# SEAL TAPE, INC.


First issue: 04/01/30
Revised issue: 07/16/09

P.O. BOX 2683
Palos Verdes, CA 90274

MSDS No. 9082-e

# MATERIAL SAFETY DATA SHEET

## T/# 9082 Naflon Seal Tape (PTFE Thread Seal Tape)
## T/# 9082-BL Naflon Seal Tape (PTFE Thread Seal Tape)

## 1. Chemical Product and Company Identification

**Product Identification**
**General Use:** Joint for screws, sealing for bolts or nuts for almost all fluid.
**Product Description:** A tape shape sealing material made of Polytetrafluoroethylene (PTFE).
**Manufacturer/IMPORTER**
**Company Name:** Seal Tape, Inc.
**Section in Charge:** Environmental Control Section / Technical Division
**Address:** Palos Verdes, California 90732
**Telephone Number for Information:** (800) 533-5646
**Emergency Telephone Number:** 310-519-8783

## 2. Composition/Information on Ingredients

**Ingredient CAS No Wt% TLV PEL**
Polytetrafluoroethylene (PTFE) 9002-84-0 90-100 not established.
**Key:** TLV = $ACGIH_{2006}$, 8hr, time weighted average (TWA)
PEL = $OSHA_{1994}$ permissible exposure limit.

## 3. Hazards Identification

**Emergency Overview:**
Non hazardous under recommended condition of handling.
Caution! The fumes produced when heated at high temperature are toxic. Exposure to Thermo degradation products may cause influenza-like symptoms.
**Primary Routes of Entry:** No identified
**Primary Target Organs:** No identified
**Potential Health Effects:**
**Eye Contact:** Non hazardous under recommended condition of handling.
**Skin Contact:** Non hazardous under recommended condition of handling.
Molten material can cause severe burns.
**Inhalation:** Unlikely to be hazardous by inhalation unless heated. The fumes produced when heated at high temperature are toxic. Exposure to thermo degradation products may cause influenza-like symptoms.
**Ingestion:** Not identified.
**Carcinogenicity:** Polytetrafluoroethylene is classified as IARC GROUP 3 (Not classifiable as it's Carcinogenicity to humans).

## 4. First Aid Measures

**Inhalation:** Not likely to be inhaled due to physical form. For processing fume inhalation irritation, leave contaminated area and breathe fresh air. If coughing, difficult breathing or any other symptoms develop, get medical attention.
**Ingestion:** Not a likely route of exposure.
**Skin Contact:** If contact with molten product occurs, treat as for thermal burn. Do not try to peel molten polymer from the skin. Get medical attention promptly.
**Eye Contact:** If contact with molten product occurs, remove contact lenses at once. Immediately flush eyes with large quantities of water for at least 15 minutes. Get medical attention.
**Note to Physician:** Treat symptomatically.

## 5. Fire Fighting Measures

**Flammable Properties:** Non-flammable
**Extinguishing Media:** Use that which is appropriate for the surrounding fire.
**Fire Fighting Procedure:** Persons exposed to thermal decomposition products of this material should wear self-contained breathing apparatus, full protective equipment, and also gloves made of chloroprene rubber.
**Unusual Fire and Explosion Hazards:** Fluorocarbon polymers are non-flammable in air and will not propagate flame. However under high temperature they can yield toxic particles, fumes, and gases. In case of fire, escape to the windward.

## 6. Accidental Release Measures

**Clean-up Procedures:** Not applied.
**Personal Precautions:** Not applied.

## 7. Handling and Storage

**Handling:** Do not use over service temperature (260ºC). In case products is used over 260ºC, ventilate well and do not inhale thermo degradation products.
Keep away from heat and sources of ignition.
**Storage:** Store in a cool, dry area away from heat and sources of ignition.

## 8. Exposure Controls, Personal Protection

**Airborne Exposure Limits:** See section 2 Composition/Information on Ingredients
**Engineering Controls:** Not required under recommended condition of handling. When used above 260°C, toxic fumes will be produced from thermal degradation and/or decomposition of fluorocarbon polymers and therefore proper ventilation equipment shall be installed and used.
**Personal Protective Equipment:**
**Eye/Face Protection:** Not required under recommended condition of handling.
**Skin Protection:** Not required under recommended condition of handling.
**Respiratory Protection (Specify Type):** Not required under recommended condition of handling.

## 9. Physical and Chemical Properties

**Appearance and Odor:** Solid, tape-shape, white or pink or yellow, no odor
**Boiling Point:** Not available
**Melting Point:** 327ºC
**Vapor Pressure:** Not applicable
**Vapor Density:** Not applicable
**Evaporation Rate:** Not applicable
**Solubility in Water:** Insoluble
**pH:** Not applicable
**Density(apparent density):**
**Service Temperature:** up to 260°C

## 10. Stability and Reactivity

**Chemical Stability:** Non hazardous under recommended condition of handling.
**Condition to Avoid:** Do not use for gas sealing.
**Incompatibility with Other Materials:** May react with molten alkali such as metal sodium, and fluorine at high temperature and pressure.
**Hazardous Decomposition Products:** Above 260°C this product thermally degrades at a rate dependent on the temperature, releasing toxic materials.
**Hazardous Polymerization:** Will not occur.

## 11. Toxicological Information

**Acute and chronic health hazard:** No acute and chronic hazard under recommended conditions of storage and handling. Neither acute nor chronic effects are likely.
**Inhalation:** Unlikely to be hazardous by inhalation unless heated.
The fumes produced when heated at high temperature are toxic. Exposure to thermo degradation products may cause influenza-like symptoms.
**Eye Contact:** No hazardous under recommended condition of handling.
**Skin Contact:** No hazardous under recommended condition of handling.
Molten material can cause severe burns.
**Ingestion:** Not identified.
**Special Hazard Information:** Unheated fluorocarbon polymer product is inert, and there are no known instances of health hazard, when handling the unheated product. When heated at high temperature, it will thermally degrade, decompose, and produce toxic fumes. Inhalation of such fumes will cause “Polymer Fume Fever”, which has symptoms very similar to influenza and can include headache, cough, fever, chills, chest discomfort. The symptoms do not occur until several hours after exposure and may pass within 36 to 48 hours, even in absence of treatment.
T/# 9082 T/# 9082-BL

1.0 ~ 1.4g/ml 0.85 ~ 1.05g/ml

**Carcinogenicity:** Polytetrafluoroethylene is classified as IARC GROUP 3 (Not classifiable as Its carcinogenicity to humans).

## 12. Ecological Information

Ecological testing has not been conducted on this product.

## 13. Disposal Information

Do not incinerate.
Comply with all federal, state and local regulations.

## 14. Transportation Information

Follow all regulations in your country.
**International Dangerous Goods Information;**
**IMO:** Not regulated as dangerous goods according to the IMDG Code.
**ICAO:** Not regulated as dangerous goods according to the IACO Technical Instructions.

## 15. Regulatory Information

Follow all regulations in your country.

## 16. Other Information

**References:**
1. ACGIH 2006 Threshold Limit Value for Chemical Substances and Physical Agents (2006)
2. Guide to Occupational Exposure Values 2006 (2006)
3. TEFLON" PTFE FLUOROCARBON RESIN, ALL GRADES LISTED ON PL0016126" MSDS, Canada Centre of Occupational Health and Safety：DuPont Canada Inc. (1992)
4. Guide to the Safe Handling of Fluoropolymer Resins 3rd Edition：The Society of the Plastics Industry,Inc.(1998)
This Material Safety Data Sheet conforms to the requirements of ANSI Z400.1.
This information is furnished without warranty, express or implied, except that it is accurate to the best knowledge of NICHIAS Co., Ltd. It relates only to the specific material designated herein, and does not relate to use in combination with any other material or in any process. NICHIAS Co., Ltd. assumes no legal responsibility for use of or reliance upon this information.