Section 1 - Product and Company Information

Product Name                         BENZANTHRONE, TECH.
Product Number                       B2608
Brand                                ALDRICH

Company                              Sigma-Aldrich
Address                              3050 Spruce Street
                                        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

<table>
<thead>
<tr>
<th>Substance Name</th>
<th>CAS #</th>
<th>SARA 313</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,9-BENZ-10-ANTHRONE</td>
<td>82-05-3</td>
<td>No</td>
</tr>
</tbody>
</table>

Formula: C17H10O
Synonyms: 7H-Benz(de)anthracene-7-one * Benzanthrenone *
          Benzanthrone * 7H-Benzo(de)anthracen-7-one *
          Benzoanthrone * DYE, benzantherone *
          MS-Benzanthrone * 7-Oxobenz(de)anthracene

RTECS Number: CX5075000

Section 3 - Hazards Identification

EMERGENCY OVERVIEW
Irritant.
Irritating to eyes, respiratory system and skin.

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
N/A

AUTOIGNITION TEMP
N/A

FLAMMABILITY
N/A

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.

EXPOSURE HAZARD(S)
Material: Irritant.

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.

STORAGE
Suitable: Keep tightly closed. Store in a cool dry place.

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: Rubber gloves.
Eye: Chemical safety goggles.

GENERAL HYGIENE MEASURES
Wash contaminated clothing before reuse. Wash thoroughly after handling.

Section 9 - Physical/Chemical Properties

Appearance
Color: Light yellow
Form: Powder

Property                      Value                        At Temperature or Pressure

Molecular Weight             230.27 AMU
pH                           N/A
BP/BP Range                  N/A
MP/MP Range                  170 °C
Freezing Point               N/A
Vapor Pressure               N/A
Vapor Density                N/A
Saturated Vapor Conc.        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
Surface Tension              N/A
Partition Coefficient        N/A
Decomposition Temp.          N/A
Flash Point                  N/A
Explosion Limits             N/A
Flammability                 N/A
Autoignition Temp            N/A
Refractive Index             N/A
Optical Rotation             N/A
Miscellaneous Data           N/A
Solubility                   N/A

N/A = not available

Section 10 - Stability and Reactivity

STABILITY
Materials to Avoid: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS
Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.

Section 11 - Toxicological Information

ROUTE OF EXPOSURE
Inhalation: Material is irritating to mucous membranes and upper respiratory tract.
Multiple Routes: May be harmful by inhalation, ingestion, or skin absorption. Causes eye and skin irritation.

SIGNS AND SYMPTOMS OF EXPOSURE
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

TOXICITY DATA

Intraperitoneal
Rat
1500 MG/KG
LD50

Intraperitoneal
Mouse
290 MG/KG
LD50

IRRITATION DATA

Skin
Rabbit
500 mg
24H
Remarks: Mild irritation effect

Eyes
Rabbit
100 mg
24H
Remarks: Moderate irritation effect

CHRONIC EXPOSURE - MUTAGEN

Species: Human
Dose: 3300 UG/L
Cell Type: lymphocyte
Mutation test: Mutation in mammalian somatic cells.

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION
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: None
Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

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.
R: 36/37/38
Risk Statements: Irritating to eyes, respiratory system and skin.
S: 26-37/39
Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable gloves and eye/face protection.

US CLASSIFICATION AND LABEL TEXT
Indication of Danger: Irritant.
RISK STATEMENTS: Irritating to eyes, respiratory system and skin.
Safety Statements: In case of contact with eyes, rinse
immediately with plenty of water and seek medical advice. Wear
suitable gloves and eye/face protection.

UNITED STATES REGULATORY INFORMATION
SARA LISTED: No
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: No
NDSL: Yes

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
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