### Compagnie Tunisienne De Forage

19 RUE DE L'ARTISANAT CHARGUIA II – 2035 L'AEROPORT-ARIANA TUNISIA FAX N°(216-70) 836 568/837 041 PHONE N°(216-70) 837 322

### FAX MESSAGE

FROM : C.T.F TO

FAX REF: ATT:

DATE: 19/09/2023 FAX N°: VIA MAIL
CONTACT NAME: Y/REF:
Page (01) of (17) including this page COPY:

SUBJECT: INVITATION TO BID N° PP 2023/555

SUPPLY OF 04 LOTS OF VARIOUS SPARE PARTS

Compagnie Tunisienne de Forage, (CTF) is now seeking competitive bids for the Supply of:

#### SUPPLY OF 04 LOTS OF VARIOUS SPARE PARTS

To this purpose you are hereby invited to submit your best prices and delivery in full compliance with the following terms and conditions.

Bidders can submit for one lot or more.

#### A - SCOPE OF WORK:

*Spare parts must be in compliance with technical specifications as detailed in attachment A.* 

#### **B-** ACKNOWLEDGEMENT:

You are kindly requested to acknowledge receipt of this inquiry by return fax or email.

#### C - BID CLOSING DATE:

Bids must be sent to CTF head office as soon as possible but no later than 05 October 2023 as per bid submission instructions hereinafter.

#### **D- FORM OF BIDS:**

Bids shall be in the form of pro forma invoices as per the formats shown under attachments B and C and shall include all requested details.

#### E - VALIDITY:

Bids shall be valid for a period of at least 90 days from bid closing date.

#### F/BID SUBMISSION PROCEDURE:

Bids shall be submitted by one of the ways listed under articles G1 and G2: The bidder is free to choose the appropriate way:

#### F-1- IN A SEALED OPAQUE ENVELOPE AS FOLLOWS:

Within this sealed opaque envelope bidder shall include the following two (02) separate internal sealed envelopes:

#### - The first internal sealed envelope shall:

<sup>\*</sup> Indicate:

- "envelope N°1 "UNPRICED Technical offer"
- Tenderer's name and address
- \* Contain:
- The Unpriced Technical offer (in the format shown in Attachment B) duly signed dated and stamped.
- Any technical information related to the proposed Spare Parts.
- The <u>Second internal sealed envelope shall:</u>
- \* Indicate:
- "envelope N°2 "PRICED" Financial offer"
- Tenderer's name and address
- \* Contain:
- The **Priced Financial offer** (as per the format provided under **attachment C**) duly signed dated and stamped.
- <u>The outer sealed envelope containing the 2 internal sealed envelopes shall</u> be sent by registered mail or by courier to the following address so as to arrive as soon as possible but no later than, **05 October 2023.**

COMPAGNIE TUNISIENNE DE FORAGE
19 RUE DE L'ARTISANAT CHARGUIA II
2035 ARIANA - TUNISIA
ATT: PRESIDENT OF THE TENDER BOARD
''DO NOT OPEN''
INQUIRY N° PP/2023/555
SUPPLY OF 04 LOTS OF VARIOUS SPARE PARTS

# F-2- BY E-MAIL TO: closed.bids@ctf.com.tn as per the pro forma provided under attachment B and C

#### G - CONTACTS:

Any further information or clarification required during the bidding period to aid bidder in the preparation of his bid shall be requested in writing by fax addressed to:

COMPAGNIE TUNISIENNE DE FORAGE FAX N° (216-70) 837 041 – 836 568 ATT: TENDER BOARD

#### H - SPECIAL NOTES:

- H.1- By written notice, CTF may modify the inquiry terms and conditions in any aspect by way of clarification, addition, deletion or otherwise, prior to bid closing date.
- H.2- CTF shall be under no obligation to accept the lowest or any bid submitted hereunder and CTF shall not be held liable for any expenses incurred in the preparation or submittal of bids or any subsequent discussion and/or negotiation.
- H.3—The financial offers and after the correction of possible errors of calculation, will be classed from the lowest bidder to the highest bidder and CTF will select the best offer which meets CTF technical.
- H.4-Bidders are requested to quote for only Ex-Works
- H.5-Certificate of conformance to be supplied in case P.O is placed.

BEST REGARDS,

C.T.F.

PROCUREMENT & MARKETING MANAGER

### ATTACHMENT A

### TECHNICAL SPECIFICATIONS OF THE REQUESTED PARTS

	LOT01: Grease for DC-Tool Joint						
Item	Description	Reference	QTY				
1	DC- TOOL JOINT COMPOUND-JET LUBE Z60 _ 40 lb.	20713	33				
2	DP-TOOL JOINT COMPOUND -JET LUBE Z50 _ 35 Lb TOOL JOINT COMPOUND WITH 50% PRIME GRADE METALLIC ZINC Z-50 For technical specifications: see attached file in the end of the inquiry.	20413	40				

	LOT02: Grease for gate & plug valve 10 000PSI						
Item	Description	Reference	QTY				
1	GRAISSE POUR GATE ET PLUG VALVE 0-10 000	JET LUBE EZY TURN	100 Kg				
	psi (gate & valve sealant) (*)	<i>3ARCTIC</i>					
	Technical specifications: see attached file in the end						
	of the inquiry						
	(*) NB : to provide data sheet						

LOT03: Hand Hydraulic Pump 40 000 PSI					
Item	Description	Reference	QTY		
1	Hand hydraulic pump 40 000 PSI/3000 bars with hose		1		

	LOT04: Spare parts for safe	ety valves	
Item	Description	Reference	QTY
1	GATE & SEAT ASSY. (2 1/16 X 5;10M)	21353-02-13	2
2	STEM F/2"1/16X10M G.V TYPE F&FC H2S TRIM	29381-01-99	3
3	GATE	23042-02	5
4	BONNET GASKET	21793-11	5
5	SEAT RING	44844-06	12
6	BONNET GASKET	19141-07	8
7	STEM F/3"1/8X5M G.V TYPE F&FC H2S TRIM	29381-03	6
8	BONNET GASKET	19141-10	15
9	GATE & SEAT ASSY.	21353-03-07	5
10	GATE, 3-1/8"	23247-02	5
11	SEAL RING	610500-50	30
12	SEAT RING	44783-06	10
13	BODY BUSHING (3"1/8 x5)	630690-01	10
14	BODY BUSHING (2 1/16 X10M)	630691-01	12
15	BONNET GASKET	21793-27	10
16	GATE & SEAT ASSY.	21353-03-16	3
17	BONNET GASKET	19141-11	5
18	GATE	23249-01	6
19	SEAL RING	610500-47	20
20	SEAT RING	610978-02	10
21	BODY BUSHING	610774-02	10
22	ASSY GATE AND SEAT 2 1/6 HYD	21436-02-04	3
23	Gate ( HGV 2" 1/16 5M/10M)	29786-01	5
24	GATE AND SEAT ASSY 3 1/8 HYD	21436-03-04	3
25	BONNET GASKET	19141-10	5
26	BODY BUSHING (3 1/16)	630469-06	5
27	GATE & SEAT ASSY 4"1/16-10M HYD.	21436-04-05	2
28	GATE	34273-01	3
29	BACK-UP RING	BU -241	1
30	RETAINING RING	33186-45	2
31	REAR RETAINER	40989	1
32	FRONT RETAINER	40988	2
33	O-RING	OR-340	8
34	O-RING	OR-214	5
35	O-RING (stem adapter)	OR-222	6
36	O-RING	OR-333	6
37	O-RING	OR-344	4

### ATTACHMENT B

### UNPRICED TECHNICAL OFFER

LOT01: Grease for DC- Tool Joint

PRO-FO	
OTY	DESCRIPTION
	Detailed description of the EUIPEMENT
	AUTHORIZED SIGNATURE
	SIGNATURE :
	DATE :
_	
	COMPANY STAMP
	PRO-FO DATE

### UNPRICED TECHNICAL OFFER

## LOT02: Grease for plug & gate valve 0-10 000 PSI

OM : DDER'S FULL NAM DRESS: LEPHONE N° : X N°: NTACT NAME:			TO: COMPAGNIE TUNISIENNE DE FORAGE 19 RUE DE L'ARTISANAT 2035 CHARGUIA II ARIANA – L'AEROPRO TUNIS - TUNISIA		
	DATE				
ITEM	QTY		DESC	RIPTION	
		Detailed des	scription of the E	SUIPEMENT	
		<u>AUTHORIZEL</u>	O SIGNATURE		
NAME :			SIGNAT	<i>CURE :</i>	
TITLE :			DATE :	·	
	ſ	COMPAN	Y STAMP	]	
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### UNPRICED TECHNICAL OFFER

LOT03: Hand Hydraulic Pump 40 000 PSI

ROM: IDDER'S FULL NAME: DDRESS: ELEPHONE N°: DNTACT NAME:  PRO-FORMA INVO			TO: COMPAGNIE TUNISIENNE DE FORAGE 19 RUE DE L'ARTISANAT 2035 CHARGUIA II ARIANA – L'AEROPRO' TUNIS - TUNISIA OICE N°:		
ITEM	QTY	<del></del>	DESCRIPTION		
		Detailed de	scription of the EUIPEMENT		
<i>NAME:</i>		<u>AUTHORIZEI</u>	SIGNATURE :		
TITLE :			DATE:		
	Γ	COMPAN	IY STAMP		

### UNPRICED TECHNICAL OFFER

LOT04: Spare parts for safety valves

OM : DDER'S FULL NAME: DRESS: LEPHONE N° : X N°: NTACT NAME:			ANAT 2035
	DATE	<i>:</i>	
ITEM	QTY	DESCRIPTION	
		Detailed description of the EUIPEMEN	NT
	4	UTHORIZED SIGNATURE	
NAME :	•••••	SIGNATURE:	
TITLE :		DATE:	
	Г	COMPANY STAMP	

### ATTACHMENT C

### PRICED FINACIAL OFFER

LOT01: Grease for DC -tool Joint

FROM: BIDDER'S FULL NAME: ADDRESS: TELEPHONE N°: FAX N°: CONTACT NAME:			······································	TO: COMPAGNIE TUNISIENNE DE FORAGE 19 RUE DE L'ARTISANAT 2035 CHARGUIA II ARIANA – L'AEROPROT TUNIS - TUNISIA		
		PRO-FORM DATE	IA INVOICE N :	······································	•••••	
ITEM	QTY	DESCRIPT	ION	UNIT P	PRICE	EXTENDED PRICE
		Detailed description of EQUIPMENT	<sup>c</sup> the			
TOTAL MA	TERIAL	VALUE EX-WORKS				
CHARGES	S( PACK	ING, HANDLING , ETC	.)			
TOTAL FC	Ά					
- DELIVERY - TERMS OF - VALIDITY	FROM I FPAYME FOF BIL	AND GROSS WEIGHT: DATE OF ORDER ACKNOW ONT: NET 30 DAYS/ CAS O (TO BE NOT LESS THAN AND CONDITIONS:	WLEDGEMENT: SH AGAINST L 90 days from	Preferably 02 OOCUMENT BID CLOSING D	ATE):	
		<u>AUT</u>	THORIZED SIG	<u>ENATURE</u>		
<i>NAME :</i>	••••••		S	SIGNATURE:		
TITLE :	••••••			DATE:		
СОМРА				<i>AMP</i> :		

### PRICED FINACIAL OFFER

## LOT02: Grease for Plug & gate valve 0-10 000 PSI

FROM: BIDDER'S FULL NAME: ADDRESS: TELEPHONE N°: FAX N°: CONTACT NAME:			TO: COMPAGNIE TUNISIENNE DE FORAGE 19 RUE DE L'ARTISANAT 2035 CHARGUIA II ARIANA – L'AEROPROT TUNIS - TUNISIA		
		PRO-FORMA INVOIO DATE :	CE N*:		
ITEM	QTY	DESCRIPTION	UNIT PRICE	EXTENDED PRICE	
		Detailed description of the EQUIPMENT			
TOTAL MA	TERIAL	VALUE EX-WORKS	•		
CHARGES	( PACK	ING, HANDLING , ETC)			
TOTAL EX	-WORKS	S			
- DELIVERY - TERMS OF	Y FROM I F PAYME Y OF BIL	AND GROSS WEIGHT:	ENT: Preferably 02 to 03 weel  IST DOCUMENT  ROM BID CLOSING DATE):		
		<u>AUTHORIZEL</u>	<u> SIGNATURE</u>		
NAME :	•••••••		SIGNATURE:		
TITLE :	••••••	<u> </u>	DATE :	••••	
		COMPAN	Y STAMP :		

### PRICED FINACIAL OFFER

LOT03: Hand Hydraulic Pump 40 000 PSI

FROM: BIDDER'S FULL NAME: ADDRESS: TELEPHONE N°: FAX N°: CONTACT NAME:			TO: COMPAGNIE TUNISIENNE DE FORAGE 19 RUE DE L'ARTISANAT 2035 CHARGUIA II ARIANA – L'AEROPROT TUNIS - TUNISIA		
		PRO-FORMA INVOI DATE :	CE N*:		
ITEM	QTY	DESCRIPTION	UNIT PRICE	EXTENDED PRICE	
		Detailed description of the EQUIPMENT			
TOTAL MA	TERIAL	VALUE EX-WORKS			
CHARGES	( PACK	ING, HANDLING , ETC)			
TOTAL EX	-WORK	S			
- DELIVERY - TERMS OF	Y FROM A F PAYME Y OF BIL	AND GROSS WEIGHT:	YENT: Preferably 02 to 03 week NST DOCUMENT FROM BID CLOSING DATE):		
		<u>AUTHORIZE</u>	D SIGNATURE		
<i>NAME</i> :	••••••		<i>SIGNATURE</i> :		
TITLE :			DATE :		
		COMPAN	VY STAMP :		

### PRICED FINACIAL OFFER

LOT04: Spare parts for safety valves

FROM: BIDDER'S FULL NAME:  ADDRESS:  TELEPHONE N°:  FAX N°:  CONTACT NAME:  PRO-FORMA INVOI		TO: COMPAGNIE TUNISIENNE DE FORAGE 19 RUE DE L'ARTISANAT 2035 CHARGUIA II ARIANA – L'AEROPROT TUNIS - TUNISIA		
		DATE :		
ITEM	QTY	DESCRIPTION	UNIT PRICE	EXTENDED PRICE
		Detailed description of the EQUIPMENT		
TOTAL MA	TERIAL	VALUE EX-WORKS		
CHARGES	( PACKI	NG, HANDLING, ETC)		
TOTAL Ex-	-WORKS	5		
- DELIVERY - TERMS OF - VALIDITY	FROM I FPAYME FOF BID	ND GROSS WEIGHT:	ENT: Preferably 02 to 03 wee NST DOCUMENT FROM BID CLOSING DATE):	
		<u>AUTHORIZE</u>	D SIGNATURE	
<i>NAME :</i>	••••••		SIGNATURE:	
<i>TITLE</i> :	•••••		DATE :	
		COMPAN	YY STAMP :	

## ATTACHMENT D

**MAIN TERMS AND CONDITIONS** 

#### ATTACHMENT D

#### **MAIN TERMS AND CONDITIONS**

# A Purchase Order will be issued to the successful bidders based on the following main terms and conditions

#### 1/ Purchase Order Prices

Purchase Order prices are inclusive of all rights, duties and taxes applicable outside Tunisia and related to the supply of Each lot including all costs related to packing, handling, shipping and delivery.

#### 2/ Prices validity:

The prices of the Purchase Order, shall remain firm throughout delivery and not subject to any revision.

#### 3/ Payment:

Payment will be made by wire transfer to the supplier's designated Bank account no later than 30 days from date of receipt of invoice.

#### 4/ Payment of subcontractors:

Subcontractors are paid directly by the supplier; CTF will not assume any liability in case supplier does not pay his subcontractors.

#### 5/ Conformity:

The SPARE PARTS shall be in conformity with the technical specifications set forth in attachment A and in supplier's quote.

CTF reserves the right to call on experts or technicians of it's choice to examine, control and test the SPARE PARTS in view of their acceptance.

In the event SPARE PARTS turn out not to be in conformity, expert fees will be at supplier's cost even in case of replacement of the rejected SPARE PARTS.

Accordingly supplier will not be entitled to make any claim of what ever nature as a result of incurring above costs.

#### 6/ Delivery:

Delivery will be as stated in supplier's bid and the resulting Purchase Order.

Such delivery shall be respected and no delays will be allowed except as provided under article 10 (Force Majeure).

#### 7/ Packing and Transport:

### 7-1Packing and marking:

#### > Packing:

Supplier shall pack the SPARE PARTS adequately in such a manner as to prevent any damages during transport from ex-works.

Packing shall be adequate to provide good conservation during handling, bad weather etc... supplier shall bear the full responsibility for damages resulting from improper packing of material.

The packaging must be only in cardboard or in wood boxes instead of plastic packing otherwise penalities will be applied

#### Marking

Each parcel shall be clearly marked to mention the following:

#### COMPAGNIE TUNISIENNE DE FORAGE 19 RUE DE L'ARTISANAT – CHARGUIA II

### L'AEROPORT – 2035 ARIANA

#### **TUNISIA**

#### **PURCHASE ORDER N**•

Packing shall be marked to show the following informations:

- Supplier's name and address.
- Parcel number in X/N form (the numerator will indicate the sequential number of the parcel and de denominator the total number of parcels).
- Gross weight of each parcel.
- Dimension of each parcel in form  $L \times W \times H$  (length  $\times W$  width  $\times W$  height)
- Special marking as required for specific material such as fragile, Top, Bottom etc....

#### 7-2 Insurance coverage:

CTF will be responsible for insurance coverage of the risks involved in transport of the SPARE PARTS from port of loading or F.O.T (if delivery by truck) to port of unloading in accordance with the provision of incorterms 2000 or latest edition of ICC

However supplier shall be responsible for packing, handling and loading of the SPARE PARTS on the vessel or truck.

#### 8/ Loss, Damages, Rejected Material

#### 8.1 Loss, damages:

Supplier is required to replace as soon as possible at his costs and expenses (including all costs involved from ex-works to CTF designated delivery site) any missing items or non conformity of part or the totality of the items

All expenses, fees and taxes of what ever nature and – notwithstanding their amounts- incurred in making such replacements as provided in this article will be at supplier's cost.

#### 8.2 Rejected material

Any material rejected by CTF shall be replaced by supplier at his sole cost and expenses and without compensation, as soon as possible but no later than Seven (07) days from date of rejection notification.

#### 9/ Guarantee:

Supplier shall guarantee the SPARE PARTS against any hidden defect, fabrication or materials defects for a period of 12 months from date of first usage or 18 months from shipping date (as stated in the bill of lading or CMR whichever comes first).

This guarantee shall also cover any and all costs related to travel of personnel, packing and shipment incurred when replacing or repairing defective material weather at a designated location or at CTF Base.

During the guarantee period, supplier shall make any repairs requested by CTF. However, he can request to be reimbursed in case he determines that such repairs are not covered by the guarantee or are due to CTF unproper usage or handling of the SPARE PARTS

#### 10/ Force Majeure

Neither party will be considered as failing to meet it's contractual obligations in case such failure is delayed, hindered or prevented by a case of force majeure.

Force majeure is defined as any unpredictable, irresistible event beyond the concerned party control which prevents him from meeting part or all of his obligations setforth in the present contract.

Strikes of supplier's personnel will not be considered as case of force majeure.

In the event delivery of the SPARE PARTS complete with accessories will be partially or totally hampered due to a case of force majeure, supplier shall advise CTF within **Three (03) days** by formal notification of the commencement and end of force majeure as well as the likely consequences on the fulfillment of this contractual obligation.

He shall also provide CTF with credible evidence of the existence and duration of the case of force majeure. CTF reserves the right to evaluate the reasons hampering the fulfillment of supplier's contractual obligations and to decide whether they are among force majeure cases or not.

Time required to fulfill supplier's contractual obligations will be extended by the number of days required to overcome the force majeure case. Should the force majeure case exceeds **Ten** (10) days; CTF reserves the right to cancel the Purchase Order by written notice (fax or e-mail).

#### 11/ Disputes And Conflicts

Any disputes related to the interpretation or the execution of the present contract –unless settled amicably by the parties- shall be settled by the competent Tunisian court.



### **TOOL JOINT COMPOUND WITH 50% ZINC**

#### **DESCRIPTION**

**Z-50** is formulated with 50% metallic zinc which meets the requirements described in API bulletin RP 7G. It contains special additives to reduce the problem of excessive plating and buildup of metallic zinc encountered with other compounds.

**Z-50** is manufactured with JET-LUBE grease compounded from custom refined low sulphur oil. The grease base ensures brushability over a wide temperature range, tenacious adherence to all surfaces, resistance to water wash out and the prevention of rust/corrosion. The metallic particles and other additives are maintained in uniform suspension throughout the compound. **Z-50** is unmatched in its ability to displace moisture and in adherence to wet tool joint surfaces.

#### **ADVANTAGES**

- Non-plating
- Low sulphur content
- Non-reactive, no gassing
- Brushable over a wide temperature range
- Sticks to wet joints
- Consistent rig floor make-up
- Resistant to downhole make-up
- Available in Arctic and Thermal grades

#### **APPLICATIONS**

**Z-50** Tool Joint Compounds is designed to provide the maximum protection for tool joint threads and shoulders over a wide variety of conditions.

#### PRODUCT CHARACTERISTICS

Service Range:

Standard: -18°C (0°F) to 149°C (300°F)

Thickener Aluminium complex

Fluid Type Petroleum

Colour/Appearance **Smooth Grey Paste** 

Dropping Point (ASTM D-566) 199°C (390°F)

Specific Gravity 1.78 Oil Separation <5.0

Wt. % Loss @ 212°F (100°C)

Flash Point (ASTM D-92) >221°C (430°F)

**NLGI** Grade 1-2 Penetration @ 77°F (ASTM D-217) 275-305

Copper Strip Corrosion(ASTM D-4048) 1A

Shell 4-Ball (ASTM D-2596)

Weld Point, kgf 500

Recommended Torque Per API RP 7G

Friction factor 1.0

#### **PACKAGING**

Code No.	Size	Container
JA20412	12.5kg	Plastic pail
JA20416	16kg	Metal pail
JA20493	25kg	Metal pail

Also available as Z-40 & Z-60 with different amounts of Zinc compared to Z-50

#### LIMITED WARRANTY

Jet-Lube (UK) Limited makes the Limited Express Warranty that at the date of delivery, this product shall be free from defects in Jet-Lube (UK) Limited 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 (UK) Limited. 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 (UK) Limited shall not be liable for incidental or consequential damages



#### DESCRIPTION

Jet-Lube® EZY-TURN® #3 ARCTIC Gate and Plug Valve Sealant is specifically designed for use where light hydrocarbon liquids and gases are present, making it the sealant of choice for pipeline and compressor station usage. Pumpable to temperatures as low as -58°F (-50°C) with the appropriate pump.

Our proprietary blend of oils and solid lubricants, means Jet-Lube EZY-TURN #3 ARCTIC lubricates and is resistant to all aliphatic hydrocarbons. Lowers torque necessary for smooth valve operation and protects internal plug surfaces from scoring and galling.

Proprietary Oil Base

Nontoxic

Color: Grey/Black

H<sub>2</sub>S Resistant

Reduces Torque

• Biodegradable Stops Scoring, Galling

• Prevents Corrosion

Pumpable

Nonhazardous

Stops Leaks

## **APPLICATIONS**

Jet-Lube EZY-TURN #3 ARCTIC Gate and Plug Valve Sealant is ideal for any plug valve application requiring aliphatic liquid and gas resistance. Ideal for pipeline and compressor station operation. Excellent for use in heavy H<sub>2</sub>S, saline or salt water service.

**Recommended Cleanup:** Although conventional solvents like methanol, ethanol, IPA, chlorinated solvent, aromatic solvents, acetone and other ketones can be utilized, JET-LUBE® recommends its EZY-OPEN™ or other safe oxygenated solvents. **EZY-OPEN** is a nontoxic, nonflammable, biodegradable lubricant and cleanser specifically designed for valve cleaning applications. It contains no components listed as federal hazardous wastes.

NOTE: Not for use with oxygen or strong oxidizers.

#### PRODUCT CHARACTERISTICS

Grey/Black Paste **Appearance** 

Cone Penetration @ 77°F 290 - 335

(As manufactured, 300 strokes)

Density (lb/gal) Typical 8.80 Specific Gravity, Typical 1.06 Dropping Point (ASTM D-2265) None Oil Separation 3.0 max

(FTMS 791.B M.321.2)

(ASTM D-6184)

Thickener Inorganic

Flash Point °F (°C) >500°F (260°C)

(ASTM D-92)

-58°F (-50°C) to 500°F Temperature Range

(260°C)

**Evaporation Loss** 

24 hr @ 150°C, % Loss < 0.5

#### For package types and part numbers

www.jetlube.com/resources/product-index/

#### **Limited Warranty**

www.jetlube.com/assets/documents/Jet-Lube Warranty.pdf

#### SERVICE RECOMMENDATIONS

Aliphatic Hydrocarbons

• Hot Gases

Butane

Propane

Natural Gas

• Fuel Oil

H<sub>2</sub>S. Saline. Salt Water

•LPG

### **TEMPERATURE RANGE**

-58°F (-50°C) to 500°F (260°C)