



# Material Safety Data Sheet

<b>NFPA</b>	<b>HMIS</b>	<b>Personal Protective Equipment</b>						
	<table border="1"> <tr> <td style="background-color: #00FFFF;">Health Hazard</td> <td style="text-align: center;">2</td> </tr> <tr> <td style="background-color: #FFCCCC;">Fire Hazard</td> <td style="text-align: center;">1</td> </tr> <tr> <td style="background-color: #FFFF00;">Reactivity</td> <td style="text-align: center;">0</td> </tr> </table>	Health Hazard	2	Fire Hazard	1	Reactivity	0	
Health Hazard	2							
Fire Hazard	1							
Reactivity	0							
See Section 15.								

<b>Section 1. Chemical Product and Company Identification</b>		<i>Page Number: 1</i>										
<b>Common Name/Trade Name</b>	<b>Pyrene</b>	<table border="1"> <tr> <td><b>Catalog Number(s).</b></td> <td>P2187</td> </tr> <tr> <td><b>CAS#</b></td> <td>129-00-00</td> </tr> <tr> <td><b>RTECS</b></td> <td>UR2450000</td> </tr> <tr> <td><b>TSCA</b></td> <td>TSCA 8(b) inventory: Pyrene</td> </tr> <tr> <td><b>CI#</b></td> <td>Not available.</td> </tr> </table>	<b>Catalog Number(s).</b>	P2187	<b>CAS#</b>	129-00-00	<b>RTECS</b>	UR2450000	<b>TSCA</b>	TSCA 8(b) inventory: Pyrene	<b>CI#</b>	Not available.
<b>Catalog Number(s).</b>	P2187											
<b>CAS#</b>	129-00-00											
<b>RTECS</b>	UR2450000											
<b>TSCA</b>	TSCA 8(b) inventory: Pyrene											
<b>CI#</b>	Not available.											
<b>Manufacturer</b>	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	<p style="text-align: center; color: blue; margin: 0;"><b>IN CASE OF EMERGENCY</b></p> <p style="text-align: center; color: blue; margin: 0;"><b>CHEMTREC (24hr) 800-424-9300</b></p> <p style="text-align: center; margin: 0;">CALL (310) 516-8000</p>										
<b>Commercial Name(s)</b>	Not available.											
<b>Synonym</b>	Benzo(D,E,F)phenanthrene											
<b>Chemical Name</b>	Pyrene											
<b>Chemical Family</b>	Not available.											
<b>Chemical Formula</b>	C16-H10											
<b>Supplier</b>	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248											

<b>Section 2. Composition and Information on Ingredients</b>					
		<i>Exposure Limits</i>			
Name	CAS #	TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )	CEIL (mg/m <sup>3</sup> )	% by Weight
1) Pyrene	129-00-00				100
<b>Toxicological Data on Ingredients</b>		<b>Pyrene:</b> ORAL (LD50): Acute: 2700 mg/kg [Rat]. 800 mg/kg [Mouse].			

<b>Section 3. Hazards Identification</b>	
<b>Potential Acute Health Effects</b>	Hazardous in case of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant, permeator).
<b>Potential Chronic Health Effects</b>	<p><b>CARCINOGENIC EFFECTS:</b> 3 (Not classifiable for human.) by IARC.</p> <p><b>MUTAGENIC EFFECTS:</b> Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast.</p> <p><b>TERATOGENIC EFFECTS:</b> Not available.</p> <p><b>DEVELOPMENTAL TOXICITY:</b> Not available.</p> <p>Repeated or prolonged exposure is not known to aggravate medical condition.</p>

**Section 4. First Aid Measures**

<b>Eye Contact</b>	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
<b>Skin Contact</b>	In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
<b>Serious Skin Contact</b>	Not available.
<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
<b>Serious Inhalation</b>	Not available.
<b>Ingestion</b>	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.
<b>Serious Ingestion</b>	Not available.

**Section 5. Fire and Explosion Data**

<b>Flammability of the Product</b>	May be combustible at high temperature.
<b>Auto-Ignition Temperature</b>	Not available.
<b>Flash Points</b>	Not available.
<b>Flammable Limits</b>	Not available.
<b>Products of Combustion</b>	These products are carbon oxides (CO, CO <sub>2</sub> ).
<b>Fire Hazards in Presence of Various Substances</b>	Slightly flammable to flammable in presence of heat, of combustible materials. Non-flammable in presence of shocks.
<b>Explosion Hazards in Presence of Various Substances</b>	Risks of explosion of the product in presence of mechanical impact: Not available. Slightly explosive in presence of heat. Non-explosive in presence of open flames and sparks.
<b>Fire Fighting Media and Instructions</b>	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
<b>Special Remarks on Fire Hazards</b>	Not available.
<b>Special Remarks on Explosion Hazards</b>	Not available.

**Section 6. Accidental Release Measures**

<b>Small Spill</b>	Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
<b>Large Spill</b>	Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

**Section 7. Handling and Storage**

**Precautions** Keep locked up.. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Avoid contact with eyes. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents.

**Storage** Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 24°C (75.2°F). Preferably refrigerate.

**Section 8. Exposure Controls/Personal Protection**

**Engineering Controls** Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Personal Protection** Safety glasses. Synthetic apron. Gloves (impervious).

**Personal Protection in Case of a Large Spill** Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits** Not available.

**Section 9. Physical and Chemical Properties**

<b>Physical state and appearance</b>	Solid. (Crystalline solid. Powdered solid.)	<b>Odor</b>	Not available.
<b>Molecular Weight</b>	202.26 g/mole	<b>Taste</b>	Not available.
<b>pH (1% soln/water)</b>	Not applicable.	<b>Color</b>	Yellow.
<b>Boiling Point</b>	404°C (759.2°F)		
<b>Melting Point</b>	151.2°C (304.2°F)		
<b>Critical Temperature</b>	Not available.		
<b>Specific Gravity</b>	1.271 @ 23 C (Water = 1)		
<b>Vapor Pressure</b>	Not applicable.		
<b>Vapor Density</b>	Not available.		
<b>Volatility</b>	Not available.		
<b>Odor Threshold</b>	Not available.		
<b>Water/Oil Dist. Coeff.</b>	The product is more soluble in oil; log(oil/water) = 4.9		
<b>Ionicity (in Water)</b>	Not available.		
<b>Dispersion Properties</b>	Is not dispersed in cold water, hot water. See solubility in diethyl ether.		
<b>Solubility</b>	Soluble in diethyl ether. Insoluble in cold water, hot water. Pyrene is fairly soluble in organic solvents. It is soluble in alcohol, benzene, carbon disulfide, ether, petroleum ether, and toluene		

**Section 10. Stability and Reactivity Data**

<b>Stability</b>	The product is stable.
<b>Instability Temperature</b>	Not available.
<b>Conditions of Instability</b>	Excess heat, incompatible materials
<b>Incompatibility with various substances</b>	Reactive with oxidizing agents.
<b>Corrosivity</b>	Not available.
<b>Special Remarks on Reactivity</b>	Not available.
<b>Special Remarks on Corrosivity</b>	Not available.
<b>Polymerization</b>	Will not occur.

**Section 11. Toxicological Information**

<b>Routes of Entry</b>	Inhalation. Ingestion.
<b>Toxicity to Animals</b>	Acute oral toxicity (LD50): 800 mg/kg [Mouse].
<b>Chronic Effects on Humans</b>	<b>CARCINOGENIC EFFECTS:</b> 3 (Not classifiable for human.) by IARC. <b>MUTAGENIC EFFECTS:</b> Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast.
<b>Other Toxic Effects on Humans</b>	Hazardous in case of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant, permeator).
<b>Special Remarks on Toxicity to Animals</b>	Not available.
<b>Special Remarks on Chronic Effects on Humans</b>	May affect genetic material (mutagenic). May cause cancer (tumorigenic) according to animal data.
<b>Special Remarks on other Toxic Effects on Humans</b>	Acute Potential Health Effects: Skin: May cause skin irritation. May be absorbed through skin. Eyes: May cause eye irritation. Conjunctival irritation may be noted. Inhalation: May cause respiratory tract irritaiton. Ingestion: May cause gastrointestinal tract irritation. May affect behavior/Central Nervous System (excitation and muscel spasicity), liver and urinary system, and immune system, and blood.

**Section 12. Ecological Information**

<b>Ecotoxicity</b>	Ecotoxicity in water (LC50): 1.8 mg/l 48 hours [Water flea].
<b>BOD5 and COD</b>	Not available.
<b>Products of Biodegradation</b>	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
<b>Toxicity of the Products of Biodegradation</b>	The products of degradation are less toxic than the product itself.
<b>Special Remarks on the Products of Biodegradation</b>	Not available.

**Section 13. Disposal Considerations**

**Waste Disposal** Waste must be disposed of in accordance with federal, state and local environmental control regulations.

**Section 14. Transport Information**

**DOT Classification** Not a DOT controlled material (United States).

**Identification** Not applicable.

**Special Provisions for Transport** Not applicable.

**DOT (Pictograms)**



**Section 15. Other Regulatory Information and Pictograms**

**Federal and State Regulations**

Connecticut carcinogen reporting list.: Pyrene  
 Illinois chemical safety act: Pyrene  
 New York release reporting list: Pyrene  
 Pennsylvania RTK: Pyrene  
 Massachusetts RTK: Pyrene  
 Massachusetts spill list: Pyrene  
 New Jersey: Pyrene  
 New Jersey spill list: Pyrene  
 Louisiana RTK reporting list: Pyrene  
 Louisiana spill reporting: Pyrene  
 California Director's list of Hazardous Substances: Pyrene  
 TSCA 8(b) inventory: Pyrene  
 TSCA 8(a) CAIR: Pyrene  
 TSCA 8(d) H and S data reporting: Pyrene: June 1, 1987-June1, 1997  
 SARA 302/304/311/312 extremely hazardous substances: Pyrene  
 CERCLA: Hazardous substances.: Pyrene: 5000 lbs. (2268 kg)

**California Proposition 65 Warnings**

**Other Regulations** EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.


**Other Classifications** **WHMIS (Canada)** Not controlled under WHMIS (Canada).

**DSCL (EEC)** R20/21/22- Harmful by inhalation, in contact with skin and if swallowed. S2- Keep out of the reach of children. S36/37- Wear suitable protective clothing and gloves. S46- If swallowed, seek medical advice immediately and show this container or label.

**HMIS (U.S.A.)**

Health Hazard	2
Fire Hazard	1
Reactivity	0
Personal Protection	C

**National Fire Protection Association (U.S.A.)**

Health  Flammability  
 Reactivity  
 Specific hazard

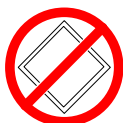
WHMIS (Canada)  
(Pictograms)



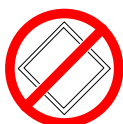
DSCL (Europe)  
(Pictograms)



TDG (Canada)  
(Pictograms)



ADR (Europe)  
(Pictograms)



**Protective Equipment**



Gloves (impervious).



Synthetic apron.



Not applicable.  
Safety glasses.

**Section 16. Other Information**

MSDS Code 5876P

References Not available.

Other Special Considerations Not available.

Validated by Sonia Owen on 8/11/2006.

Verified by Sonia Owen.

Printed 9/13/2006.

CALL (310) 516-8000

**Notice to Reader**

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.