

DNP Imagingcomm America Corporation**Safety Data Sheet****TR4500****1. Identification**

Product Name: TR4500

Product Use: No restrictions. Use in accordance with applicable guidelines.

Manufacturer: DNP Imagingcomm America Corporation

Address: 1001 Technology Drive, Mt. Pleasant, PA 15666

General Information: (724) 696-7500

Emergency Number: (724) 696-7500

2. Hazard Identification

GHS Classification:

Health: Not Applicable

Environmental: Not Applicable

Physical: Not Applicable

GHS Label:

Symbol: None

Hazard Statement: None

Signal Words: None

Toxic Components: None

HAZARD STATEMENT : Carbon black was identified as an IARC 2B (possible human) carcinogen in 1996. This classification was made due to results of inhalation testing. Dermal and oral testing did not yield evidence of tumors during these tests. When used under normal and recommended conditions, the carbon black in this application will not be air born and subject to inhalation. This product should therefore present a minimal risk to personal health.

3. Composition/Information on Ingredients

Chemical Identity: Thermal Transfer Ribbon

Substance/Mixture: Mixture

Component	Weight % (Range)	CAS-Reg. No.
Polyethylene terephthalate film	61% - 71%	25038-59-9
<i>Thermal Transfer Ink</i>		
Component	Weight % (Range)	CAS-Reg. No.
Polymeric Resin	10% - 12%	Trade Secret
Carbon Black	5% - 8%	1333-86-4
Carnauba Wax	13% - 16%	8015-86-9
Wax	1% - 3%	Trade Secret

HAZARDOUS INGREDIENTS: NONE

4. First-Aid Measure

Eye:	Product can create airborne powder and/or dust when subjected to excessive cutting or abrading. In case of eye contact, immediately flush eyes with water for at least 15 minutes. Seek medical attention if irritation persists.
Ingestion:	If material is swallowed, get immediate medical attention or advice. If choking, remove obstruction from passageway and seek immediate medical attention. DO NOT induce vomiting unless instructed to do so by medical personnel.
Inhalation:	As supplied, product is a solid and would not in practice, be inhaled. However, inhalation hazards become more acute if exposure to airborne powder or dust is caused by excessive cutting or abrading. If difficulty in breathing or respiratory irritation occurs, move person to fresh air. If irritation persists, seek medical attention
Skin:	Not skin sensitive if used under normal conditions and as recommended. If irritation persists, seek medical attention.

5. Fire Fighting Measures

Autoignition Temperature: No data available

- Extinguishing Media: Use alcohol foam, carbon dioxide, dry chemical powder or water spray when fighting fires involving this material.
- Fire Fighting Instructions: As in any fire, wear MSHA/NIOSH-approved (or equivalent) respiratory protection, and full protective gear.
- Combustion Products: Thermal decomposition generates carbon oxides and irritating volatile organic compounds.

6. Accidental Release Measures

- Clean-up Procedure: Safely collect material and place in proper disposal container. Wash walking surface with detergent and water to reduce slipping hazard.

7. Handling and Storage

- Handling: As supplied this product is inert. Protective clothing and respiratory protection should be utilized if the product is handled during excessive cutting or abrading.
- Storage: Store in a dry location at temperatures between 5°C (41°F) and 40°C (104°F).

8. Exposure Controls/Personal Protection

Occupational Exposure Limits:

- Carbon Black: OSHA TWA PEL = 3.5 mg/cu. meter ACGIH TWA TLV = 3.5 mg/cu. meter
- Eye/Face Protection: Not required with expected use.
- Skin and Body Protection: Not required with expected use.
- Respiratory Protection: Not required with expected use.

If occupational exposure limits are exceeded or respiratory irritation occurs, use of a NIOSH/MSHA approved respirator suitable for the use-conditions and chemicals in Section 3 should be considered.

- General Hygiene Practices: Wash hands and any exposed skin thoroughly after handling. See 29 CFR 1910.132-138 for further guidance.

9. Physical and Chemical Properties

Appearance/Physical State:	Solid
Color:	Black
Odor:	Paraffinic
PH:	No information available
Melting Point Range:	489-543° F (254-284° C) (for PET base film)
Freezing Point:	No information available.
Boiling Point:	No information available.
Flash Point:	No information available.
Evaporation Rate:	No information available.
Flammability (solid, gas):	Slightly flammable when exposed to heat or flame.
Upper Flammability Limit:	No information available
Lower Flammability Limit:	No information available
Vapor Pressure:	No information available.
Vapor Density:	No information available.
Specific Gravity:	1.33-1.45 (for PET base film)
Solubility:	Negligible in water
Partition Coefficient:	No information available.
Auto-ignition Temperature:	932° F (500° C) (for PET base film)
Decomposition Temperature:	No information available.
Viscosity:	No information available

10. Stability and Reactivity

Reactivity:	This material is considered to be non-reactive under normal conditions of use.
Chemical Stability:	Stable
Possibility of Hazardous Reactions:	Not expected to occur with normal handling and storage.

Incompatible Materials: No information available.

Hazardous Decomposition Products: May include carbon monoxide, carbon dioxide (CO₂) and other toxic gases or vapors.

11. Toxicological Information

No acute or chronic toxicological effects are expected.

12. Ecological Information

Persistence and Degradability: This product is not biodegradable

13. Disposal Considerations

As local regulations may vary, all waste must be disposed/recycled/reclaimed in accordance with federal, state, and local environmental control regulations.

14. Transportation Information

General Information: Not classified as hazardous for transport.
DOT Hazard Class: Not regulated.

15. Regulatory Information

SARA (311, 312): None
Hazard Class:
SARA (313) Chemicals: None known
SARA Section 302: None found
WHIMS Hazard Class: Non-Controlled

16. Other Information

Disclaimer: This data is offered in good faith as typical values and not as a product specification. No warranty, either expressed or implied, is made. The recommended handling procedures are believed to be generally applicable, however, each user should review these recommendations

in the specific content of the intended use. Should new information become available regarding this product, DNP Imagingcomm America will update this safety data sheet as needed.

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