

Material Safety Data Sheets (MSDS)

This material is made-up in accordance with requirements of Article 41 of Industrial Safety & Health Act.

1. Information of Chemicals/Manufacturer

- a. Name of Product: Barrier Adhesive Tape 1,2 (DTS-280)
- b. General features: It is complex tape composited polyester and non-woven fabric.
It is good for electronic insulation, flame retardant and also superior to durability.
Working effect shown excellent as time.
- c. Health hazard information: not hazardous
- d. Use: It is used to high electronic insulation which of layer insulation, armoring insulation and coil winding of transformer
- e. Manufacturer Information
Name: Ducksung Hitech Co. Ltd.
Address: 225-2, Sinneung-li, Seoun-myun, Ansong-si, Kyunggi-do, Korea(ROK)
TEL. : 031) 671 - 0953~5
Fax : 031) 671 - 0956~8
- f. Supplier/Distributor Information
Supplier: Seoul Office of Ducksung Hitech Co. Ltd.
Address: F5 & 6, Grand Bldg. Seokcho1-dong, Songpa-gu, Seoul, Korea
TEL. : 02) 2202 - 0454
Fax : 02) 2202 - 0453
- g. Drawer/Division: KWON SOON IL / R&D Center
- h. Date of Draft: Dec 22, 2008
- i. Frequency/Date of Revision: 1 / Dec 22, 2008

2. Chemical Name, Synonyms, & CAS No. a Listing Hazardous Constituents for Mixtures

Chemical Name or Synonyms	CAS No.	Constituents(%)	
		Barrier 1	Barrier 2
Polyester + Nonwoven	25038-59-9	55	50
Acrylic Adhesive	35239-19-1	33	37
Flame retardants	84852-53-9	9.5	9.8
Tackifier	64742-16-1	2.5	3.2

3. Health Hazard Information

- a. Information of urgent hazard and harm: unknown
- b. Eyes: no contact with eyes expected in use

- c. Skin No harm to human beings
- d. Inhalation: a bit stimulant, but not hazardous to human body at all unless long-term inhalation occurs.
- e. Chronic symptoms & signs: unknown

4. First-Aid Measures

- a. Eyes: unknown
- b. Exposure to skin; first aids unnecessary
- c. Inhalation: first aids unnecessary
- d. Swallowed: no exposure happened
- e. Doctor's precautions: unknown

5. Fire-Fighting Measures

- a. Flash point: unknown
- b. Autogenous ignition point : unknown
- c. Minimum inflammability limit/Maximum inflammability limit: not applicable
- d. Classifications & Regulations under Fire Protection Law: not applicable
- e. Fire extinguisher: CO₂, water, water spray, solid compound, dry chemical fire extinguisher
- f. Fire protection method/equipments: directly spray CO₂, water, or dry chemical fire extinguisher to the fire sources.
- g. Hazardous substances caused by combustion: thermolysis oxides may contain toxic carbon oxides
- h. Prohibited fire extinguisher: unknown

6. Accidental Release Measures

- a. Human body protection measures: unknown
- b. Environment protection measures: unknown
- c. Purifying or removing method: unknown

7. Handling & Storage Precautions

- a. Safe handling measures: unknown
- b. Method of storage: Store at a cool place free from direct ray of light at normal temperature

8. Exposure Controls/Personal Protection

- a. Engineering Controls: unknown
- b. Respiratory system: none applicable

- c. Eyes/hands: none applicable
- d. Body: unknown
- e. Health precautions: unknown
- f. Exposure criteria: unknown

9. Physical/Chemical Properties

- a. Appearance: solid, tape roll
- b. Smell: unique smell to the product
- c. pH: not applicable
- d. Solubility: not applicable
- e. Boiling point/Range of Boiling point: not applicable
- f. Melting point/Range of melting point: not applicable
- g. Explosiveness: unknown
- h. Oxidizing effect: unknown
- i. Vapor pressure: not applicable
- j. Specific gravity: not applicable
- k. Partition coefficient: unknown
- l. Vapor density: not applicable
- m. Viscosity: not applicable
- n. Molecular weight: unknown

10. Stability/Reactivity

- a. Chemical stability: stable(no dangerous polymerization happened)
- b. Prohibited substances and conditions: unknown
- c. Hazardous substances caused by decomposition: unknown
- d. Probability of generating hazardous substances during reaction: unknown

11. Toxicological Information

- a. Acute oral toxicity: unknown
- b. Acute inhalation toxicity : unknown
- c. Sub-acute toxicity: unknown
- d. Chronic toxicity: unknown
- e. Mutation effect: unknown
- f. Next generation effect(reproductive toxicity) : unknown
- g. Cancer-causing effect: unknown
- h. Others: uses except for prescribed purposes prohibited

12. Ecological Information

- a. Aquatic/ecological toxicity: unknown
- b. Mobility in Soil: unknown
- c. Persistency/degradability: unknown
- d. Probability of accumulation in animals or organisms: unknown

13. Disposal Considerations

- a. Regulations of Waste Control Act: unknown
- b. Method of disposal: In principle, wastes must be dumped out on a designated reclaimed land.
(*Alternative—burn at industrial site or facilities together with combustible materials)
- c. Disposal precautions: Strictly conform to requirements of the central and local governments

14. Transport Information

- a. Classifications/Regulations under other safety and storage of sea transport of hazardous materials—related laws of foreign countries: unknown
- b. Transport precautions: must conform to requirements of the central and local governments
- c. Classifications/Regulations under other transport—related laws of foreign countries unknown

15. Regulatory Information

- a. Regulations under Korea Occupational Safety and Health Act:
Article 41(Draw—up and Provision of MSDS)
- b. Regulations under chemicals control—related laws including Hazardous Chemicals Control Act: unkn
- c. Regulations under other laws of foreign countries: unknown

16. Other Information

- a. References
 1. Standards for Draw—up and Provision of MSDS(Ministry of Labor Order No. 97—27, Oct, 1997)
 2. Practice of Draw—up of MSDS(Korea Occupational Safety and Health Agency(KOSHA), Nov. 1996)
 3. Practice of Draw—up of MSDS for Mixtures(Korea Occupational Safety and Health Agency(KOSHA), Nov. 1996)
 4. MSDS's received from raw—material manufacturers

※ This MSDS is based on MSDS's received from raw—material manufacturers and provided without special information, warranties, or representation, which cannot be used as a material for lawsuits and other legal actions, except for user's review, inspection, and reference purposes.