

Data Sheet - ATF for DIWA Transmissions

1) General Data

Product Marketer	Modrica Oil Refinery
Product Brand Name	MATIK DX III
Unique oil code	B3871835003019
Rebrand of	
Reblend of	AT-11949-40
GM-Dexron License Number in case of Rebrand/Reblend GM-Dexron License No. of Original	
Mercon License Number in case of Rebrand/Reblend Mercon License No. of Original	
Market region	<input checked="" type="checkbox"/> Europe <input type="checkbox"/> North America <input type="checkbox"/> Asia <input type="checkbox"/> Africa <input type="checkbox"/> South America <input type="checkbox"/> Oceania

2) Contents

	Mass %	API Group	Supplier and Code	Kin. Visc. @ 100°C
Base oil 1	25	3	Nexbase 3043	4.3 mm ² /s
Base oil 2	63.6	1	AP/E Core 100	4 mm ² /s
Base oil 3				mm ² /s
Base oil 4				mm ² /s

	Mass %	Type	Supplier and Code
Additive 1	11.4	ATF additive pack	Afton Chemical : HiTEC 419
Additive 2			
Additive 3			
Additive 4			

Mass sum 100 must be 100

Phosphorus	P	287 ppm	Sodium	Na	ppm
Boron	B	132 ppm	Barium	Ba	ppm
Calcium	Ca	36 ppm	Potassium	K	ppm
Silicon	Si	5 ppm	Magnesium	Mg	ppm
Zinc	Zn	ppm	Molybdenum	Mo	ppm

3) Physical Properties

<u>Kinematic Viscosity @ 40°C</u>	DIN 51562	36.78	mm ² /s
<u>Kinematic Viscosity @ 100°C</u>	DIN 51562	7.45	mm ² /s
<u>Viscosity Index</u>	DIN ISO 2909	173	-
<u>Brookfield Viscosity @ -40°C</u>	DIN 51398	18936	mPa·s
<u>Density @ 15°C</u>	DIN 51757	862	kg/m ³
<u>Pour Point</u>	DIN ISO 3016	>-49	°C
<u>Flash Point</u>	DIN EN ISO 2592	210	°C
<u>Fire Point</u>	DIN EN ISO 2592	242	°C
<u>Total Acid Number</u>	ASTM D 664	1.3	mg KOH/g

4) Test Results

FZG-Test A/8,3/90 - Scuffing Load Capacity

<u>Failure Load stage</u>	DIN 51354	13	KS
---------------------------	-----------	----	----

Shear stability

<u>KV100 after 20 h KRL @ 60°C</u>	DIN 51350-6 – KRL/C	5.6	mm ² /s
------------------------------------	---------------------	-----	--------------------

Compatibility with Sealing Material

DIN ISO 1817 (Freudenberg-Test)

Change of Volume and Hardness with ACM and FPM after 168 h @ 95°C and 150°C

Test pieces Ø 36mm, thickness 2 mm

ACM 80	168 h / 95°C	168 h / 150°C
<u>Change of Shore Hardness</u>	-2	-3
<u>Change of Volume</u>	-0.6 %	1.7 %
FPM 80	168 h / 95°C	168 h / 150°C
<u>Change of Shore Hardness</u>	-1	0
<u>Change of Volume</u>	0.3 %	0.5 %
75 FKM 585 (Freudenberg)	168 h / 95°C	168 h / 150°C
<u>Change of Shore Hardness</u>	-1	3
<u>Change of Volume</u>	0.3 %	2 %

5) IR-Diagram

Diagram in transmittance layout to be enclosed.

6) Sample

ONLY for approvals for North America a 1 pint sample to be sent to Voith Turbo Inc. USA (see 8.)

7) Contact Person

Name	Branko Despotovic
Phone	38765037613
Fax	38753812541
E-mail	bane@modricaoil.com
Address	Modrica Oil Refinery Vojvode Stepe Stepanovica 49 st. 74480 Modrica Bosnia and Herzegovina
Date	15. 03. 2013.  Signature 

8) Contacts Voith

Voith Turbo GmbH & Co. KG	Dr. Helmut Krieger
Bus Drive Systems	Phone +49 7321 37 8245
Alexanderstr. 2	Fax +49 7321 37 7690
89522 Heidenheim - Germany	E-mail helmut.krieger@voith.com

Voith Turbo Inc.	Mark Bair
DIWA Bus Transmissions	Phone +1 717 767 3254
25 Winship Road	Fax +1 717 767 3210
York, PA 17402 - USA	E-mail mark.bair@voith.com

9) General Conditions

If the approval is granted the product will be added to the respective Voith approval list
The approval is limited to 24 months. For re-approval the ongoing production and marketing of the product has to be re-confirmed by signed letter sent to Voith prior to expiration.
The approval can be withdrawn by Voith at any time without stating any reason.
Any change of the product has to be indicated immediately and will terminate the approval.

Approval

Product Marketer Modrica Oil Refinery
 Product Brand Name MATIK DX III
 Unique oil code B3871835003019

Not Approved

Approved for

Voith Approval List

H55.6335.xx - Standard Drain Intervals

H55.6336.xx - Extended Drain Intervals


US SB 013/118 - Standard Drain Intervals

US SB 013/118 - Extended Drain Intervals

Approval Date 2013-07-17

Expiration Date 2015-07-17

Name Dr. Krieger
VTA-arae

Signature 
Voith Turbo GmbH & Co. KG
Alexanderstraße 2
89522 Heidenheim

Re-Approval

Re-Approval Date 2015-07-02

Expiration Date 2017-07-01

Name Dr. Burr/Mr. Mondorf

Signature 

Re-Approval Date 2017-08-28

Expiration Date 2019-08-27

Name Dr. Burr / Mr. Mondorf

Signature 

Re-Approval Date 2019-08-22

Expiration Date 2021-08-21

Name i. V. Bischoff / i. A. Dittes

Signature i. V. Bischoff Dittes

Re-Approval Date _____

Expiration Date _____

Name _____

Signature _____

Re-Approval Date _____

Expiration Date _____

Name _____

Signature _____