Physical and Chemical Properties

Physical state @ 20°C	Solid.	Solubility	Not available.
Specific Gravity	Not available.		
Molecular Weight	973.11	Partition Coefficient	Not available.
Boiling Point	Not available.	Vapor Pressure	Not applicable.
Melting Point	Not available.	Vapor Density	Not available.
Refractive Index	Not available.	Volatility	Not available.
Critical Temperature	Not available.	Odor	Not available.
Viscosity	Not available.	Taste	Not available.

Section X. Stability and Reactivity Data

Stability	This material is stable if stored under proper conditions. (See Section VII for instructions)
Conditions of Instability	Avoid excessive heat and light.
Incompatibilities	Reactive with oxidizing agents.

Section XI. Toxicological Information

RTECS Number	Not available. AL3150000 (Acetone)
Routes of Exposure	Eye Contact. Ingestion. Inhalation.
Toxicity Data	Acetone: Rat LC ₅₀ (inhalation) 50100mg/m ³ /8H Rat LD ₅₀ (oral) 5800mg/kg Guinea Pig LD ₅₀ (dermal) >9400µl/kg

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Emergency phone number (800) 424-9300

Chronic Toxic Effects	<p>CARCINOGENIC EFFECTS : Not available. MUTAGENIC EFFECTS : Not available. TERATOGENIC EFFECTS : Not available. DEVELOPMENTAL TOXICITY : REPRODUCTIVE EFFECTS: Acetone: Rat TLo (inhalation) 30mg/m³, female, 1-13 Days of pregnancy. Toxic Effects: Effects on Fertility- Pre-implantation mortality. Effects on Fertility- Post-implantation mortality. Effects on Embryo or Fetus- Fetal death. Rat TDLo (oral) 273gm/kg, male, 13 Weeks prior to mating. Toxic Effects: Paternal Effects- Spermatogenesis. Mammal - Unspecified Species TLo (inhalation) 31500µg/m³/24 Hours, female, 1-13 Days of pregnancy. Toxic Effects: Effects on Fertility- Post-implantation mortality. Repeated or prolonged exposure to this compound is not known to aggravate existing medical conditions.</p>
Acute Toxic Effects	<p>No specific information is available in our data base regarding the toxic effects of this material for humans. However, exposure to any chemical should be kept to a minimum. Skin and eye contact may result in irritation. May be harmful if inhaled or ingested. Always follow safe industrial hygiene practices and wear proper protective equipment when handling this compound. Follow safe industrial hygiene practices and always wear proper protective equipment when handling this compound.</p>


Section XII. Ecological Information

Ecotoxicity	Not available.
Environmental Fate	<p>Acetone's production and use as a solvent for fats, oils, waxes, resins, rubbers, plastics, pharmaceuticals and rubber cements may result in its release to the environment through various waste streams. Its use as an extracting reagent and starting material or intermediate in the manufacture of chemical products will also lead to its release to the environment. Acetone occurs naturally as a metabolic byproduct of plants and animals and is released into the atmosphere by volcanoes and forest fires. Based on an experimental vapor pressure of 231 mm Hg at 25 deg C, acetone is expected to exist solely as a vapor in the ambient atmosphere. Vapor-phase acetone is degraded in the atmosphere by reaction with photochemically-produced hydroxyl radicals with an estimated atmospheric half-life of 71 days. Acetone also undergoes photodecomposition by sunlight with an estimated half-life of about 80 days. Acetone is expected to have very high mobility in soils based upon an estimated Koc value of 1. Volatilization from dry soil surfaces is expected based upon the vapor pressure of this compound. Volatilization from moist soil surfaces is also expected based upon the measured Henry's Law constant of 1.87X10⁻⁵ atm-cu m/mol. This compound is expected to biodegrade under aerobic and anaerobic conditions. In water, acetone is not expected to adsorb to suspended solids or sediment based upon its estimated Koc value. Volatilization from water surfaces is expected to be an important environmental fate process given its estimated Henry's Law constant. Estimated half-lives for a model river and model lake are 38 and 333 hours, respectively. Experimentally determined volatilization half-lives in a shallow stream were measured in the range of 8-18 hours. Bioconcentration in aquatic organisms is considered low based upon an estimated BCF value of 1. Occupational exposure may be through inhalation and dermal contact with this compound at workplaces where acetone is produced or used. The general population may be exposed to acetone through the use of commercially available products containing this compound such as paints, adhesives, cosmetics, and rubber cements. Exposure will also arise from inhalation of ambient air, ingestion of drinking water, and food that contains acetone. (HSDB)</p>

Section XIII. Disposal Considerations

Waste Disposal	Recycle to process, if possible. Consult your local regional authorities. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when disposing of the substance.
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Section XIV. Transport Information

DOT Classification	CLASS 4.1: Flammable solid.
PIN Number	UN3175
Proper Shipping Name	Solids containing flammable liquid, n.o.s.
Packing Group (PG)	II
DOT Pictograms	

Section XV. Other Regulatory Information and Pictograms

TSCA Chemical Inventory (EPA)	<p>This product is NOT on the EPA Toxic Substances Control Act (TSCA) inventory. The following notices are required by 40 CFR 720.36 (C) for those products not on the inventory list: (i) These products are supplied solely for use in research and development by or under the supervision of a technically qualified individual as defined in 40 CFR 720.0 et sec. (ii) The health risks of these products have not been fully determined. Any information that is or becomes available will be supplied on an MSDS sheet.</p>
WHMIS Classification (Canada)	CLASS B-4: Flammable solid.
EINECS Number (EEC)	Not available. 200-662-2 (Acetone)
EEC Risk Statements	R10- Flammable. R18- In use, may form flammable/explosive vapor-air mixture.
Japanese Regulatory Data	Not available.

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Section XVI. Other Information

Version 1.0
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Notice to Reader

TCl laboratory chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our MSDS sheets are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated MSDS sheets for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, facial mask, fume hood). For proper handling and disposal, always comply with federal, state, and local regulations.

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