



SIGMA-ALDRICH

## Material Safety Data Sheet

Date Printed: 11/13/2007  
Date Updated: 03/24/2006  
Version 1.50

### Section 1 - Product and Company Information

**Product Name** PSEUDOCUMENE, STANDARD FOR GC  
**Product Number** 82540  
**Brand** Fluka Chemical  
**Company** Sigma-Aldrich  
**Address** 3050 Spruce Street  
**City, State, Zip, Country** SAINT LOUIS, MO 63103 US  
**Technical Phone:** 800-325-5832  
**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
1,2,4-TRIMETHYLBENZENE	95-63-6	Yes	202-436-9	601-043-00-3

**Formula** C9H12  
**Synonyms** Asymmetrical trimethylbenzene, Benzene, 1,2,5-trimethyl-, psi-Cumene, Pseudocumene, Pseudocumol, as-Trimethylbenzene

### Section 3 - Hazards Identification

#### Emergency Overview

Combustible (USA) Flammable (EU). Harmful. Dangerous for the environment.  
Flammable. Irritating to eyes, respiratory system and skin. Toxic to aquatic organisms, may cause longterm adverse effects in the aquatic environment.  
Target organ(s): Central nervous system.

**HMIS Rating**  
Health: 2\* Flammability: 2 Reactivity: 0

**NFPA Rating**  
Health: 2 Flammability: 2 Reactivity: 0

\*additional chronic hazards present.

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

**Flammable Hazards** Yes

#### Explosion Hazards

Vapor may travel considerable distance to source of ignition and flash back.  
Container explosion may occur under fire conditions.

**Flash Point:** 118.4 °F 48 °C

**Explosion Limits:** Lower: 0.9 % Upper: 6.4 %

**Autoignition Temp:** 515 °C **Flammability:** Yes

#### Extinguishing Media Suitable

For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be effective. Cool all affected containers with flooding quantities of water.

#### Firefighting

##### Protective Equipment

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

##### Specific Hazard(s)

Flammable liquid. Emits toxic fumes under fire conditions.

### Section 6 - Accidental Release Measures

#### Procedure to be Followed in Case of Leak or Spill

Evacuate area. Shut off all sources of ignition.

#### Procedure(s) of Personal Precaution(s)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

#### Methods for Cleaning Up

Cover with dry-lime, sand, or soda ash. Place in covered containers using nonsparking tools and transport outdoors. Ventilate area and wash spill site after material pickup is complete.

### Section 7 - Handling and Storage

#### Handling

##### User Exposure

Avoid breathing vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

#### Storage

##### Suitable

Keep container closed. Keep away from heat, sparks, and open flame.

### Section 8 - Exposure Controls / PPE

#### Engineering Controls

Safety shower and eye bath. Use nonsparking tools. 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 air-purifying respirators are appropriate use a full-face respirator with multi-purpose

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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 fullface supplied air respirator.

#### Hand

Compatible chemical-resistant gloves.

#### Eye

Chemical safety goggles.

#### General Hygiene Measures

Wash thoroughly after handling. Wash contaminated clothing before reuse.

#### Exposure Limits

Country	Type	Value
Poland	NDS	100 mg/m3
Poland	NDSch	170 mg/m3
Poland	NDSP	

### Section 9 - Physical/Chemical Properties

Appearance	Physical State	Color
	Clear liquid	Colorless
Molecular Weight	120.2 AMU	
pH	N/A	
BP/BP Range	168 - 169 °C	
MP/MP Range	-43.7 °C	
Freezing Point		
Vapor Pressure	7 mmHg	44.4 °C
Vapor Density	4.2 g/l	
Saturated Vapor Conc.	N/A	
SG/Density	0.876 g/cm3	
Bulk Density	N/A	
Odor Threshold	N/A	
Volatile%	N/A	
VOC Content	N/A	
Water Content	N/A	
Solvent Content	N/A	
Evaporation Rate	N/A	
Viscosity	N/A	
Partition Coefficient	N/A	
Decomposition Temp.	N/A	
Flash Point °F	118.4 °F	Method: closed cup
Flash Point °C	48 °C	Method: closed cup
Explosion Limits	Lower: 0.9 % Upper: 6.4 %	
Flammability	N/A	
Autoignition Temp	515 °C	
Refractive Index	1.505	

#### Solubility

Solubility in Water: Insoluble.

N/A = not available

### Section 10 - Stability and Reactivity

#### Stability

Stable.

Stable.

#### Materials to Avoid

Strong oxidizing 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

Causes eye irritation.

#### Inhalation

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

#### Ingestion

May be harmful if swallowed.

#### Target Organ(s) or System(s)

Central nervous system.

#### Signs and Symptoms of Exposure

Prolonged exposure can cause: Narcotic effect. Bronchitis. Headache, nausea, drowsiness, and fatigue. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

RTECS Number: DC3325000

#### Toxicity Data

Oral - Rat: 5000 mg/kg (LD50)

Inhalation - Rat: 18,000 mg/m3 (LC50)

#### Chronic Exposure - Mutagen

Species	Dose	Route	Mutation test
Mouse	900 MG/KG	Intraperitoneal	Sister chromatid exchange

### 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.

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable.  
Observe all federal, state, and local environmental regulations.

#### Section 14 - Transport Information

##### DOT

**Proper Shipping Name:** Hydrocarbons, liquid, n.o.s.  
**UN#:** 3295  
**Class:** 3  
**Packing Group:** Packing Group III  
**Hazard Label:** Flammable liquid  
**PIH:** Not PIH

##### IATA

**Proper Shipping Name:** Hydrocarbons, liquid, n.o.s.  
**IATA UN Number:** 3295  
**Hazard Class:** 3  
**Packing Group:** III

#### Section 15 - Regulatory Information

##### EU Directives Classification

**Symbol of Danger:** Xn N

**Indication of Danger**

Harmful, Dangerous for the environment.

**Risk Statements** R: 10 20 36/37/38 51/53

Flammable, Harmful by inhalation, Irritating to eyes, respiratory system and skin. Toxic to aquatic organisms, may cause longterm adverse effects in the aquatic environment.

**Safety Statements** S: 26 61

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Avoid release to the environment. Refer to special instructions/safety data sheets.

##### US Classification and Label Text

**Indication of Danger**

Combustible (USA) Flammable (EU), Harmful, Dangerous for the environment.

**Risk Statements**

Flammable, Irritating to eyes, respiratory system and skin. Toxic to aquatic organisms, may cause longterm adverse effects in the aquatic environment.

**Safety Statements**

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Avoid release to the environment. Refer to special instructions/safety data sheets.

**US Statements**

Target organ(s): Central nervous system.

##### United States Regulatory Information

**SARA Listed:** Yes

**Deminimis:** 1 %

**Notes:** This product is subject to SARA section 313 reporting requirements.

**TSCA Inventory Item:** Yes

##### 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. SigmaAldrich 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.

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