

SAFETY DATA SHEET

Creation Date 03-May-2012

Revision Date 18-May-2022

Revision Number 7

1. Identification

Product Name Anthracene

Cat No. : AC104860000; AC104860025; AC104860050; AC104860100;
AC104861000; AC104865000

CAS-No 120-12-7
Synonyms Green oil; Paranaftalene

Recommended Use Laboratory chemicals.
Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Importer/Distributor

Fisher Scientific
112 Colonnade Road,
Ottawa, ON K2E 7L6,
Canada
Tel: 1-800-234-7437

Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

Manufacturer

Fisher Scientific Company
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

Emergency Telephone Number

For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11
Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99
CHEMTREC Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

2. Hazard(s) identification

Classification

WHMIS 2015 Classification Classified as hazardous under the Hazardous Products Regulations (SOR/2015-17)

| | |
|--|------------|
| Skin Corrosion/Irritation | Category 2 |
| Serious Eye Damage/Eye Irritation | Category 2 |
| Combustible Dusts | Category 1 |

Label Elements

Signal Word

Warning

Hazard Statements

May form combustible dust concentrations in air
Causes skin irritation
Causes serious eye irritation

**Precautionary Statements****Prevention**

Keep container tightly closed

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Response

In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion

IF ON SKIN: Wash with plenty of soap and water

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If skin irritation occurs: Get medical advice/attention

If eye irritation persists: Get medical advice/attention

Take off contaminated clothing and wash it before reuse

Storage

Store in a well-ventilated place. Keep container tightly closed

Disposal

Dispose of contents/container to an approved waste disposal plant

Other Hazards

Very toxic to aquatic life with long lasting effects

Light sensitive

3. Composition/Information on Ingredients

| Component | CAS-No | Weight % |
|------------|----------|----------|
| Anthracene | 120-12-7 | >95 |

4. First-aid measures

| | |
|---|---|
| General Advice | If symptoms persist, call a physician. |
| Eye Contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention. |
| Skin Contact | Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician. |
| Inhalation | Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur. |
| Ingestion | Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur. |
| Most important symptoms/effects Notes to Physician | None reasonably foreseeable. Treat symptomatically |

5. Fire-fighting measures

| | |
|---|---|
| Suitable Extinguishing Media | Water spray, carbon dioxide (CO ₂), dry chemical, alcohol-resistant foam. |
| Unsuitable Extinguishing Media | No information available |
| Flash Point | 121 °C / 249.8 °F |
| Method - | No information available |
| Autoignition Temperature | 540 °C / 1004 °F |
| Explosion Limits | |
| Upper | No data available |
| Lower | 0.6 vol % |
| Sensitivity to Mechanical Impact | No information available |
| Sensitivity to Static Discharge | No information available |

Specific Hazards Arising from the Chemical

Fine dust dispersed in air may ignite. Dust can form an explosive mixture with air. Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition. Do not allow run-off from fire-fighting to enter drains or water courses.

Hazardous Combustion Products

Carbon monoxide (CO). Carbon dioxide (CO₂).

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

| | | | |
|---------------|---------------------|--------------------|-------------------------|
| Health | Flammability | Instability | Physical hazards |
| 2 | 1 | 1 | N/A |

6. Accidental release measures

| | |
|---|---|
| Personal Precautions | Use personal protective equipment as required. Ensure adequate ventilation. Avoid dust formation. |
| Environmental Precautions | Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained. |
| Methods for Containment and Clean Up | Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal. |

7. Handling and storage

| | |
|-----------------|---|
| Handling | Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid dust formation. Avoid ingestion and inhalation. Do not get in eyes, on skin, or on clothing. |
| Storage. | Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from direct sunlight. Incompatible Materials. Acids. Strong oxidizing agents. Fluorine. |

8. Exposure controls / personal protection**Exposure Guidelines**

| Component | Alberta | British Columbia | Ontario TWAEV | Quebec | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|------------|---------|------------------|---------------|--------|-----------|----------------------------|------------|
| Anthracene | | | | | | TWA: 0.2 mg/m ³ | |

Legend

OSHA - Occupational Safety and Health Administration

Engineering Measures

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

Personal protective equipment

| | |
|------------------------|-------------------|
| Eye Protection | Goggles |
| Hand Protection | Protective gloves |

| Glove material | Breakthrough time | Glove thickness | Glove comments |
|----------------|-------------------|-----------------|------------------------|
| Natural rubber | See manufacturers | - | Splash protection only |
| Nitrile rubber | recommendations | | |
| Neoprene | | | |
| PVC | | | |

Inspect gloves before use. observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information) gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. gloves with care avoiding skin contamination.

Respiratory Protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly

Recommended Filter type: Particulates filter conforming to EN 143

When RPE is used a face piece Fit Test should be conducted

Environmental exposure controls

Prevent product from entering drains. Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

| | |
|---|-------------------------------|
| Physical State | Powder Solid |
| Appearance | Yellow |
| Odor | aromatic |
| Odor Threshold | No information available |
| pH | Not applicable |
| Melting Point/Range | 215 - 218 °C / 419 - 424.4 °F |
| Boiling Point/Range | 340 °C / 644 °F @ 760 mmHg |
| Flash Point | 121 °C / 249.8 °F |
| Evaporation Rate | Not applicable |
| Flammability (solid,gas) | No information available |
| Flammability or explosive limits | |
| Upper | No data available |
| Lower | 0.6 vol % |
| Vapor Pressure | 1.3 mbar @ 145 °C |
| Vapor Density | Not applicable |
| Specific Gravity | No information available |
| Solubility | insoluble |
| Partition coefficient; n-octanol/water | No data available |
| Autoignition Temperature | 540 °C / 1004 °F |
| Decomposition Temperature | No information available |

| | |
|-------------------|----------------|
| Viscosity | Not applicable |
| Molecular Formula | C14 H10 |
| Molecular Weight | 178.23 |

10. Stability and reactivity

| | |
|---|--|
| Reactive Hazard | Yes |
| Stability | Stable under normal conditions. Sensitivity to light. |
| Conditions to Avoid | Avoid dust formation. Incompatible products. Excess heat. Exposure to light. |
| Incompatible Materials | Acids, Strong oxidizing agents, Fluorine |
| Hazardous Decomposition Products | Carbon monoxide (CO), Carbon dioxide (CO ₂) |
| Hazardous Polymerization | Hazardous polymerization does not occur. |
| Hazardous Reactions | None under normal processing. |

11. Toxicological information

Acute Toxicity

Product Information Component Information

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|------------|------------------------|---------------------|-----------------|
| Anthracene | LD50 > 16 g/kg (Rat) | >1320 mg/kg (Rat) | Not listed |

Toxicologically Synergistic Products No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| | |
|------------------------|--|
| Irritation | Irritating to eyes and skin |
| Sensitization | No information available |
| Carcinogenicity | The table below indicates whether each agency has listed any ingredient as a carcinogen. |

| Component | CAS-No | IARC | NTP | ACGIH | OSHA | Mexico |
|------------|----------|------------|------------|------------|------------|------------|
| Anthracene | 120-12-7 | Not listed | Not listed | Not listed | Not listed | Not listed |

Mutagenic Effects No information available

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure None known
STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects, both acute and delayed No information available

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity

The product contains following substances which are hazardous for the environment. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

| Component | Freshwater Algae | Freshwater Fish | Microtox | Water Flea |
|------------|------------------|--|------------|---|
| Anthracene | Not listed | LC50: = 0.00278 mg/L, 96h static (Lepomis macrochirus) LC50: 0 - 0.00318 mg/L, 96h flow-through (Lepomis macrochirus) | Not listed | EC50: 0.081 - 0.112 mg/L, 48h (Daphnia magna) |

Persistence and Degradability May persist

Bioaccumulation/ Accumulation No information available.

Mobility . Is not likely mobile in the environment due its low water solubility.

| Component | log Pow |
|------------|---------|
| Anthracene | 4.65 |

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT

UN-No UN3077
 Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
 Technical Name Anthracene
 Hazard Class 9
 Packing Group III

TDG

UN-No UN3077
 Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
 Hazard Class 9
 Packing Group III

IATA

UN-No UN3077
 Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
 Hazard Class 9
 Packing Group III

IMDG/IMO

UN-No UN3077
 Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
 Hazard Class 9
 Packing Group III

15. Regulatory information

All of the components in the product are on the following Inventory lists: China X = listed Australia U.S.A. (TSCA) Canada (DSL/NDSL) Europe (EINECS/ELINCS/NLP) Australia (AICS) Korea (KECL) China (IECSC) Japan (ENCS) Philippines (PICCS) Taiwan (TCSI) Japan (ISHL) New Zealand (NZIoC) Japan (ISHL)

International Inventories

| Component | CAS-No | DSL | NDSL | TSCA | TSCA Inventory notification - Active-Inactive | EINECS | ELINCS | NLP |
|-----------|--------|-----|------|------|---|--------|--------|-----|
| | | | | | | | | |

| Anthracene | 120-12-7 | X | - | X | ACTIVE | 204-371-1 | - | - | |
|------------|----------|-------|----------|------|--------|-----------|------|-------|-------|
| Component | CAS-No | IECSC | KECL | ENCS | ISHL | TCSI | AICS | NZIoC | PICCS |
| Anthracene | 120-12-7 | X | KE-01825 | X | X | X | X | X | X |

Legend:

X - Listed '-' - Not Listed

KECL - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

ENCS - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

Canada

SDS in compliance with provisions of information as set out in Canadian Standard - Part 4, Schedule 1 and 2 of the Hazardous Products Regulations (HPR) and meets the requirements of the HPR (Paragraph 13(1)(a) of the Hazardous Products Act (HPA)).

| Component | Canada - National Pollutant Release Inventory (NPRI) | Canadian Environmental Protection Agency (CEPA) - List of Toxic Substances | Canada's Chemicals Management Plan (CEPA) |
|------------|--|--|---|
| Anthracene | Part 2 Substance | | |

Legend

NPRI - National Pollutant Release Inventory

Other International Regulations**Authorisation/Restrictions according to EU REACH**

| Component | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|------------|---|---|---|
| Anthracene | - | Use restricted. See item 75. (see link for restriction details) | SVHC Candidate list - 204-371-1 - PBT, Article 57d |

After the sunset date the use of this substance requires either an authorization or can only be used for exempted uses, e.g. use in scientific research and development which includes routine analytics or use as intermediate.

<https://echa.europa.eu/authorisation-list>

<https://echa.europa.eu/substances-restricted-under-reach>

<https://echa.europa.eu/candidate-list-table>

Safety, health and environmental regulations/legislation specific for the substance or mixture

| Component | CAS-No | OECD HPV | Persistent Organic Pollutant | Ozone Depletion Potential | Restriction of Hazardous Substances (RoHS) |
|------------|----------|----------|------------------------------|---------------------------|--|
| Anthracene | 120-12-7 | Listed | Not applicable | Not applicable | Not applicable |

| Component | CAS-No | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements | Rotterdam Convention (PIC) | Basel Convention (Hazardous Waste) |
|------------|----------|---|--|----------------------------|------------------------------------|
| Anthracene | 120-12-7 | Not applicable | Not applicable | Not applicable | Not applicable |

16. Other information

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Regulatory Affairs

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Revision Summary This document has been updated to comply with the requirements of WHMIS 2015 to align with the Globally Harmonised System (GHS) for the Classification and Labelling of Chemicals.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS