SECTION-1: Identification of the substance / mixture and the company / undertaking

Catalogue Number	CS-T-39130
Product Name	Perylene
CAS No.	198-55-0
Category	API
Synonyms	α-Perylene
Brand	Clearsynth Labs Ltd.
Identified uses	Laboratory Chemicals
Uses advised against	Not available
Company	Clearsynth Labs Ltd. Mumbai, India
Emergency Phone #	+91-22-245045900
REACH No.	Not available

SECTION 2: Hazards identification

Disclaimer: This is sample MSDS. Please email **sales@clearsynth.com** for more details.

2.1 Classification of the substance or mixture-Regulation (EC) No 1272/2008:

Not available

2.2 Label Elements

Signal Word: Warning

Hazard Statement(s)

Code	Statement
H351	Not available
H410	Not available

Precautionary Statement(s)

Code	Statement
P203	Not available
P273	Not available
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P318	Not available
P391	Not available
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulatio

SECTION 3: Composition / information on ingredients

3.1 Substance

Component : Perylene
CAS Number : 198-55-0
Molecular Formula : C20H12
Molecular Weight : 252.31
Parent Chemical : Perylene
Synonyms : α-Perylene
Concentration : Not available

SECTION 4: First aid measures

SECTION 4: First-aid measures

4.1 Description of first aid measures
- General advice: Seek medical attention if symptoms occur or persist. Show this SDS to the physician.
- Inhalation: Move person to fresh air. If breathing is difficult, seek medical attention.
- Skin contact: Wash with soap and water. Remove contaminated clothing and wash before reuse.
- Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention if irritation persists.
- Ingestion: Rinse mouth. Do not induce vomiting unless directed by medical personnel. Seek medical attention if unwell.

4.2 Most important symptoms and effects, both acute and delayed
- Not available.

4.3 Indication of any immediate medical attention and special treatment needed
- Treat symptomatically. No data available.

SECTION 5: Firefighting measures

SECTION 5: Fire-fighting measures

5.1 Extinguishing media
- Suitable extinguishing media: Use extinguishing measures appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media: Not available.

5.2 Special hazards arising from the substance or mixture
- Specific hazards: No data available.
- Hazardous combustion products: Not available.

5.3 Advice for firefighters
- Wear self-contained breathing apparatus (SCBA) and full protective gear.
- Avoid inhalation of combustion products.
- Use water spray to cool unopened containers exposed to fire, if safe to do so.

SECTION 6: Accidental release measures

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
- Avoid breathing dust.
- Avoid contact with skin and eyes.
- Use appropriate personal protective equipment (see Section 8).

6.2 Environmental precautions
- Prevent further leakage or spillage if safe to do so.
- Avoid release to the environment. No data available on environmental precautions.

6.3 Methods and material for containment and cleaning up
- Avoid dust formation.
- Collect spillage using methods that minimize dust generation (e.g., damp wipe or HEPA-filtered vacuum).
- Place in a suitable, closed container for disposal.

6.4 Reference to other sections
- See Section 8 for personal protective equipment and Section 13 for disposal considerations.

SECTION-7: Handling and storage

SECTION 7: Handling and storage

7.1 Precautions for safe handling
- Handle in accordance with good industrial hygiene and safety practice.
- Avoid formation and inhalation of dust.
- Avoid contact with skin, eyes, and clothing.
- Provide adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities
- Store in a tightly closed container.
- Store in a cool, dry, well-ventilated place.
- Incompatible materials: Not available.

7.3 Specific end use(s)
- Not available.

SECTION 8: Exposure controls / personal protection

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
- Occupational exposure limits: Not available.
- Biological limit values: Not available.

8.2 Exposure controls
- Engineering controls: Use local exhaust ventilation or general ventilation to minimize dust exposure.
- Personal protective equipment (PPE):
- Eye/face protection: Safety glasses with side shields or chemical splash goggles.
- Skin protection: Protective gloves. Protective clothing as appropriate.
- Respiratory protection: If dust is generated and ventilation is inadequate, use a suitable particulate respirator.
- Hygiene measures: Wash hands after handling. Do not eat, drink, or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Test	Result
Appearance	No data available
IR spectrum	No data available
pH	No data available
Solubility	No data available

Property	Value
a) Physical State	No data available
b) Color	No data available
c) Odor	No data available
d) pH	No data available
e) Vapour Pressure	No data available
f) Viscosity	No data available
g) Initial Boiling Point and boiling range	No data available
h) Melting Point / Freezing Point	No data available
i) Auto Ignition Temperature	No data available

Property	Value
j) Flash Point	No data available
k) Explosion Limit, Lower	No data available
l) Explosion Limit, Upper	No data available
m) Decomposition Temperature	No data available
n) Loss on Drying	No data available
o) Relative Density	No data available
p) Solubility (in DMSO)	No data available
q) Oxidizing Properties	No data available

SECTION 10: Stability and reactivity

SECTION 10: Stability and reactivity

10.1 Reactivity
- No data available.

10.2 Chemical stability
- Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
- No data available.

10.4 Conditions to avoid
- Avoid dust formation. Avoid incompatible conditions. No data available.

10.5 Incompatible materials
- Not available.

10.6 Hazardous decomposition products
- Not available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
- Acute toxicity: IDENTIFICATION AND USE: Perylene forms yellow to colorless crystals. It is used in the manufacture of organic semiconductors. Polycyclic aromatic hydrocarbons (PAHs) are a group of chemicals that are formed during the incomplete burning of coal, oil, gas, wood, garbage, or other organic substances, such as tobacco and charbroiled meat. HUMAN EXPOSURE AND TOXICITY: Perylene did not induce mutations in cultured human lymphoblastoid cells. Perylene exerted a cytotoxic effect on human keratinocytes in vitro. The agent is not classifiable as to its carcinogenicity to humans. ANIMAL STUDIES: Perylene dermal applications, or i.p. injections did not induce tumors in mice. Benzo(a)pyrene hydroxylase activity of the rat placenta can be induced by perylene. ECOTOXICITY STUDIES: Perylene did not induce 7-ethoxyresorufin-o-deethylase (EROD) activity in the rainbow trout liver cells. /GENOTOXICITY/ In one study, /perylene/ did not induce mutations in cultured human lymphoblastoid cells.

- Skin corrosion/irritation: No data available.
- Serious eye damage/eye irritation: No data available.
- Respiratory or skin sensitization: No data available.
- Germ cell mutagenicity: /GENOTOXICITY/ In one study, /perylene/ did not induce mutations in cultured human lymphoblastoid cells.
- Carcinogenicity: IDENTIFICATION AND USE: Perylene forms yellow to colorless crystals. It is used in the manufacture of organic semiconductors. Polycyclic aromatic hydrocarbons (PAHs) are a group of chemicals that are formed during the incomplete burning of coal, oil, gas, wood, garbage, or other organic substances, such as tobacco and charbroiled meat. HUMAN EXPOSURE AND TOXICITY: Perylene did not induce mutations in cultured human lymphoblastoid cells. Perylene exerted a cytotoxic effect on human keratinocytes in vitro. The agent is not classifiable as to its carcinogenicity to humans. ANIMAL STUDIES: Perylene dermal applications, or i.p. injections did not induce tumors in mice. Benzo(a)pyrene hydroxylase activity of the rat placenta can be induced by perylene. ECOTOXICITY STUDIES: Perylene did not induce 7-ethoxyresorufin-o-deethylase (EROD) activity in the rainbow trout liver cells. Inadequate information to assess carcinogenic potential
- Reproductive toxicity: No data available.
- STOT-single exposure: No data available.
- STOT-repeated exposure: /LABORATORY ANIMALS: Chronic Exposure or Carcinogenicity/ Groups of 20 female Crl/CD-1 (ICR)Br mice [age unspecified] received a total of 10 dermal applications of 0 or 100 ug perylene (purity >99% by HPLC) in 100 uL acetone on alternate days. Ten days after the last application, all mice received thrice weekly dermal applications of 2.5 ug TPA for 25 weeks. At the end of the treatment period, the incidence of skin tumors (5%) in mice treated with perylene (0.1 tumors/ mouse) did not differ from that in the control mice (0.1 tumors/mouse). /LABORATORY ANIMALS: Chronic Exposure or Carcinogenicity/ Female strain A mice [number and age not specified] received intraperitoneal injections 0, 200, 500 or 1000 mg/kg bw perylene [purity not specified] three times a week for 8 weeks and the incidence of lung tumors was determined 16 weeks after the last injection. None of the treatments with perylene affected the number of lung tumors [incidence not given].
- Aspiration hazard: No data available.

Likely routes of exposure
- No data available.

Symptoms related to the physical, chemical and toxicological characteristics
- /ALTERNATIVE and IN VITRO TESTS/ The cytotoxic effects of two polycyclic aromatic hydrocarbons (PAH) (1-methyplyrene and perylene) were investigated on human skin keratinocytes. Normal human keratinocytes were cultured in the presence of various concentrations of 1-methylpyrene and perylene either alone or in combination. Following incubation, keratinocyte adhesion, viability, proliferation, colony-forming efficiency, and apoptosis/necrosis level were examined. The effects of PAH on wound healing were also determined in vitro using a scrape-wound healing assay on epidermis-like tissue. In addition, the inflammatory cell response to PAH insult was examined through interleukin-1 (IL-1) alpha and interleukin-6 (IL-6) secretion. Each individual PAH significantly decreased keratinocyte adhesion and viability in a concentration-dependent manner, which was associated with a reduced ability of keratinocytes to proliferate and form colonies. When PAH were combined, a greater effect on keratinocyte adhesion, viability, and proliferation was noted. Decreased cell proliferation/colony-forming efficiency was accompanied by increased cell apoptosis following incubation with either PAH. This effect was enhanced by the inhibitory influence on keratinocyte migration, as assessed by culture scratching. Each PAH also exerted a significant effect on keratinocyte immune functions by modulating the secretion of inflammatory mediators. Indeed, 1-methylpyrene or perylene, individually or when combined, significantly upregulated IL-1alpha and IL-6 secretion. This effect was greater and was concentration dependent when the PAH combination was used. Overall results indicate that 1-methylpyrene and perylene exerted a cytotoxic effect on human keratinocytes. ...

SECTION 12: Ecological information

SECTION 12: Ecological information

12.1 Toxicity
- Not available.

12.2 Persistence and degradability
- Not available.

12.3 Bioaccumulative potential
- Not available.

12.4 Mobility in soil
- Not available.

12.5 Results of PBT and vPvB assessment
- Not available.

12.6 Endocrine disrupting properties
- Not available.

12.7 Other adverse effects
- Not available.

SECTION 13: Disposal considerations

SECTION 13: Disposal considerations

13.1 Waste treatment methods
- Dispose of contents/container in accordance with local/regional/national/international regulations.
- Do not discharge to drains or the environment.
- Contaminated packaging: Dispose of as unused product or according to local requirements.
- Waste code: Not available.

SECTION 14: Transport information

SECTION 14: Transport information

- UN number: Not available.
- UN proper shipping name: Not available.
- Transport hazard class(es): Not available.
- Packing group: Not available.
- Environmental hazards: Not available.
- Special precautions for user: Not available.
- Transport in bulk according to IMO instruments: Not available.

SECTION 15: Regulatory information

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Not available.

15.2 Chemical safety assessment
- Not available.

SECTION 16: Other information

SECTION 16: Other information

- Product name: Perylene
- CAS No.: 198-55-0
- Synonyms: α-Perylene
- Supplier: Clearsynth Labs Ltd., Mumbai, India
- Emergency phone: +91-22-245045900

Disclaimer
- The information provided is believed to be accurate based on available data; however, no warranty is expressed or implied. The user is responsible for determining suitability for a particular purpose and for complying with applicable laws and regulations.

DISCLAIMER

This MSDS is system-generated. Please verify and confirm all data, statements, and values with the Support Team before use or distribution.