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

Product name: DOUBLE-COATED ADHESIVE TAPE
Product identifier: TR-5310EX
Product Code: P020-00047718-0000
Supplier Address: Nitto Denko Corporation Toyohashi Plant
18, Hirayama, Nakahara-cho, Toyohashi, Aichi, 441-3194, Japan
TEL. +81-532-41-8461, FAX. +81-532-41-8064
Department responsible: Quality Management Dept. Administration Div
Emergency telephone number: +81-532-41-1121 (TOYOHASHI PLANT)
Recommended Use: For LED light

2. Hazards Identification

GHS Classification:
Classification of the substance or mixture: Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

3. Composition/information on Ingredients

<table>
<thead>
<tr>
<th>Single Substance or Mixture</th>
<th>Chemical name</th>
<th>CAS No.</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Acrylic adhesive</td>
<td>-</td>
<td>85-95</td>
</tr>
<tr>
<td></td>
<td>Polyester film</td>
<td>-</td>
<td>5-15</td>
</tr>
<tr>
<td>Silicone coated paper</td>
<td>(Release liner)</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

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

4. First aid measures

If inhaled: Will not occur
Skin contact: Peel slowly, then rinse in water
Eye contact: Immediately flush with large amounts of water for at least 15 minutes. Examination and treatment by a physician if necessary
Ingestion: Immediately induce vomiting and then consult a doctor
Most important symptoms/effects, acute and delayed: No information available
Self-protection of the first aider: No information available
Note to physicians: No information available

5. Fire-fighting measures

Fire extinguishing agent:
- Carbon dioxide (CO2)
- Extinguishing powder
- Water
- ABC-powder

Prohibited media: No information available
Special exposure hazards in a fire: No information available
Specific extinguishing methods: No information available
Advice for fire-fighters: Due to poisonous gas (chlorine gas and so on) may be occurred, if needed, use Gas mask and Goggles

6. Accidental release measures

Personal Precautions: Will not occur. Not specified
Protective equipment and emergency procedures: Will not occur. Not specified
Environmental precautions: Will not occur. Not specified
Methods and material for containment and cleaning up: Will not occur. Not specified
7. Handling and Storage

Handling

Technical measures:
- None in particular

Local and general exhaust ventilation
- Not required for use in normal temperature
- Provide adequate ventilation when performing high-temperature processing

Precautions for safe handling
- None in particular
- Use caution and protective gloves to avoid cuts with edges of tape liners

Remarks

Storage

Technical measures:
- None in particular

Storage conditions
- Store at room at room temperature and normal humidity away from direct sunlight
- Avoid high temperature

Incompatible materials
- No information available

Conditions for safe storage, including any incompatibilities
- Shipping package

8. Exposure Controls/Personal Protection

Control parameters
- Unset

Permissible concentration
- Unset

Appropriate engineering controls
- Not required

Personal protective equipment [PPE]

Respiratory Protection
- Not required

Hand protection
- Not required

Eye protection
- Not required

Skin protection
- Not required

General hygiene considerations
- None under normal use conditions

9. Physical and Chemical Properties

Physical state
- Solid
- Roll type

Color
- White

Odor
- None in particular

pH
- No data available

Melting point / Freezing point
- No data available

Boiling point / boiling range
- No data available

Flash Point
- No data available

Autoignition temperature
- No data available

Vapor pressure
- No data available

Vapor density
- No data available

Specific gravity
- Approx 1.4

Solubility
- Insoluble in water

Partition Coefficient (n-octanol/water)
- No data available

Decomposition temperature
- No data available

10. Stability and Reactivity

Reactivity
- Stable under normal conditions of use and storage

Possibility of hazardous reactions
- None in particular

Conditions to avoid
- No data available

Incompatible materials
- No information available

Hazardous decomposition products
- No information available

11. Toxicological Information

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 information available

Reproductive Toxicity
- No information available

Specification target internal organs/systemic toxicity (single exposure)
- No information available
12. Ecological Information

- Specification target internal organs/systemic toxicity (repeat exposure): No information available
- Aspiration hazard: No information available

13. Disposal Considerations

- Waste treatment methods: Disposal should be in accordance with applicable regional, national and local laws and regulations. When burning it, use an incinerator which satisfies its technical guidelines (the residence time is 2 seconds or more at a temperature of 800 °C centigrade or more). Contact an authorized industrial waste treatment company for off-site disposal.
- Contaminated packaging: Package: Contact a recycling manufacture.

14. Transport Information

- International regulations: Not Applicable
- UN number: Not Applicable

- Japanese regulation: Not Applicable
- Special precautions in connection with transport or conveyance: Do not store in long term under high temperature or leave outdoors.

15. Regulatory information

- Local regulation: Japanese regulation Fire Service Act: Designated flammable material (Synthetic resins: Other)
- Foreign regulation: Contact NITTO for more information
- REACH 7 Article 33 Article SVHC notification (> 0.1 wt. %): Not Applicable

16. Other information

- Creation date: 22-Aug-2019
- Revision date: 22-Aug-2019
- Version: 1
- Key literature references and sources for data: JIS Z 7252: 2009 Classification of chemicals based on "Globally Harmonized System of Classification and Labelling of Chemicals (GHS)"
- JIS Z7253: 2012 Safety data sheet for chemical products -Content and order of sections

Disclaimer:
Contents are based on documents, information and data which are available at this time, but nothing is guaranteed as regards content, physical and chemical properties, hazards. Also precautions are subject to ordinary handling, so please take safety measures as usage in special cases. The regulatory information presented here should not necessarily be considered as all-inclusive. Other local and international regulations may also apply.

End of Safety Data Sheet