

# TS-117 M.P. SYNTHETIC GATE VALVE LUBRICANT

Overbase Calcium Sulfonate Grease · Distributed by Project Sales Corp

Multi-Purpose Synthetic

Gate / Ball / Plug Valve Grade

www.tsmoly.com

T.S. MOLY LUBRICANTS

## TS-117

M.P. SYNTHETIC GATE VALVE LUBRICANT

OVERBASE CALCIUM SULFONATE

### PHYSICAL & PERFORMANCE PROPERTIES

Thickener Type	<b>Calcium Sulfonate</b>
Base Oil	<b>100% Synthetic</b>
NLGI Grade	<b>1-2 (M.P.)</b>
Color	<b>Amber / Light Brown</b>
Temperature Range	<b>-20°F to 450°F</b>
Temperature Range (°C)	<b>-29°C to 232°C</b>
Dropping Point	<b>&gt;500°F / &gt;260°C</b>
Corrosion Protection	<b>Exceptional</b>
Mechanical Stability	<b>High</b>
Water Resistance	<b>Excellent</b>
H <sub>2</sub> S / CO <sub>2</sub> Resistance	<b>Yes</b>
Solubility in Water	<b>Insoluble</b>
Flash Point	<b>&gt;400°F / &gt;204°C</b>
Odour	<b>Mild / None</b>

### PRODUCT OVERVIEW

TS-117 M.P. Synthetic Gate Valve Lubricant is an overbase calcium sulfonate grease from T.S. Moly Lubricants, Inc. (Houston, TX), characterized by exceptional corrosion protection, a high dropping point, and superior mechanical stability. Formulated with 100% synthetic base oils and a proprietary calcium sulfonate thickener system, TS-117 delivers outstanding lubricity and sealing performance in gate, plug, and ball valves across a wide range of demanding oilfield and industrial service conditions. Available in India exclusively through Project Sales Corp (PSC).

### KEY FEATURES & BENEFITS

#### Overbase Calcium Sulfonate

Unique thickener technology provides inherent rust and corrosion inhibition without additional additives – superior to conventional lithium greases.

#### High Dropping Point

Dropping point in excess of 500°F / 260°C ensures the lubricant maintains its body and sealing effectiveness at elevated valve operating temperatures.

#### 100% Synthetic Base Oil

Fully synthetic formulation provides outstanding oxidation stability, reduced friction, and superior performance over a wide temperature range versus mineral oil alternatives.

#### Exceptional Corrosion Protection

The calcium sulfonate system provides inherent multi-metal corrosion protection, ideal for valves exposed to salt water, sour gas, and aggressive process fluids.

#### H<sub>2</sub>S & CO<sub>2</sub> Resistant

Inhibited for hydrogen sulphide and carbon dioxide service – maintains sealing and lubrication integrity in sour gas and CO<sub>2</sub> injection applications.

#### Mechanical Stability

Resists shear breakdown and structural degradation under repeated valve cycling and high-pressure injection, retaining consistent sealing properties throughout service life.

### APPLICATIONS

- Gate, plug, and ball valves in oilfield, pipeline, refining, and petrochemical service requiring low-torque operation
- Choke and kill manifold valves, BOP valves, and high-pressure wellhead equipment
- Valves in sour gas (H<sub>2</sub>S) and CO<sub>2</sub> service, including injection and production wells
- High-temperature valve applications in refineries, gas plants, and natural gas pipelines
- Valves exposed to salt water, steam, dilute acids and caustics in marine and offshore installations

### **i** HANDLING & SAFETY NOTE

No hazardous ingredients known. Flash point >400°F (>204°C). No known carcinogenicity (IARC, NTP, OSHA). Inhalation risk very low (very low vapor pressure). In case of eye or skin contact, flush with plenty of water. Keep away from heat and ignition sources. Refer to the T.S. Moly MSDS / SDS for full handling, storage, and disposal guidance – available from Project Sales Corp upon request.

DISTRIBUTOR - INDIA


**PROJECT SALES CORP**

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# EXTENDED PROPERTIES & DISTRIBUTOR INFORMATION

## 1 COMPLETE PROPERTIES OF TS-117

PARAMETER	TEST METHOD	TYPICAL VALUE
Thickener Type	–	Overbase Calcium Sulfonate
Base Oil	–	100% Synthetic (PAO)
NLGI Grade	ASTM D217	1-2 (Multipurpose)
Color	–	Amber / Light Brown
Dropping Point	ASTM D2265	>500°F / >260°C
Temperature Range	–	-20°F to 450°F (-29°C to 232°C)
Flash Point (COC)	ASTM D92	>400°F (>204°C)
Water Resistance	–	Excellent
Corrosion Protection	–	Exceptional (inherent via CaSO <sub>3</sub> system)
Mechanical Stability	–	High (resists shear breakdown)
Solubility in Water	–	Insoluble
H <sub>2</sub> S Service	–	Suitable (inhibited)
CO <sub>2</sub> Service	–	Suitable (inhibited)
Odour	–	Mild / None
Carcinogenicity (NTP/IARC/OSHA)	–	None known
Vapor Pressure	–	Very Low

## 2 PERFORMANCE CHARACTERISTICS

- Corrosion Protection:** The overbase calcium sulfonate system provides multi-metal corrosion and rust inhibition inherently – no supplementary rust inhibitors required.
- Oxidation Stability:** 100% synthetic PAO base oil provides excellent resistance to oxidative degradation, extending service life versus mineral-oil-based alternatives.
- Low Torque Operation:** The combination of synthetic base oil and calcium sulfonate thickener provides an extremely low and consistent coefficient of friction for reduced valve operating torque.
- Pumpability:** Multipurpose NLGI 1-2 consistency enables injection through standard valve fitting systems and grease guns across a wide range of temperatures.
- Shear Resistance:** Exceptional mechanical stability under repeated valve cycling and high-pressure fluid contact – resists washout and structural breakdown.
- Compatibility:** Compatible with most elastomers and metals used in valve construction. Suitable for use in applications involving natural gas, crude oil, condensate, water, and dilute sour streams.

## 3 HANDLING, STORAGE & SAFETY

- STORAGE:** Store in original containers in a cool, dry, well-ventilated area away from heat and ignition sources. Keep tightly closed when not in use.
- HANDLING:** No special PPE required under normal intended use. Avoid prolonged skin contact. Wash hands with soap and water after handling.
- EYE / SKIN:** Flush eyes with plenty of water for several minutes. Wash skin thoroughly with soap and water. Get medical attention if irritation persists.
- INHALATION:** Vapor pressure is very low. Remove from exposure if overcome by vapor; seek medical attention. Product is not expected to present an inhalation hazard under normal use.
- INGESTION:** May cause GI irritation (nausea, vomiting, diarrhea). Do not induce vomiting. Get medical attention. Not for human consumption.
- FIRE:** Flash point >400°F (>204°C). Combustion produces carbon oxides. Use dry chemical, CO<sub>2</sub>, foam or water spray. SCBA recommended for firefighters.
- SDS:** Full MSDS/SDS available from T.S. Moly Lubricants, Inc. or from Project Sales Corp upon request.

### Manufacturer

T.S. Moly Lubricants, Inc.  
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### India Distributor

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## 4 ABOUT PROJECT SALES CORP

**Project Sales Corp (PSC)** is India's exclusive distributor of T.S. Moly Lubricants products and India's largest specialty lubricants distributor, stocking products from TS Moly, Dow, Houghton Offshore, MacDermid, Bestolife, Lubriplate, Climax, Detco, Lubchem, Jetlube, Belray, Bostik, Cameron, Sweeney, and many other leading brands.

T.S. Moly products are stocked at PSC warehouses in Kakinada and Visakhapatnam and available through all major offshore resellers across India. PSC serves the oil & gas, petrochemical, power generation, marine, and offshore drilling industries with high-performance greases, synthetic oils, valve lubricants, thread compounds, anti-seize pastes, wire rope lubricants, and other specialty products.

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