#### MATERIAL SAFETY DATA SHEET

Date Printed: 02/28/2007 Date Updated: 01/29/2006

Version 1.4

## Section 1 - Product and Company Information

Product Name POLY(9-VINYLCARBAZOLE), AVERAGE MW CA.

1,100,000

Product Number 182605 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 POLY(9-VINYLCARBAZOLE) 25067-59-8 No

Formula C14H11N

Synonyms Carbazole, 9-vinyl-, polymer (8CI) \* DH 700 \*

Luvican M 150 \* Luvican M 170 \*

Poly(vinylcarbazole) \* Poly(N-vinylcarbazole) \*
Poly(9-vinylcarbazole) \* PVK \* Tuvical 210 \*
N-Vinylcarbazole homopolymer \* 9-Vinylcarbazole

homopolymer \* Vinylcarbazole polymer

RTECS Number: FE6225480

Section 3 - Hazards Identification

For additional information on toxicity, please refer to Section 11.

# Section 4 - First Aid Measures

### INHALATION EXPOSURE

If inhaled, remove to fresh air.

## DERMAL EXPOSURE

In case of contact, immediately wash skin with soap and copious amounts of water.

## EYE EXPOSURE

In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes. Assure adequate flushing of the eyes by separating the eyelids with fingers.

# Section 5 - Fire Fighting Measures

### CONDITIONS OF FLAMMABILITY

Under fire conditions, material may decompose to form flammable and/or explosive mixtures in air.

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.

#### Section 6 - Accidental Release Measures

### PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear respirator, chemical safety goggles, 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. Avoid contact with eyes, skin, and clothing.

#### STORAGE

Suitable: Keep tightly closed. Store in a cool dry place.

# Section 8 - Exposure Controls / PPE

## ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

#### PERSONAL PROTECTIVE EOUIPMENT

Respiratory: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Respiratory protection is not required. Where protection is desired, use multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges.

Hand: Compatible chemical-resistant gloves.

Eye: Chemical safety goggles.

### GENERAL HYGIENE MEASURES

Wash thoroughly after handling. Remove and wash contaminated clothing promptly.

## Section 9 - Physical/Chemical Properties

рН	N/A	
BP/BP Range	N/A	
MP/MP Range	300	°C
Freezing Point	N/A	

```
Vapor Pressure
                       N/A
Vapor Density
                       N/A
Saturated Vapor Conc. N/A
SG/Density
                       1.2 \text{ g/cm}3
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
                       1.683
Refractive Index
Optical Rotation
                       N/A
Miscellaneous Data
                      N/A
Solubility
                       N/A
N/A = not available
Section 10 - Stability and Reactivity
STABILITY
   Materials to Avoid: Strong oxidizing agents.
HAZARDOUS DECOMPOSITION PRODUCTS
   Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide,
   Nitrogen oxides.
Section 11 - Toxicological Information
ROUTE OF EXPOSURE
   Skin Contact: May cause skin irritation.
   Eye Contact: May cause eye irritation.
   Multiple Routes: May be harmful by inhalation, ingestion, or
   skin absorption.
SIGNS AND SYMPTOMS OF EXPOSURE
   To the best of our knowledge, the chemical, physical, and
   toxicological properties have not been thoroughly investigated.
TOXICITY DATA
   Oral
   Rat
   > 5000 \text{ mg/kg}
   Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and
   Taste):Eye:Lacrimation. Behavioral:Somnolence (general depressed
   activity). Lungs, Thorax, or Respiration: Other changes.
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: None

Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

#### IATA

Non-Hazardous for Air Transport: Non-hazardous for air transport.

### Section 15 - Regulatory Information

### UNITED STATES REGULATORY INFORMATION

SARA LISTED: No

TSCA INVENTORY ITEM: Yes

### 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: Yes

# 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 2007 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.