

TS-70 MOLY PASTE

70% MoS₂ Thread Compound · Riser, BOP & Flange Bolt Lubricant · Supplied by PSC Group

SKU: 15-70-710

NLGI No. 2 · Non-metallic

4 lb cans · 52 lb pails · 10 oz tubes



70%

Molybdenum Disulfide
BY WEIGHT · NON-METALLIC
FORMULATION

TECHNICAL SPECIFICATIONS

MoS ₂ Content	70% by weight
NLGI Grade	No. 2
Cone Penetration — Unworked	252
Cone Penetration — Worked	276
Flash Point (COC)	520°F
Fire Point (COC)	600°F
Solids Oxidation Begins	750°F
Minimum Temperature	0°F
Coefficient of Friction	0.044 / 0.045
Mean K Factor (A193 B-7)	0.135
Mean K Factor (A540 B-23)	0.113
Wear Scar (ASTM D2266)	0.50 / 0.42 mm
Humidity Cabinet (60 days)	Pass — no rust
Salt Spray (60 days)	Pass — no rust
Application Method	Brush / Burnish
Metal Content	None

PRODUCT OVERVIEW

TS-70 Moly Paste is a premium thread compound from T.S. Moly Lubricants, Inc. (Houston, TX) containing **70% Molybdenum Disulfide (MoS₂) by weight**. Specially designed for wet, saltwater, and corrosive environments — including offshore and subsea applications — it provides highly consistent torque values for make-up and break-out of risers, BOP flanges, and structural bolts. Its coefficient of friction nearly approaches that of pure MoS₂, delivering superior wear protection under extreme pressure. TS-70 does not contain metals and is applied by brushing or burnishing. Available in India, Dubai, and Houston through PSC Group.

KEY FEATURES & BENEFITS

70% MoS₂ Content

The highest MoS₂ content in its class — delivers strong, durable boundary lubrication under extreme pressure and heavy bolt loads.

Consistent Torque Control

Mean K factor of 0.113–0.135 ensures uniform, repeatable torque values during make-up and break-out — critical for BOP and riser assemblies.

Saltwater & Subsea Performance

Passes 60-day salt spray (ASTM B117) with no rust. Designed specifically for offshore, subsea, and salt-exposed environments above and below the waterline.

Wet & Corrosive Service

Passes 60-day humidity cabinet test (ASTM D1748). Performs in wet and corrosive conditions where conventional thread compounds fail.

Non-Metallic Formulation

Contains no metals — suitable where a high-MoS₂ non-metallic paste is preferred for compatibility, environmental or material-specification reasons.

Wide Temperature Range

Operational from 0°F. Solids oxidation begins at 750°F and flash point is 520°F (COC), supporting demanding high-temperature service conditions.

OFFSHORE MAINTENANCE USE CASES

EQUIPMENT / AREA	WHY TS-70 IS USED
Subsea riser bolts	Torque consistency and saltwater exposure protection
BOP flange bolts	Extreme pressure, corrosion resistance, and critical make-up torque
Subsea equipment	Wet, saltwater, and corrosive service compatibility
Structural bolts	Boundary lubrication during assembly and break-out
Press fittings	Lubrication during assembly of interference-fit components
Tapping threads	Thread lubrication and wear reduction during machining
Slow-moving loaded bushings	Heavy-load, slow-speed boundary lubrication

APPLICATION & SAFETY NOTE

Apply by brushing or burnishing onto clean threaded or contact surfaces before assembly. Flash point 520°F (COC). Non-metallic formulation. Product suitability should be confirmed against the actual bolt material, torque procedure, operating environment, OEM recommendation, and customer maintenance practice. SDS available from T.S. Moly Lubricants or PSC Group upon request.

SUPPLIED BY PSC GROUP



India · Dubai · Houston
pscrigconsumables.com



Information based on T.S. Moly Lubricants, Inc. product data sheet. T.S. Moly Lubricants and PSC Group reserve the right to modify specifications without notice. Always refer to the current MSDS/SDS before use. Confirm suitability against bolt material, torque procedure, OEM requirements, and operating environment.

TS-70 Moly Paste - 70% MoS₂ Thread Compound
SKU 15-70-710 | T.S. Moly Lubricants, Inc., Houston TX USA
Supplied by: PSC Group | India · Dubai · Houston
pscrigconsumables.com

EXTENDED PROPERTIES, SAFETY & PSC GROUP OFFICES

1 COMPLETE TECHNICAL SPECIFICATIONS

PARAMETER	TEST METHOD	VALUE
MoS ₂ Content	—	70% by weight
NLGI Grade	ASTM D217	No. 2
Cone Penetration @ 77°F — Unworked	ASTM D217	252
Cone Penetration @ 77°F — Worked	ASTM D217	276
Flash Point	COC	520°F
Fire Point	COC	600°F
Solids Oxidation Begins	—	750°F
Minimum Temperature	—	0°F
Coefficient of Friction	—	0.044 / 0.045
Mean K Factor — ASTM A193 B-7 Bolt	ASTM A193	0.135
Mean K Factor — ASTM A540 B-23 Bolt	ASTM A540	0.113
Wear Preventive (Scar Diameter)	ASTM D2266	0.50 mm / 0.42 mm
Humidity Cabinet (60 days)	ASTM D1748	Pass — no rust
Salt Spray (60 days)	ASTM B117	Pass — no rust
Metal Content	—	None (non-metallic)
Application Method	—	Brushing or burnishing

2 PHYSICAL PROPERTIES & PACKAGING

BASE MATERIAL MoS₂ Paste	COLOR Black
NLGI GRADE No. 2	METAL CONTENT None
FLASH POINT 520°F (COC)	FIRE POINT 600°F (COC)
MIN. TEMPERATURE 0°F	SKU 15-70-710

3 HANDLING & SAFETY

APPLICATION:	Apply by brushing or burnishing to clean surfaces. Ensure surfaces are free from loose contaminants before application.
FLASH POINT:	520°F (COC). Keep away from extreme heat and open flame. Non-flammable under normal handling conditions.
SKIN / EYES:	Avoid prolonged skin contact. Flush eyes with water if contact occurs. Wash hands thoroughly after handling.
INHALATION:	Use with adequate ventilation. Vapor pressure is very low — no significant inhalation hazard under normal use.
INGESTION:	May cause GI irritation. Do not induce vomiting. Get medical attention if swallowed.
SDS:	Full MSDS/SDS available from T.S. Moly Lubricants, Inc. (info@tsmoly.com) or from PSC Group upon request.

4 PSC GROUP - GLOBAL OFFICES

 INDIA Project Sales Corp 28, Founta Plaza, Suryabagh Visakhapatnam – 530020 Andhra Pradesh, India info@projectsalescorp.com (+91) 9100932334 pscrigconsumables.com	 DUBAI PSC Gulf Oilfield Trading LLC Dubai Silicon Oasis, Building A1 IFZA Business Park, DDP Dubai, United Arab Emirates info@pscdubai.com (+971) 50-457-2844 pscdubai.com	 HOUSTON PSC Houston Oilfield Supplies LLC 134 Vintage Park Blvd, Ste A #1006 Houston, TX 77070, USA info@pschoustonllc.com (984) 322-1807 pschoustonllc.com
--	---	--