

Creation date 26-May-2016

Revision date 12-Jun-2019

Version 2

1. Identification of the Substance/Preparation and of the Company/Undertaking

- (a) Product name Polyimide adhesive tape
Product identifier P224
- (b) Other means of identification
Product Code P777-627-00035
- (c) Recommended Use High temperature resistant, high dielectric strength adhesive tape
 For electric insulation and protection
- (d) Supplier Address Nitto, Inc.
 1990 Rutgers University Blvd. Lakewood, NJ08701, U.S.A.
 TEL.+1-732-901-7905 FAX.+1-732-364-4985
- (e) Emergency telephone number +1-732-901-7905 (Nitto, Inc.)

2. Hazards Identification

- (a) GHS - Classification Not applicable for article
- (b) Label elements Not Applicable
Physical state Solid
Odor Slight
- (c) Other Hazards Not Applicable

3. Composition/information on Ingredients

Product Classification Article

<u>Chemical name</u>	<u>CAS No.</u>	<u>Weight-%</u>
Acrylic adhesive	-	55-65
Polyimide	25038-81-7	35-45

The exact percentage (concentration) of composition has been withheld as a trade secret

4. First aid measures

- (a) General information
If inhaled Will not occur
Eye contact Call a physician immediately
Skin contact Wash off immediately with soap and plenty of water
 In the case of skin irritation or allergic reactions see a physician
Ingestion Get immediate medical advice/attention
- (b) Most important symptoms/effects, acute and delayed No information available
- (c) Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves
Note to physicians No information available

5. Fire-fighting measures

- (a) Fire extinguishing agent Dry chemical, CO2, water spray or regular foam
Prohibited media No information available
- (b) Special exposure hazards in a fire No information available
Hazardous combustion products No information available
Explosion data No information available

<u>Sensitivity to Mechanical Impact</u>	No information available
<u>Sensitivity to Static Discharge</u>	Yes. This film is subject to generation of static during processing. Use precautions of static charge during processing and when removing plastic films used as protective packaging
<u>(c) Special protective equipment and precautions for firefighters</u>	In the event of fire, wear self-contained breathing apparatus Use personal protective equipment as required

6. Accidental release measures

<u>(a) Personal Precautions</u> <u>Protective equipment and emergency procedures</u>	Avoid contact with eyes and skin Protective gloves and safety glasses recommended
<u>(b) Environmental precautions</u>	Collect spillage Prevent product from entering drains Keep out of waterways
<u>(c) Methods and material for containment and cleaning up</u>	Should not be released into the environment

7. Handling and Storage

<u>(a) Precautions for safe handling</u>	Protective gloves and safety glasses recommended
<u>(b) Storage conditions</u>	Store at room temperature and normal humidity away from direct sunlight

8. Exposure Controls/Personal Protection

<u>(a) Control parameters</u> <u>Other information</u>	None under normal use conditions No information available
<u>(b) Appropriate engineering controls</u>	Ensure adequate ventilation, especially in confined areas
<u>(c) Personal protective equipment [PPE]</u> <u>Respiratory Protection</u> <u>Hand protection</u> <u>Skin protection</u>	None under normal use conditions Wear non-permeable gloves Wear protective gloves and protective clothing

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

<u>(a) Physical state</u>	Solid
<u>(b) Color</u>	amber
<u>(c) Odor</u>	Slight
<u>(d) pH</u>	No data available
<u>(e) Melting point / Freezing point</u>	No information available
<u>(f) Boiling point / boiling range</u> <u>boiling point</u>	Not Applicable Not Applicable
<u>(g) Flash Point</u>	No data available
<u>(h) Evaporation rate</u>	No data available
<u>(i) Flammability (solid, gas)</u> <u>(j) Upper flammability limit</u> <u>Upper</u> <u>Lower</u>	Non-flammable solid Not Applicable Not Applicable
<u>(k) Vapor pressure</u>	Not Applicable
<u>(l) Vapor density</u>	Not Applicable
<u>(m) Specific gravity</u>	No data available
<u>(n) Solubility</u>	Insoluble in water
<u>(o) Partition Coefficient</u> <u>(n-octanol/water)</u>	No data available
<u>(p) Autoignition temperature</u>	No data available
<u>(q) Decomposition temperature</u>	No data available
<u>(r) Kinematic viscosity</u>	No data available
<u>(s) Molecular weight</u>	No data available

<u>9.2 Other information</u>	Not Applicable
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10. Stability and Reactivity

- (a) Reactivity Stable under normal conditions
- (b) Chemical stability Stable under normal conditions
- (c) Possibility of hazardous reactions No data available
- (d) Conditions to avoid No information available
- (e) Incompatible materials No information available
- (f) Hazardous decomposition products Thermal decomposition can lead to release of irritating and toxic gases and vapors
Carbon dioxide (CO₂)
Carbon monoxide

11. Toxicological Information

- (a) Information on likely routes of exposure
- Inhalation Not an expected route of exposure
- Ingestion Not an expected route of exposure May cause respiratory irritation to sensitive individuals
- Skin contact May cause skin irritation to sensitive individuals
- Eye contact May cause eye irritation to sensitive individuals
- (b) Most important symptoms/effects, acute and delayed No information available
- (c) Delayed and immediate effects and also chronic effects from short- and long-term exposure
- Acute Toxicity No information available
- Skin corrosion/irritation No information available
- Serious eye damage/eye irritation No information available
- Respiratory sensitization No information available
- Germ cell mutagenicity No data available on finished product
- Reproductive Toxicity No data available on finished product
- Specification target internal organs/systemic toxicity (single exposure) No data available on finished product
- Specification target internal organs/systemic toxicity (repeat exposure) No data available on finished product
- Aspiration hazard Not Applicable
- (d) Unknown Acute Toxicity Not Applicable
- (e) Carcinogenicity No data available on finished product

12. Ecological Information

- (a) Ecotoxicity No data available on finished product
- (b) Mobility in soil No data available on finished product
- (c) Persistence and degradability No data available on finished product
- (d) Bioaccumulation No data available on finished product
- (e) Other adverse effects
- Ozone depletion potential (ODP) Stable under normal conditions

13. Disposal Considerations

Waste treatment methods

Disposal of wastes

Dispose of in accordance with federal, state and local regulations. The Customer is responsible for the proper disposal of any waste generated as a result of the use of the Product or of the Product itself, and is responsible for complying with all applicable laws, rules and regulations relating to the management, storage, treatment, shipment and disposal of such waste or Product ("Waste Management Practices"). "Product" includes anything sold by Nitto Denko Corporation and/or any affiliates or subsidiaries ("Company") to Customer. The Company is not responsible for any of the Customer's Waste Management Practices. As part of those practices, Customer must separate packaging from Product before disposal. Further, Customer should review and comply with this SDS prior to any such disposal.

Customer shall hold harmless the Company, its agents, contractors, successors and assigns from any and all liability, claims, loss, damage, death or injury, including reasonable attorney's fees and costs, arising out of or relating to Customer's Waste Management Practices

Contaminated packaging

Dispose of in accordance with federal, state and local regulations

Disposal considerations

Should not be released into the environment

14. Transport Information

<u>DOT(U.S. Department of Transportation) (HMTA)</u>	Not regulated
<u>UN number</u>	Not Applicable
<u>UN Proper Shipping Name</u>	Not regulated
<u>Transport hazard class</u>	Not Applicable
<u>Packing group, if applicable</u>	Not Applicable
<u>Environmental hazards (Applicable/Not applicable)</u>	Not Applicable
<u>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</u>	Not Applicable
<u>Special precautions in connection with transport or conveyance</u>	Store in a cool area away from heat
<u>TDG</u>	Not regulated
<u>MEX(Transport is specifically for Mexico)</u>	Not regulated
<u>ICAO (air)</u>	Not regulated
<u>IATA</u>	Not regulated
<u>IMDG</u>	Not regulated
<u>UN number</u>	Not Applicable
<u>UN Proper Shipping Name</u>	Not regulated
<u>Transport hazard class</u>	Not Applicable
<u>Special precautions in connection with transport or conveyance</u>	Store in a cool area away from heat
<u>RID (Regulations concerning the International Carriage of Dangerous Goods by Rail)</u>	Not regulated
<u>ADR (European Agreement concerning International Carriage of Dangerous Goods by Road)</u>	Not regulated
<u>ADN Technical Name</u>	Not regulated

15. Regulatory information

US State Regulations

California Proposition 65

This product will not contain compounds in particulate (respirable) form under normal conditions

Global Inventories

Not Applicable

REACH 7 Article 33 Article SVHC notification (> 0.1 wt. %)

None based on the current SVHC listing, as of the date of this SDS.

16. Other information

<u>NFPA</u>	Health Hazards 0	Flammability 0	Instability: 0	Physical and Chemical Properties -
<u>HMIS</u>	Health Hazards 0	Flammability 0	Physical Hazards 0	Personal protective equipment X

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Source Information Raw material SDS
 LOLI (Chem ADVISOR) GHS classification data

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End of Safety Data Sheet