



SIGMA-ALDRICH

## Material Safety Data Sheet

Date Printed: 09/05/2008  
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Version 1.80

### Section 1 - Product and Company Information

<b>Product Name</b>	ANTHRACENE, FOR SCINTILLATION		
<b>Product Number</b>	10580		
<b>Brand</b>	Fluka Chemical		
<b>Company</b>	Sigma-Aldrich		
<b>Address</b>	3050 Spruce Street		
<b>City, State, Zip, Country</b>	SAINT LOUIS, MO 63103 US		
<b>Technical Phone:</b>	800-325-5832	<b>Emergency Phone:</b>	314-776-6555
<b>Fax:</b>	800-325-5052		

### Section 2 - Composition/Information on Ingredient

<u>Substance Name</u>	<u>CAS #</u>	<u>SARA 313</u>	<u>EC no</u>	<u>Annex I Index Number</u>
ANTHRACENE	120-12-7	Yes	204-371-1	

**Formula** C14H10  
**Synonyms** Anthracen (German), Anthracin, Coal tar pitch volatiles:anthracene (OSHA), Green Oil, Paraphthalene, Tetra Olive N2G

### Section 3 - Hazards Identification

#### Emergency Overview

Irritant. Dangerous for the environment.  
Irritating to eyes, respiratory system and skin. Very toxic to aquatic organisms, may cause longterm adverse effects in the aquatic environment.  
Photosensitizer, Lachrymator, Target organ(s): Lungs, Kidneys

**HMIS Rating**  
 Health: 3\* Flammability: 0 Reactivity: 0

**NFPA Rating**  
 Health: 3 Flammability: 0 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

**Flash Point:** > 370 °F > 188 °C

**Explosion Limits:** Lower: 0.6 %

**Autoignition Temp:** 540 °C

#### 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.

##### 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

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

### Section 7 - Handling and Storage

#### Handling

##### User Exposure

Do not breathe dust. 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 air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator.

##### Hand

Compatible chemical-resistant gloves.

##### Eye

Chemical safety goggles.

#### General Hygiene Measures

Wash thoroughly after handling.

#### Exposure Limits, RTECS

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Health

Country	Source	Type	Value
USA	OSHA	PEL	8H TWA 0.2 MG/M3

### Section 9 - Physical/Chemical Properties

Appearance	Color	Form
	Faintly beige	Fine crystals

Molecular Weight 178.23 AMU

Property	Value	At Temperature or Pressure
pH	N/A	
BP/BP Range	340 °C	760 mmHg
MP/MP Range	214 °C	
Freezing Point	N/A	
Vapor Pressure	1 mmHg	145 °C
Vapor Density	6.15 g/l	
Saturated Vapor Conc.	N/A	
SG/Density	N/A	
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	Log Kow: 4.45	
Decomposition Temp.	N/A	
Flash Point °F	> 370 °F	
Flash Point °C	> 188 °C	
Explosion Limits	Lower: 0.6 %	
Flammability	N/A	
Autoignition Temp	540 °C	
Solubility	N/A	

N/A = not available

### Section 10 - Stability and Reactivity

**Stability**  
**Stable**  
 Stable.  
**Materials to Avoid**  
 Strong oxidizing agents, Hypochlorites, Chromic acid, Fluorine

**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, Lachrymator.  
**Inhalation**  
 Material is irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.  
**Ingestion**  
 May be harmful if swallowed.

**Sensitization**  
**Sensitization**  
 Causes photosensitivity. Exposure to light can result in allergic reactions resulting in dermatologic lesions, which can vary from sunburnlike responses to edematous, vesiculated lesions, or bullae

**Target Organ(s) or System(s)**  
 Lungs, Kidneys, Bladder, Blood.

**Signs and Symptoms of Exposure**  
 Possible tumor promoter. Exposure can cause: Headache, Nausea, Weakness.

**RTECS Number:** CA9350000

**Toxicity Data**  
 Intraperitoneal - Mouse: 430 MG/KG (LD50)

**Irritation Data**  
 Skin - Mouse: 0.118 mg  
 Remarks: Mild irritation effect

**Chronic Exposure - Carcinogen**  
 Result: This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.  
 Rat - Oral: 20 GM/KG 79W I  
 Result: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Liver: Tumors.  
 Rat - Subcutaneous: 3300 MG/KG 33W I  
 Result: Tumorigenic: Neoplastic by RTECS criteria. Tumorigenic: Tumors at site or application.  
 Rat - Subcutaneous: 660 MG/KG 33W I  
 Result: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Tumorigenic: Tumors at site or application.

**IARC Carcinogen List**  
Rating  
 Group 3