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## Technical Data Sheet

# Permatex® Pipe Joint Compound

AAM Revised 09/02

### PRODUCT DESCRIPTION

Permatex® Pipe Joint Compound is a black, viscous, brushable liquid sealant and lubricant designed to help assemble and seal threaded joints on water, steam, oil and fuel lines.

S.I.N.: 834-300

### PRODUCT BENEFITS

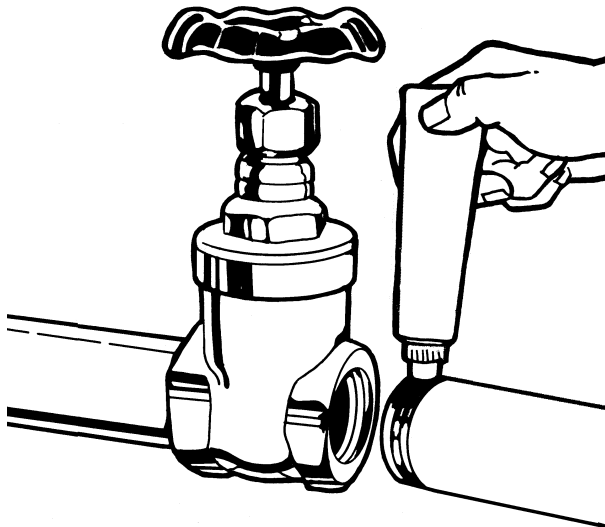
- Non-hardening for easy disassembly
- Works to 400°F (204°C)
- Sealing pressures to 5000 psi (100 psi for steam)
- Outperforms Teflon tape and does not shred
- No measuring or mixing
- Prevents galling and corrosion

### TYPICAL APPLICATIONS

- Threaded pipe
- Pipe fittings
- Flanges

### DIRECTIONS FOR USE

1. Clean threads to be sealed. A light coating of oil or grease will not affect the sealability.
2. Apply the compound to the male threads, brushing into the grooves of the threads.



3. Assemble the parts.
4. On flanges and gaskets, apply a thin coat to each surface.
5. Let stand for 5 minutes and then assemble

### For Cleanup

1. Clean up with isopropyl alcohol.
2. Clean hands with a dry cloth or Permatex® Fast Orange® hand cleaner.

### PROPERTIES OF UNCURED MATERIAL

	Typical Value
Chemical Type	Polymerized vegetable oil
Appearance	Black viscous liquid
Odor	Alcoholic
Specific Gravity	1.28
Viscosity	Flow similar to mustard
Flash Point, TCC, °F	76

### TYPICAL CURING PERFORMANCE

Permatex® Pipe Joint Compound cures by the evaporation of solvent. Full properties will be affected in 24 hours.

### PERFORMANCE OF CURED MATERIAL

Forms a semi-liquid, flexible seal when fully cured.  
Temperature range -65°F to +400°F (-54°C to +204°C)

### GENERAL INFORMATION

**This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.**

**For safe handling information on this product, consult the Material Safety Data Sheet, (MSDS).**

### ORDERING INFORMATION

Part Number	Container Size
80044 (51H)	4 oz. bottle
80045 (51D)	16 oz. bottle

### STORAGE

Products shall be ideally stored in a cool, dry location in unopened containers at a temperature between 8° to 28°C (46° to 82°F) unless otherwise labeled. Optimal storage is at the lower half of this temperature range. To prevent contamination of unused product, do not return any material to its original container

### NOTE

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## Material Safety Data Sheet

### 1. PRODUCT IDENTIFICATION

**Product Name:** 51D PIPE JOINT COMPOUND 1PT  
**Item No:** 80045  
**Product Type:** Sealant

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	Weight Percent	ACGIH TLV:	OSHA PEL:
KAOLIN 1332-58-7	30-40	2 mg/m <sup>3</sup> dust TWA	15 mg/m <sup>3</sup> dust; 5 mg/m <sup>3</sup> respir. TWA
VEGETABLE OIL 68187-84-8	15-25	Not Listed	Not Listed
ROSIN 8050-09-7	15-25	sensitizer; reduce exposure to as low as possible	15 mg/m <sup>3</sup> total dust; 5 mg/m <sup>3</sup> respir.
2-PROPANOL 67-63-0	10-20	200 ppm TWA	400 ppm TWA; 980 mg/m <sup>3</sup> TWA
TALC 14807-96-6	1-10	2 mg/m <sup>3</sup> respir. dust TWA	20 mppcf TWA
TITANIUM DIOXIDE 13463-67-7	0.1-1.0	10 mg/m <sup>3</sup> TWA ACGIH	15 mg/m <sup>3</sup> TWA (total dust)
SILICA, QUARTZ 14808-60-7	0.1-1.0	0.05 mg/m <sup>3</sup> TWA respirable	0.1 mg/m <sup>3</sup> TWA respirable

### 3. HAZARDS IDENTIFICATION

**Toxicity:** May cause eye, skin and respiratory irritation. Oral LD50 greater than 5000 mg/kg.  
**Primary Routes of Entry:** Eye and skin contact, ingestion, inhalation  
**Signs and Symptoms of Exposure:** Excessive accidental exposure may cause headache, dizziness, nausea and mild respiratory irritation. Overexposure may cause eye and skin redness.

Ingredient	Weight Percent	NTP	ACGIH Carcinogens	IARC
KAOLIN 1332-58-7	30-40		A4-Not classifiable as a human carcinogen	
2-PROPANOL 67-63-0	10-20		A4 - Not classifiable as a human carcinogen	Group 3 Monograph 71, 1999; Supp.7, 1987; Monograph 15, 1977
TALC 14807-96-6	1-10	male rat-some evidence, female rat-clear evidence, male mice-no evidence, female mice-no evidence	A4- Not classifiable as a human carcinogen	Group 3 Supplement 7, 1987 Monograph 42, 1987
TITANIUM DIOXIDE 13463-67-7	0.1-1.0	male rat-negative, female rat-negative, male mice-negative, female mice-negative	A4	Group 2B; Vol 93,2006; Vol 47,1989
SILICA, QUARTZ 14808-60-7	0.1-1.0		A2 - Suspected Human Carcinogen	Group 1; Monograph 68, 1997 (inhaled)

**Medical Conditions Recognized as Being Aggravated by Exposure:** Preexisting eye, skin and respiratory disorders may be aggravated by overexposure to this product.

### 4. FIRST AID MEASURES

**Ingestion:** If swallowed, DO NOT induce vomiting. Keep individual calm. Obtain medical attention.  
**Inhalation:** Move to fresh air in case of accidental inhalation of vapours. Obtain medical attention.  
**Skin Contact:** Wash off with soap and water. If skin irritation persists, call a physician.

#### **4. FIRST AID MEASURES**

**Eye Contact:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

#### **5. FIRE FIGHTING MEASURES**

**Flash Point (°F/C):** 76 degrees F. Method: Tag Closed Cup  
**Recommended Extinguishing Media:** Carbon Dioxide, Dry Chemicals, Foam.  
**Special Fire-Fighting Procedures:** Firefighters should wear self-contained breathing apparatus. Water spray may be ineffective on flames but should be used to keep fire-exposed containers cool.  
**Hazardous Products of Combustion:** Aldehydes, Oxides of carbon, Carboxylic acids  
**Unusual Fire/Explosion Hazards:** Closed containers may rupture or explode when exposed to extreme heat.  
**Lower Explosive Limit:** 2.3  
**Upper Explosive Limit:** 12.7

#### **6. ACCIDENTAL RELEASE MEASURES**

**Spill Procedures:** Eliminate all sources of ignition. Maintain good ventilation. Take up with an inert absorbent. Store in a closed waste container until disposal. Residues may be cleaned up with isopropyl alcohol.

#### **7. HANDLING AND STORAGE**

**Storage:** Store away from heat, sparks or open flame. Do not store at temperatures above 120 degrees F.  
**Handling:** Avoid contact with skin and eyes. Do not inhale vapors. Keep container closed when not in use.

#### **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Eyes:** Safety glasses  
**Skin:** Rubber or plastic gloves.  
**Ventilation:** General; local exhaust ventilation as necessary to control any air contaminants to within their exposure limits (or to the lowest feasible levels when limits have not been established) during the use of this product.  
**Respiratory Protection:** An approved respirator (i.e. NIOSH, etc.) should be worn when exposures are expected to exceed the applicable limits.

#### **9. PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance:** Black paste  
**Odor:** Alcohol  
**Boiling Point:** 180 degrees F.  
**pH:** Does not apply  
**Solubility in Water:** Partial  
**Specific Gravity:** 1.28 @ 25 degrees C.  
**VOC Content(Wt.%):** 16.5% by weight  
**Vapor Pressure:** 33 mm Hg @ 68 degrees F.  
**Vapor Density (Air=1):** 2.07  
**Evaporation Rate:** Not available

#### **10. STABILITY AND REACTIVITY**

**Chemical Stability:** Stable at normal conditions  
**Hazardous Polymerization:** Will not occur.  
**Incompatibilities:** Strong oxidizers  
**Conditions to Avoid:** Keep away from heat, sparks and open flame. - No smoking  
**Hazardous Products of Combustion:** Aldehydes, Oxides of carbon, Carboxylic acids

#### **11. TOXICOLOGICAL INFORMATION**

See Section 3

#### **12. ECOLOGICAL INFORMATION**

No data available

#### **13. DISPOSAL CONSIDERATIONS**

**Recommended Method of Disposal:** Disposal should be made in accordance with federal, state and local regulations.  
**US EPA Waste Number:** D001 as per 40CFR 261.21

## **14. TRANSPORTATION INFORMATION**

**DOT (49CFR 172)**

### **Domestic Ground Transport**

**DOT Shipping Name:** Consumer Commodity (not more than one liter)  
**Hazard Class:** ORM-D  
**UN/ID Number:** None  
**Marine Pollutant:** None

### **IATA**

**Proper Shipping Name:** Consumer Commodity (Not more than 1 liter)  
**Class or Division:** Class 9  
**UN/NA Number:** ID 8000

### **IMDG**

**Proper Shipping:** Resin Solution, Flammable, Limited Quantity  
**Hazard Class:** Class 3 PGIII  
**UN Number:** UN 1866

## **15. REGULATORY INFORMATION**

**SARA 313 Chemicals:** The following component(s) is listed as a SARA Section 313 Toxic Chemical.

NONE

### **CALIFORNIA PROP 65:**

No California Prop 65 chemicals are known to be present.

### **TSCA Inventory Status:**

**Listed on Inventory:** YES All components of this product are listed (or exempt) on the EPA TSCA inventory.

## **16. OTHER INFORMATION**

**Estimated NFPA Rating:** HEALTH 2, FLAMMABILITY 3, REACTIVITY 0

**Estimated HMIS Classification:** HEALTH 2, FLAMMABILITY 3, PHYSICAL HAZARD 0

NFPA is a registered trademark of the National Fire Protection Assn.

HMIS is a registered trademark of the National Paint and Coatings Assn.

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