DESCO INDUSTRIES INC. Technical Bulletin TB-7034

Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200, Standard must be consulted for specific requirements.

NFPA Designation 704

Degree of Hazard:

4 = Extreme 1 = Slight 3 = High 0 = Insignificant

2 = Moderate

Health (Blue) 0 (Red)
ficant (Yellow)

Reactivity (Yellow)

Flammability

IDENTITY (As Used on Label and List)

Wescorp Antistatic Hi Temp Polyimide Tape

Note: Blank spaces are not permitted. If any item it not applicable, or no information is available,the space must be marked to indicate that.

Section I

Manufacturer's Name	Emergency Telephone Number
Desco Industries Inc.	(909) 627-8178
Address (Number, Street, City, State, and Zip Code)	Telephone Number for Information
3651 Walnut Avenue, Chino, CA 91710	(909) 627-8178
Date Prepared	Signature of Preparer (Optional)
2-1-2006	

Section II - Physical/Chemical Characteristics

Polyimide Film

Electrically conductive particles embedded in a layer of polysiloxane adhesive

Section III - Hazardous Ingredients

No hazardous materials present

(1) According to Commission Directive 88/379/EEC (Article 3 6aa).

Section IV - First Aid Measures

- 4.1. Skin: No irritation is expected from handling the tape, however ensure good industrial hygiene and wash exposed areas with soap and Water.
- 4.2. Eyes: Rinse opened eye for several minutes under running water.
- 4.3. Inhalation: Not a probable route of exposure for adhesive tape. Exposure to the encapsulated electrically conductive articles in the adhesive layer is not likely.
- 4.4. Ingestion: Not a probable route of exposure for adhesive for adhesive tape. Treat symptomatically.
- 4.5. Other first aid information: Not known

Section V - Fire Extinguishing Measures

- 5.1. Extinguishing media: Carbon dioxide, foam, dry powder, or fine water spray.
- 5.2. Unsuitable extinguishing media: None known
- 5.3. Unusual firefighting hazards: None known
- 5.4. Special firefighting procedures: Self-contained respirator should be worn.
- 5.5. Other recommendations: None known
- 5.6. Combustion products: Polyimide film chars but does not burn in air, however it will burn in an atmosphere of 100% oxygen. The major off-gases are carbon dioxide and carbon monoxide. The silicone adhesive layer also tends to char leaving residues of silica and off-gases containing carbon dioxide, traces of incompletely burned carbon products and formaldehyde.

Section VI - Accidental Release Measure

- 6.1. Personal protection: Avoid contact with eyes.
- 6.2. Precautions to protect the environment: None established
- 6.3. Clean up procedure: Pick up to prevent floor

Section VII - Handling and Storage

- 7.1. Handling precautions: Avoid contact with eyes. Ensure good industrial hygiene and wash skin with soap and water after contact.
- 7.2. Storage: No special measures are required.
- 7.3. Unsuitable packaging materials: None known.
- 7.4. Incompatibilities: None known.
- 7.5. Other information: None known.

Section VIII - Exposure Controls and Personal Protection

- 8.1 Exposure controls: Safe handling/usage of PPI RD-042 at high temperatures (above 200°C/392°F) requires adequate ventilation. Using small quantities normal air circulation may be adequate otherwise further ventilation measures are recommended.
- 8.2. Exposure controls for hazardous components: No hazardous materials present
- 8.3. Personal protective equipment:

Respiratory: Not required for normal handling.

Protective gloves: Not required for normal handling, if tape is hot gloves are recommended as good industrial practice.

Eye/Face: Safety glasses are recommended as good industrial practice.

Industrial Hygiene: Wash after handling, especially before eating, drinking or smoking. Exercise good industrial hygiene practice.

DESCO WEST - 3651 Walnut Avenue, Chino, CA 91710 • (909) 627-8178 • Fax (909) 627-7449

DESCO EAST - 90 Hudson Road, Canton, MA 02021-1407 • (781) 821-8370 • Fax (781) 575-0172 • Web Site: Desco.com

Wescorp Antistatic Hi Temp Polyimide Tape MSDS (page 2)

Other data:

Section IX - Physical and Chemical Properties

9.1 Appearance:

Form: Self-adhesive tape Color: Opaque black Odor: None

9.2. Safety Related Information

pH: Not determined Vapor density (air=1): Not determined Boiling point/Boiling range: Not determined Evaporation rate (ethyl ether = 1): Not determined Melting point/Melting range: Not determined Viscosity: Not determined

Flash point: Not determined % Volatiles: < 0.05% @ 200°C (392°F)
Flammability (solid): Non-flammable Molecular weight: Not determined

Auto flammability:

Explosive properties:

Oxidizing properties:

Not determined

Vapor pressure:

Not determined

Not determined

Not determined

Not determined

Not determined

Not determined

Specific gravity:

Not soluble

Solubility in water:

Solubility in organic solvent:

Soluble in Toluene

Section X - Stability and Reactivity

Oil/water partition co-efficient

10.1 Stability: Stable at normal temperatures and storage conditions (ideal $23^{\circ}\text{C} \pm 2^{\circ}\text{C}$ ($73^{\circ}\text{F} \pm 4^{\circ}\text{F}$) $50\% \pm 2\%$ relative humidity) 10.2 Reactivity:

Conditions to avoid: none known.

Materials to avoid: Can react with strong oxidizing agents

Not determined

Hazardous decomposition products: At temperatures above $400^{\circ}\text{C}/752^{\circ}\text{F}$, the major off-gases from polyimide film are carbon monoxide and carbon dioxide. With prolonged exposure to temperatures above $150^{\circ}\text{C}/302^{\circ}\text{F}$ silicone adhesives in the presence of oxygen may emit trace quantities of formaldehyde.

Section XI - Toxicological Information

Possible Health Effects

Skin: (1) Prolonged or repeated contact may lead to slight irritation

Eyes: (1) May cause temporary discomfort

Inhalation: (1) No adverse effects are normally expected.

Ingestion: (1) Not known

Other health hazard information: None known.

LC 50 : Not determined LD 50 : Not determined

(1) This information is based either on test data, extrapolation from tests on similar materials, review of component details, or a combination of all of these.

Section XII - Ecological Impact

12.1 Elimination Persistence: Not known Degradability: The adhesive is partly biodegradable
12.2 Behavior in an aquatic environment Mobility: Insoluble in water Bioaccumulation: Not known
12.3 Aquatic: Ecotoxic effects not known Terrestrial: Not known

Section XIII - Waste Disposal

13.1. Product disposal: Can be incinerated or land filled in accordance with federal, state and local regulations.

13.2. Packaging disposal: Packaging should be disposed of in accordance with regional and/or national regulations.

Section XIV - Transport Information

UNNO: Not applicable Label: Not applicable

ROAD & RAIL TRANSPORT (ADR/RID) No special packaging or labeling required.

SEA TRANSPORT (IMO) No special packaging or labeling required.

IMO MARINE POLLUTANT: Not applicable

AIR TRANSPORT (ICAO) No special packaging or labeling required.

Section XV - Regulatory Information

15.1. EEC Supply classification & labeling: (1) Contains: Not applicable - No special packaging on labeling requirements

15.2 National legislation. For product information in other EC languages, including appropriate national legislation, please contact the sales office at the above address.

15.3 Other regulations

German water class: 1 - slight risk of causing water pollution

German Vbf: Not applicable

Ozone depleting chemicals: No ozone depleting chemicals are present or used in manufacture.

N/A = Not Applicable; NE = None Established

DESCO WEST - 3651 Walnut Avenue, Chino, CA 91710 • (909) 627-8178 • Fax (909) 627-7449

DESCO EAST - 90 Hudson Road, Canton, MA 02021-1407 • (781) 821-8370 • Fax (781) 575-0172 • Web Site: Desco.com

TB-7034 Page 2 of 2