Material Safety Data Sheet
Anthracene

MSDS# 27391

Section 1 - Chemical Product and Company Identification

MSDS Name: Anthracene
Catalog Numbers: AC104860000, AC104860050, AC104861000, AC104870000, AC104871000, AC104875000
AC104875000, AC161430000, AC161430010, AC161430100, AC161430250, AC161431000
AC161431000, AC401320000, AC401320250, AC401320500, AC401321000, ACE1062744
Synonyms: Green oil; Paranaphthalene; Anthracene blue fluorescence.

Company Identification:
Acros Organics BVBA
Janssen Pharmaceuticaan 3a
2440 Geel, Belgium

Company Identification: (USA)
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

For information in the US, call: 800-ACROS-01
For information in Europe, call: +32 14 57 52 11
Emergency Number, Europe: +32 14 57 52 99
Emergency Number US: 201-796-7100
CHEMTREC Phone Number, US: 800-424-9300
CHEMTREC Phone Number, Europe: 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#: 120-12-7
Chemical Name: Anthracene
%: 98+
EINECS#: 204-371-1

Hazard Symbols: XI N
Risk Phrases: 36/37/38 42/43 50/53

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Warning! May cause allergic respiratory and skin reaction. Causes eye, skin, and respiratory tract irritation. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Target Organs: Liver, respiratory system, eyes, skin.

Potential Health Effects
Eye: Causes eye irritation.
Skin: Causes skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. May be harmful if absorbed through the skin.
Ingestion: May cause irritation of the digestive tract. May be harmful if swallowed.
Inhalation: Causes respiratory tract irritation. May be harmful if inhaled. May cause respiratory sensitization.
Chronic exposure may cause liver damage. Laboratory experiments have resulted in mutagenic effects. Repeated or prolonged exposure may cause allergic reactions in sensitive individuals. Animal studies have reported the development of tumors.

Section 4 - First Aid Measures

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Skin:** Get medical aid. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

**Ingestion:** Do not induce vomiting. Get medical aid.

**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**Notes to Physician:** Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. This material in sufficient quantity and reduced particle size is capable of creating a dust explosion.

**Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or appropriate foam.

**Autoignition Temperature:** 540 deg C (1,004.00 deg F)

**Flash Point:** 121 deg C (249.80 deg F)

**Explosion Limits:**
- Lower: 0.6 vol %
- Upper: Not available

**NFPA Rating:** health: 2; flammability: 1; instability: 1;

Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Wear a self-contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Avoid generating dusty conditions. Provide ventilation. Do not let this chemical enter the environment.

Section 7 - Handling and Storage

**Handling:** Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Use only in a chemical fume hood.

**Storage:** Store in a cool, dry place. Store in a tightly closed container. Store protected from light.

Section 8 - Exposure Controls, Personal Protection

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthracene</td>
<td>0.2 mg/m3 TWA (benzene soluble aerosol) (listed under Coal tar pitches)</td>
<td>0.1 mg/m3 TWA</td>
<td>0.2 mg/m3 TWA</td>
</tr>
</tbody>
</table>

**OSHA Vacated PELs:** Anthracene: 0.2 mg/m3 TWA (benzene soluble fraction) (listed under Coal tar pitches)

**Engineering Controls:**

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use only under a chemical fume hood.

**Exposure Limits**
Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA’s eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA’s 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Crystalline powder
Color: yellowish
Odor: weak aromatic odor
pH: Not available
Vapor Pressure: 1.3 mbar @ 145 deg C
Vapor Density: 6.15 (air=1)
Evaporation Rate: Not available
Viscosity: Not available
Boiling Point: 340 deg C @ 760 mmHg (644.00°F)
Freezing/Melting Point: 215 - 218 deg C

Section 10 - Stability and Reactivity

Chemical Stability: Light sensitive.
Conditions to Avoid: Incompatible materials, light, dust generation, excess heat.
Incompatibilities with Other Materials: Strong oxidizing agents, fluorine, acids (mineral, oxidizing, e.g. chromic acid, hypochlorous acid, nitric acid, sulfuric acid), hypochlorite.
Hazardous Decomposition Products: Carbon monoxide, carbon monoxide, carbon dioxide.
Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#: CAS# 120-12-7: CA9350000
LD50/LC50: CAS# 120-12-7: Oral, mouse: LD50 = 4900 mg/kg;
Carcinogenicity: Anthracene - NTP: Known carcinogen (Coal tar pitches). IARC: Group 1 carcinogen (Coal tar pitches).

Section 12 - Ecological Information

Other: Do not empty into drains.

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT
Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCES, SOLID, N.O.S.
Hazard Class: 9
UN Number: UN3077
Packing Group: III
Canada TDG
Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOL
Hazard Class: 9  
UN Number: UN3077  
Packing Group: III  

USA RQ: CAS# 120-12-7: 5000 lb final RQ; 2270 kg final RQ

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

  Hazard Symbols: XI N
  Risk Phrases:
    R 36/37/38 Irritating to eyes, respiratory system and skin.
    R 42/43 May cause sensitization by inhalation and skin contact.
    R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases:
    S 22 Do not breathe dust.
    S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
    S 29 Do not empty into drains.
    S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
    S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
    S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

WGK (Water Danger/Protection)
  CAS# 120-12-7: 2

Canada
  CAS# 120-12-7 is listed on Canada's DSL List
  Canadian WHMIS Classifications: D2A, D2B
  This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.
  CAS# 120-12-7 is listed on Canada's Ingredient Disclosure List

US Federal

TSCA
  CAS# 120-12-7 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 9/02/1997
Revision #11 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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