

TEMP-TITE™

High-Temperature Sealing Compound

DESCRIPTION

TEMP-TITE is used for sealing threads, flanges, and fittings under high temperatures and pressures. **TEMP-TITE** is a temperature-activated product. Pipe joints and fittings can be disassembled after extended use at high temperatures.

This paste form is used for threaded and other machined connections and for rough or scored surfaces. **TEMP-TITE** is also used as a surface improvement paste where gasket materials have oxidized the gasket finish.

APPLICATIONS

TEMP-TITE resists most chemicals. **TEMP-TITE** is used on lines containing steam, ammonia, hydrocarbons, hydraulic fluids, propane, acids and mild alkalis*.

Typical Uses:

- Boilers
- Heat Exchangers
- Pressure Vessels
- Hydraulic systems
- Steam Turbines
- Pressure LP Gas Lines

Military Specification: **TEMP-TITE** is formulated to meet U.S. Navy requirements for use on propulsion turbines (MIL-S-15204C). The test consists of subjecting a seal to 950°F with superheated steam at 1200 psi for 96 hours and a cooling cycle every four hours. No leakage should occur and the test joint should be readily broken.

DIRECTIONS FOR USE

All surfaces to be sealed should be clean from oil, dust, dirt, grease and grime. Clean with suitable solvent. For optimum results, **TEMP-TITE** should be cured for up to 24 hours at a temperature of 150-250°F.

* For best results a thin coat of **TEMP-TITE** should be applied. Heat will accelerate the set time. **TEMP-TITE** is a heat and pressure activated product.

PRODUCT CHARACTERISTICS

| | |
|-----------------------------|---------------|
| Thickener | Inorganic |
| Fluid Type | Resin |
| Color | Black |
| Dropping Point (ASTM D-566) | N/A |
| Specific Gravity | 1.1 |
| Density (lb/gal) | 9.1 |
| Flash Point (ASTM D-92) | ≥160°F (71°C) |
| NLGI Grade | N/A |
| Viscosity, Brookfield | 250 - 700K cP |
| Temperature Range | 950°F (510°C) |
| PSI | >1200 |

TEMP-TITE does not contain PTFE or other polymeric materials that would degrade at elevated temperatures.

PACKAGING

| Code No. | Container Size | Container |
|----------|----------------|-----------|
| 15203 | 1 pt. | Plug Top |
| 15207 | 1 qt. | Plug Top |

LIMITED WARRANTY

Jet-Lube, Inc. makes the Limited Express Warranty that at the date of delivery, this product shall be free from defects in Jet-Lube, Inc. materials and workmanship.

This Limited Express Warranty is expressly in lieu of any other express or implied warranties, including any implied warranty of merchantability or fitness for a particular purpose, and of any other obligation on the part of Jet-Lube, Inc.

The sole remedy for breach of the Limited Express Warranty shall be the refund of the purchase price. All other liability is negated and disclaimed, and Jet-Lube, Inc. shall not be liable for incidental or consequential damages.

CORPORATE LOCATIONS

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JET-LUBE, INC.

MATERIAL SAFETY DATA SHEET

Product Name: TEMP-TITE
Chemical Family: Phenolic Resin
Use: Sealant

Manufacturer/Supplier: JET-LUBE, INC.
Address: 4849 Homestead Rd., Ste. #200
Houston, TX, 77028 USA **Phone:** 713-674-7617
Emergency Phone: 713-674-7617 **Fax:** 713-678-4604
Chemtrec 24 hours (USA): 800-424-9300

| Hazardous Components | CAS No. | Wt% | OSHA PEL | ACGIH TLV | Other Limits of Exposure |
|-----------------------------|---------|-------|----------|-----------|--------------------------|
| Phenol-Formaldehyde Polymer | Mixture | 50-80 | N/A | N/A | |
| Phenol | 108952 | <15 | 5 ppm | 5 ppm | |
| Formaldehyde | 50000 | <1 | 0.75 ppm | 0.3 ppm | |
| Methanol | 67561 | 0-15 | 200 ppm | 200 ppm | |

Main Hazards-Health Effects **Eyes:** Irritation, burning, redness, stinging and tearing. **Inhalation:** In poorly ventillated areas could result in irritation, burning, headache, dizziness, loss of balance, drowsiness. **Ingestion:** Irritation, burning, choking, headache, dizziness, drowsiness, unconsciousness and death. **Skin:** Irritation, burning, redness, drying, defatting and cracking of the skin.

Eyes: Flush with cool, clean water for at least 15 minutes. Roll eyes and lift eyelids frequently. **Inhalation:** Remove to fresh air. If breathing stops, administer artificial respiration and seek medical attention immediately. **Ingestion:** Systemic poison. If conscious, give two glasses of water, induce vomiting, obtain medical attention immediately. **Skin:** Remove contaminated clothing. Wash skin thoroughly with soap and water. Launder clothing before reuse.

Extinguishing Media: Foam, dry powder, Halon®, carbon dioxide, sand, earth & water mist. **Unsuitable Extinguishing Media:** Water jet.
Protective Equipment for Fire fighting: Self-contained breathing apparatus.

Personal Precautions: Wear gloves & protective overalls. **Environmental Precautions:** Do not allow it to enter drains. **Spillage:** Scrape up bulk, then wipe up remainder with cloth. To prevent walking hazard, pick up remaining residue with diatomaceous earth.

Handling: No special handling precautions necessary. **Storage:** Do not store at elevated temperatures.

Respiratory Protection: None needed. **Hand Protection:** Protective gloves for hypersensitive persons.
Eye Protection: Glasses, if applied to parts in motion. **Body Protection:** Overalls.

Physical State: Liquid **Color:** Black **Odor:** Slight phenol **pH:** 5-8 **Boiling Range/Point °F (°C):** UN
Melting Point °F (°C): <15 (-9) **Flash Point (COC) °F (°C):** >380 (193) **Autoignition Temperature °F (°C):** >600 (315)
Explosive Properties: LEL: 0.9% UEL: 7% **Evaporation Rate (Butyl Acetate):** <0.01 **Partition Coefficient (Log Pow):** N/A
Vapor Pressure (kPa): <0.01 **V.O.C. Content:** Nil **Density (g/cm³):** 1.09 (cured) **Flammability:** Not flammable at ambient temperature. **OAR Value:** N/A **Oxidizing Properties:** None **Water Solubility:** Not soluble **Vapor Density:** >5

Stability: Chemically stable under normal conditions. No photoreactive agents. **Conditions to Avoid:** Powerful sources of ignition & extreme temps. **Materials to Avoid:** Strong inorganic & organic acids, oxidizing agents. **Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons & oxides of carbon & nitrogen. Residue mainly comprised of soot.

Acute Toxicity: Not known. **Irritancy-Skin:** Very mild. **Skin Sensitization:** Not known. **Subacute/Sub-chronic Toxicity:** Not known.
Genotoxicity: None known. **Chronic Toxicity:** None known. **California Prop 65:** N/A **Carcinogen:** NTP: No IARC: No **OSHA:** No
EC Classification (67/548/EEC): No **Allergens:** None known. **LC-50:** UN **LD-50:** N/A

Possible Effects: Potential to act as marine pollutant is highly unlikely.

Behavior: Relatively well behaved. Bioaccumulation potential nil.

Environmental Fate: Highly unlikely to cause noteable contamination. Nontoxic to marine or land organisms.

Product Disposal: Do not incinerate. Contact waste disposal company or local authority for advice.

Container Disposal: Pails without liner-see Product Disposal section above. Pails with plastic liner-pail may only be disposed of via standard waste disposal services, recycled or reused. Liner-see Product Disposal section above.

Not classified as hazardous for transport. **D.O.T.:** Nonhazardous **UN No.:** Nonhazardous **Air Transport (ICAO & IATA):** Nonhazardous
Sea Transport (IMO & IMDG): Nonhazardous **Road & Rail Transport (ADR/RID):** Nonhazardous


Labeling Information: None needed **EC Annex 1 Classification:** Not Applicable. **R Phrases:** Not applicable.

S Phrases: None applicable, as known. **Ozone Depleting Chemicals:** Not applicable. **TSCA:** All components are listed.

WHMIS (Canada): Not controlled. **Canadian DSL:** All components listed. **40 CFR Part 372 (SARA Section 313):** N/A

CERCLA: Nonhazardous **RCRA Hazard Class:** Nonhazardous **SARA 311/312:** None **TSCA 12B Components:** None

SDS first issued. SDS data revised. **New Jersey Right To Know:** See Section II

Signature: 
Prepared by: Donald A. Oldiges
Date Issued: December 1, 2005

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| LEGEND | |
|--------|---|
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| II. | COMPOSITION INFORMATION ON INGREDIENTS |
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HMIS SYMBOL

| | |
|--------------|----|
| HEALTH | 1 |
| FLAMMABILITY | 1 |
| REACTIVITY | 0 |
| PPI | NR |

NFPA SYMBOL

