

Jenis Dokumen: FORMULIR	No. Revisi: 2
Judul Dokumen: OLAP PARAMETER RECOMMENDATION	Tanggal Revisi: 10 Mei 2010
No. Dokumen: ALP-FML-TES-002	

OLAP PARAMETER RECOMMENDATION

Tribology	Parameters	Method	Lub Size	Industrial														Automotive					
				Hydraulic		Gearbox		Tubine		Compressor		Circulating		Diathermic		Insulating		Diesel		Gasoline		Transmissie	
				F/N	IS/U	F/N	IS/U	F/N	IS/U	F/N	IS/U	F/N	IS/U	F/N	IS/U	F/N	IS/U	F/N	IS/U	F/N	IS/U	F/N	IS/U
Properties	APPEARANCE	visual		P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1
	COLOR TEST	various	15	C0		C0		C0		C0		C0		C0		C0		C0		C0		C0	
	COLD CRANKING SIMULATION	D-5293	10															C0 ^A		C0 ^A		C0 ^A	
	SPECTRUM ANALYSIS	FTIR	5	C0		C0		C0		C0		C0		C0		C0		C0		C0		C0	
	VISCOSITY (40 °C)	D-445	25	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1			P1		P1

Jenis Dokumen: FORMULIR	No. Revisi: 2
Judul Dokumen: OLAP PARAMETER RECOMMENDATION	Tanggal Revisi: 10 Mei 2010
No. Dokumen: ALP-FML-TES-002	

VISCOSITY (100 °C)	D-445	25	P1		P1		P1		P1		P1		P1		P1	P1	P1	P1	P1	P1	
VISCOSITY INDEX	D-2270		P1		P1		P1		P1		P1		P1		P1		P1		P1		
FLASH POINT (PMCC)	D-93	80	P1		P1		P1		P1	P2	P1		P1		P1	P1*	P1	P1*	P1	P2	
BASE NUMBER	D-2896	60	P1*		P1*		P1*		P1*		P1*					P1	P1	P1	P1*		
TOTAL ACID NUMBER	D-974	5	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1				P1	P1	
ADDITIVE METALS	ICP	10																			
1. PHOSPHOR (P)	D-4951		P2	P2	P2	P2	P2^	P2^	P2*	P2*	P2^	P2^				P2	P2	P2	P2	P2	P2
2. ZINC (ZN)	D-4951		P2	P2	P2	P2	P2^	P2^	P2~	P2~	P2^	P2^				P2	P2	P2	P2	P2	P2

Jenis Dokumen: FORMULIR	No. Revisi: 2
Judul Dokumen: OLAP PARAMETER RECOMMENDATION	Tanggal Revisi: 10 Mei 2010
No. Dokumen: ALP-FML-TES-002	

Contamination	2. CALCIUM (CA)	D-4951		P1*		P1*		P1*		P1*		P1*		P2*		P2	P2	P2	P2	P2*			
	3. MAGNESIUM (MG)	D-4951		P1*		P1*		P1*		P1*		P1*		P2*		P2	P2	P2	P2	P2*			
	5. SULPHUR (S)	D-1662	50				P2														P2		
	OXIDATION	FTIR	5		P2^			P2		P2		P2		P2				P1		P1			
	NITRATION	FTIR	5		P2^			P2		P2		P2		P2				P1		P1			
	WATER CONTENT	D-95	50		P1		P1		P1		P1		P1					P1		P1			
	WATER CONTENT	D-1123	3	CO		CO		CO		CO		CO		CO	P1	CO	P1	CO		CO		CO	P1
	SEDIMENT	D-1796	50		P1		P1		P1				P1				P1		P1		P1		P1
	INSOLUBLE in PENTANE	D-893	5		P1*						P1				P1			P2		P2		P1	

Jenis Dokumen: FORMULIR	No. Revisi: 2
Judul Dokumen: OLAP PARAMETER RECOMMENDATION	Tanggal Revisi: 10 Mei 2010
No. Dokumen: ALP-FML-TES-002	

Remark	AIR RELEASE	D-3427	200	C2	C2	C2	C2	C2	C2	C2	C2	C2	C2	C2	C2	C2						
	DEMULSIBILITY	D-1401	50	C3	C3	C3	C3	C3	C3	C3	C3	C3	C3	C3	C3							
	EVA LOSS - DENSITY (15 °C)	D-4052	250							C4						C4						
	1 pcs Bottle HDPE Non Filler	Normal	250	* Using Engine Oil	^ Hydraulic with High Pressure & Stroke Frequency.	* Using Engine Oil			^ Turbine Oil +EP or * Using Engine Oil	^ Turbine Oil +EP	* Recipro Comp or ~ Comp with Silver Bearing	* Recipro Comp or ~ Comp with Silver Bearing	^ Circulating Oil +EP or * Using Engine Oil	^ Circulating Oil +EP				^ Multigrade Oils			C4	
	2 pcs Bottle HDPE Non Filler	Problem	2x 250																			

C0:Complaint parameters for Appearance
 F/N: Fresh/New Sample

C1,2,3,4:Complaint parameters for Performance
 IS/U: Inservice/Used Sample

P1:Priority 1 parameters for Analysis

P2:Priority 2 parameters for Analysis

* If Analysis Fuel Dilution without IR / GC & ~ Wear Ag for EMD Engine

* If Analysis Fuel Dilution without IR / D-322

^ Multigrade Oils or * Using Engine Oil