

MATERIAL SAFETY DATA SHEET

Date Printed: 03/13/2008

Date Updated: 01/31/2006

Version 1.3

Section 1 - Product and Company Information

Product Name 1,1'-DIETHYL-2,2'-CARBOCYANINE IODIDE,
97%

Product Number 166510

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

Substance Name	CAS #	SARA 313
1,1'-DIETHYL-2,2'-CARBOCYANINE IODIDE, 97%	605-91-4	No

Formula C₂₅H₂₅N₂.I

Synonyms Carbocyanine * Eastman kodak 622 *
1-Ethyl-2-(3-(1-ethyl-2(1H)-quinolylidene)propenyl
)quinolinium iodide * G 1700 * Pinacyanol *
Pinacyanole * Pinacyanol iodide * Quinolinium,
1-ethyl-2-(3-(1-ethyl-2(1H)-quinolinylidene)-1-pro
penyl)-, iodide (9CI) * Sensitol Red

RTECS Number: VC3676870

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Toxic.

Toxic by inhalation, in contact with skin and if swallowed.

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.

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.
Specific Hazard(s): Emits toxic fumes under fire conditions.

EXPOSURE HAZARD(S)
Material: Toxic. Irritant.

Section 6 - Accidental Release Measures

PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL
Evacuate area.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)
Wear self-contained breathing apparatus, 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. Do not get in eyes, on skin, on clothing.

STORAGE
Suitable: Keep container closed. Store in a cool dry place.
Store at 2-8°C

SPECIAL REQUIREMENTS
Light sensitive.

Section 8 - Exposure Controls / PPE

ENGINEERING CONTROLS
Use only in a chemical fume hood. Safety shower and eye bath.

PERSONAL PROTECTIVE EQUIPMENT
Other: Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing.

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

Section 9 - Physical/Chemical Properties

Appearance Color: Deep green
Form: Powder

Property	Value	At Temperature or Pressure
Molecular Weight	480.39 AMU	
pH	N/A	
BP/BP Range	N/A	
MP/MP Range	295 °C	
Freezing Point	N/A	
Vapor Pressure	N/A	
Vapor Density	N/A	
Saturated Vapor Conc.	N/A	
SG/Density	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

Conditions of Instability: May decompose on exposure to light.
Materials to Avoid: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide,
Nitrogen oxides, Hydrogen iodide.

Section 11 - Toxicological Information

ROUTE OF EXPOSURE

Inhalation: Material is irritating to mucous membranes and upper
respiratory tract.

Multiple Routes: Causes eye and skin irritation. Harmful if
swallowed, inhaled, or absorbed through skin.

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

16 MG/KG

LD50

Remarks: Behavioral:Convulsions or effect on seizure threshold.

Intraperitoneal

Mouse

3 MG/KG

LD50

Remarks: Behavioral:Convulsions or effect on seizure threshold.

Intravenous

Dog

3700 UG/KG

LD50

Remarks: Behavioral:Convulsions or effect on seizure threshold.

Intravenous

Rabbit

9 MG/KG

LD50

Remarks: Behavioral:Convulsions or effect on seizure threshold.

Subcutaneous

Guinea pig

47 MG/KG

LD50

Remarks: Behavioral:Convulsions or effect on seizure threshold.

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: Toxic solids, organic, n.o.s.

UN#: 2811

Class: 6.1

Packing Group: Packing Group II

Hazard Label: Toxic substances.

PIH: Not PIH

IATA

Proper Shipping Name: Toxic solid, organic, n.o.s.

IATA UN Number: 2811

Hazard Class: 6.1

Packing Group: II

Section 15 - Regulatory Information

EU ADDITIONAL CLASSIFICATION

Symbol of Danger: T

Indication of Danger: Toxic.

R: 23/24/25

Risk Statements: Toxic by inhalation, in contact with skin and if swallowed.

S: 36/37/39-45

Safety Statements: Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Toxic.

Risk Statements: Toxic by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system and skin.

Safety Statements: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection.

UNITED STATES REGULATORY INFORMATION

SARA LISTED: No

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: No

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 knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2008 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.