

# Tannas Reference Oils & Catalysts

## Product Guide



### General Instrument Viscosity Standards

#### High-Temperature, Newtonian Viscosity Reference Oils

Product Name	Nominal Viscosity (mPa•s) (cP) / (mm <sup>2</sup> /s) (cSt)										Applicable ASTM Test Methods
	40°C		80°C		100°C		120°C		150°C		
	cP	cSt	cP	cSt	cP	cSt	cP	cSt	cP	cSt	
R-100	11	13	3.6	4.4	2.4	3.0	1.8	2.2	1.2	1.6	D445 (Kinematic Viscosity)
R-200	16	19	4.9	5.9	3.2	4.0	2.2	2.8	1.5	1.9	
R-300	27	32	7.1	8.6	4.5	5.5	3.0	3.8	1.9	2.4	
R-350	55	64	12	14	7.0	8.5	4.5	5.6	2.7	3.4	D2161 (Saybolt Viscosity)
R-400	97	112	18	21	9.9	12	6.2	7.6	3.6	4.4	D4683 (TBS Viscometer)
R-450	133	153	23	27	12	14	7.5	9.1	4.2	5.2	
R-500	195	224	30	36	16	19	9.5	11	5.1	6.4	
R-600	260	295	38	45	20	23	12	14	6.1	7.5	D4741 (Tapered Plug Viscometer)
R-2200	17	20	5.2	6.3	3.3	4.2	2.3	2.9	1.5	1.9	
R-2300	27	32	7.2	8.7	4.5	5.5	3.0	3.7	1.9	2.4	
R-2350	54	63	12	14	6.9	8.4	4.5	5.5	2.7	3.4	D5481 (HTHS Capillary)
R-2400	99	115	18	21	10	12	6.2	7.5	3.5	4.4	
R-2450	126	145	22	26	12	14	7.3	9.0	4.1	5.1	

SavanTech® Certified Data Includes:

- 1) Dynamic Viscosity to 4 significant figures @ each specified temperature above.
- 2) Kinematic Viscosity to 4 significant figures @ each specified temperature above.
- 3) Density {±0.0001 g/mL} @ each specified temperature above.

#### Volatility Reference Oils

Product Name	Nominal Loss	Temp.	Applicable ASTM Test Methods
SNL-75	8%	250°C	NOACK D5800 TGA @ 250°C
SNH-200	19%	250°C	
SNCa1-150	11%	250°C	
200°C-SNC	8%	200°C	

#### Foam Tendency Reference Oils

Product Name	Test Sequence	Temp.	Applicable ASTM Test Methods
F-100	I, II, and III	24°C 93.5°C	D892
F-200	II and IV	93.5°C 150°C	D6082

#### High-Temperature, High Shear Non-Newtonian Viscosity Reference Oils

Product Name	Nominal Viscosity @ 10 <sup>6</sup> sec <sup>-1</sup> (mPa•s) (cP)	Temp.	Applicable ASTM Test Methods
NNR-03	3.55	150°C	D4683 (TBS) D6616 (TBS)
NNR-10	10.0	100°C	D4741 (Tapered Plug)
NNR-80	7.10	80°C	D5481 (Capillary)

#### Low-Temperature, Newtonian Viscosity Reference Oils

Product Name	Nominal Viscosity (mPa•s) (cP) / (mm <sup>2</sup> /s) (cSt)																	
	-5°C		-10°C		-15°C		-20°C		-25°C		-30°C		-35°C		-40°C			
	cP	cSt	cP	cSt	cP	cSt	cP	cSt	cP	cSt	cP	cSt	cP	cSt	cP	cSt		
LNP-5	1228	1439	1863	2186	2990	3497	5022	5844	8487	9879	15,300	17,740	29,060	33,520	58,020	66,570		
SavanTech® Certified Data Includes:											Applicable ASTM Test Methods							
1) Dynamic Viscosity to 3 significant figures @ each specified temperature above.											D445 (KV)		D2983 (Brookfield)		D3829 (MRV)			
2) Kinematic Viscosity to 3 significant figures @ each specified temperature above.											D4684 (MRV-TPI)		D5133 (Scanning Brookfield)					
3) Density {±0.0005 g/mL} @ each specified temperature above.																		

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# Instrument Specific Viscosity Standards



ISO 9001 Certified

## Scanning Brookfield / Gelation Index Reference Oils

Product Name	Nominal Gelation Index	Nominal Gelation Index Temperature	Applicable ASTM Test Methods
GIR-150	19	-16.2C	D5133 D7110

## TEOST® Reference Oils

TEOST® 33C		
Product Name	Nominal Deposit Range (Rod + Filter weight)	Applicable ASTM Test Methods
CG-1	28.2 mg	D6335
T33C-1	46.8 mg	
TEOST MHT®		
Product Name	Nominal Deposit Range (Rod + Filter weight)	Applicable ASTM Test Methods
LDF	13.7 mg	D7097
MDF	38.6 mg	
HDF	87 mg	
SavanTech® Certified Data Includes: 1) Mass of Total Deposits and Tolerance for each oil.		

## Quantum® RPVOT Calibration/ Reference Oils

Product Name	Nominal Break-Times (minutes)	Applicable ASTM Test Method
QMR	796	D2272
QHR	1244	

## TEOST® Calibration Oil

Product Name	Calibration Uses
TPC-1	T/C Depth Pump Speed Power Settings

## TBS Viscometer Specialty Oils

Product Name	Purpose	Applicable ASTM Test Methods
BIF-03	Break-in Fluid	D4683 D6616
Idling Oil	Flush, Idle, Store	

## TFOUT Reference Oils

Product Name	Nominal Break-Times (minutes)	Applicable ASTM Test Method
TFL-60	69	D4742
TFH-220	209	

## TFOUT Catalyst Packages

Product Name	Applicable Test Sequence	Catalyst Designation	Applicable ASTM Test Methods
TFOUT IIID Catalyst	IIID	'A'	D4742
TFOUT IIIE Catalyst	IIIE	'B'	D7098
Notes: 1) Available in Kit and Tube (3 kits) quantities. 2) Kits contain catalyst material for approximately 13 tests.			

## TEOST® Catalyst Package

Product Name	Applicable Test Method
TEOST MHT Catalyst	D7097
Notes: 1) Available in 5 gram bottles. 2) Approximately 120 tests per bottle.	