

## MATERIAL SAFETY DATA SHEET

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Version 1.4

## Section 1 - Product and Company Information

|                  |   |
|------------------|---|
| Product Name     | POLY(9-VINYLCARBAZOLE), AVERAGE MN =<br>25,000-50,000 |
| Product Number   | 368350  |
| Brand            | ALDRICH   |
| Company          | Sigma-Aldrich   |
| Address          | 3050 Spruce Street<br>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 *<br>Luvican M 150 * Luvican M 170 *<br>Poly(vinylcarbazole) * Poly(N-vinylcarbazole) *<br>Poly(9-vinylcarbazole) * PVK * Tuvical 210 *<br>N-Vinylcarbazole homopolymer * 9-Vinylcarbazole<br>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.

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Section 6 - Accidental Release Measures

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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.

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Section 7 - Handling and Storage

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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.

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Section 8 - Exposure Controls / PPE

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ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

PERSONAL PROTECTIVE EQUIPMENT

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.

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Section 9 - Physical/Chemical Properties

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|                       |              |
|-----------------------|--------------|
| pH                    | N/A          |
| BP/BP Range           | N/A          |
| MP/MP Range           | 300,000 °C   |
| Freezing Point        | N/A          |
| Vapor Pressure        | N/A          |
| Vapor Density         | N/A          |
| Saturated Vapor Conc. | N/A          |
| SG/Density            | 1,2000 g/cm3 |
| 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      | 1,6830       |
| Optical Rotation      | N/A          |
| Miscellaneous Data    | N/A          |
| Solubility            | N/A          |

N/A = not available

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## Section 10 - Stability and Reactivity

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### STABILITY

Materials to Avoid: Strong oxidizing agents.

### HAZARDOUS DECOMPOSITION PRODUCTS

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

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## Section 11 - Toxicological Information

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### 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

> 5000,000000 mg/kg

LD50

Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Lacrimation. Behavioral:Somnolence (general depressed activity). Lungs, Thorax, or Respiration:Other changes.

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## Section 12 - Ecological Information

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No data available.

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## Section 13 - Disposal Considerations

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### 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.

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## Section 14 - Transport Information

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### 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.

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## Section 15 - Regulatory Information

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### 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

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## Section 16 - Other Information

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### 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 2010 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.