

2020 ORC Club Certificate

Rating Office

EYU
Purje 8
11911, Tallinn
Estonia

Certificate

Number **EST045**
Issued On **4/17/2020**
ORC Ref **03580000HD6**
VPP Ver. **2020 1.01**
Valid until **31/12/2020**

Crew Weight

Default 465kg
Maximum **500kg**
Minimum* **375kg**
*when applied by the NoR and SI
Non Manual Pwr **No**

Special Scoring

ToD ToT
Non Spin GPH **760.1 0.7894**
Non Spin OSN **737.1 0.8140**

Sails Limitations

Headsails **5** Spinnakers **4**

Spinnaker configuration

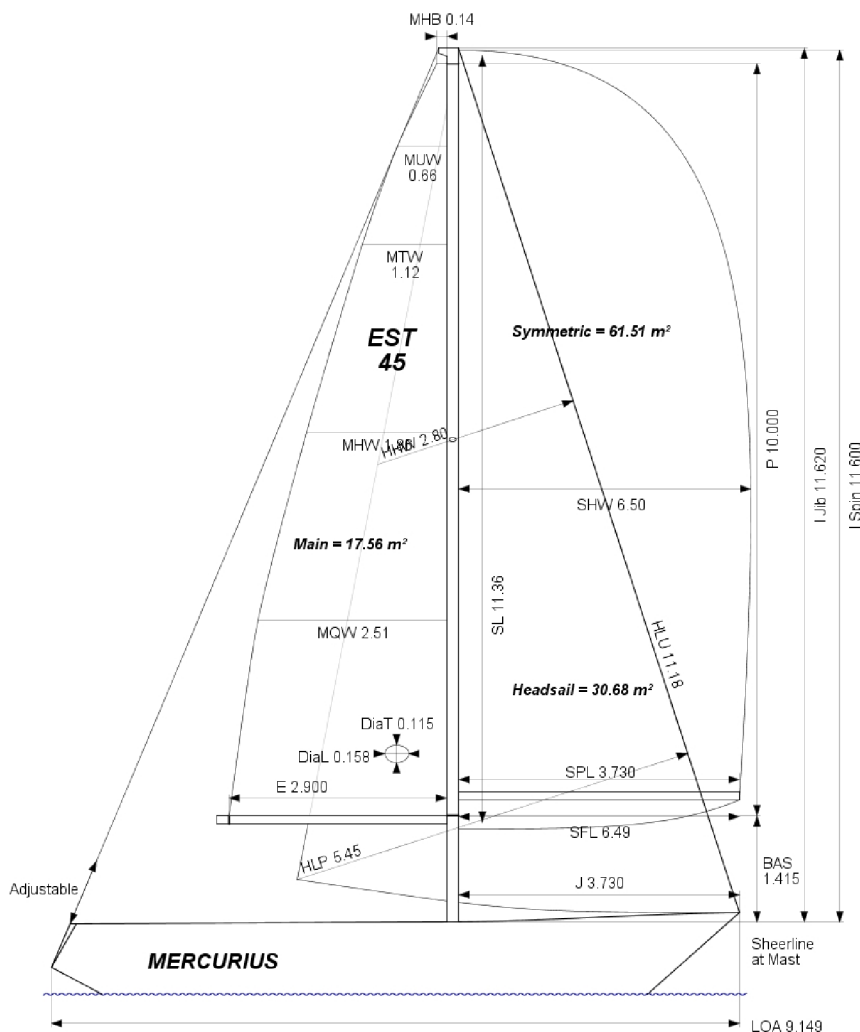
Symmetric: **Yes 61.51**
Asymmetric: **No**
Flying H/S: **No**
Spin. Pole: **Yes**

Class Division Length

CDL = **6.741**

Stability (Estimated)

Limit Positive Stab.: **112.2°**
Stability Index: **111.8**



BOAT		GPH	HULL			
Name	MERCURIUS	729.2	Data File	EST0045	LOA	9.149m
Sail Nr	EST 45		Offset File	CARTER30.OFF	MB	3.092m
CLASS			Displacement	3,781kg	Draft	1.566m
Class	CARTER 30		IMS Division	Cruiser/Racer	Dynamic All.	0.456%
Designer	CARTER		Plan Review		Construction	Solid
Builder	Teliga		Fiber Rigging	No	Aramid Core	No
Series	12/1975		Crew Arm Ex		Carbon Rudder	No
Age Date	06/1987				Light Stanchions	
Age Allowance	0.487%		IMSL	7.362m	VCGD	0.085m Sink 12.45kg/mm
COMMENTS			RL	6.119m	VCGM	0.081m WS 17.46m²
			LSM0	7.593m	Displacement/Length ratio	
			Water Ballast		Trim Tab	No
			BLR Index	0.0000		
PROPELLER			CENTERBOARD			
Installation	Shaft exposed	PRD 0.400				
Type	Feathering 2 blades	PIPA 0.0021	N/A			

SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	709.4			788.8		
Time on Time	0.8457			0.8557		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	831.8	647.2	581.8	1065.8	793.2	692.7
Time on Time	0.8115	1.0429	1.1602	0.6333	0.8510	0.9745

BOAT										INCLINING TEST AND FREEBOARDS											
Name MERCURIUS					Sail Nr EST 45					Inclining Test Club Estimated VCG											
File EST0045					Data in meters/kilograms					Flotation date SG 1.0050											
RIG Forestay Tension Aft Spreaders 1 Inner Stay None Fitted Runners/Checkstays 0 Carbon Mast No Jib Furler No Fiber Rigging No Main Furler No Non-Circular Rigging No Articulated Bowsprit No										FFM 1.055 FF 1.071 SFFP 0.736 FAM 0.924 FA 0.936 SAFP 8.812 LCF from stem on CL / on sheer 5.124 / 5.313 Maximum beam station from stem 5.352 RM Measured 58.1kg·m RM Default 56.4kg·m Limit of positive stability / Stab.Index 112.2° / 111.8 Freeboard at mast at 3.730 0.953											
MIZZEN RIG AND SAILS N/A										PROPELLER Installation Shaft exposed PRD 0.400 Type Feathering 2 blades PBW Twin Screw No PIPA 0.0021 PSA PHL ST3 ESL PSD ST1 ST4 PHD ST2 ST5											
COMMENTS 										MOVABLE BALLAST N/A											
CENTERBOARD N/A										Certificate Number EST045 ORC Ref 03580000HD6 Issued On 4/17/2020 VPP Ver. 2020 1.01 Valid until 31/12/2020											
2020 Measurements Datasheet																					
SAILS INVENTORY																					
MAINSAIL (1)																					
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment										
1	0.14	0.66	1.12	1.86	2.51	17.57															
HEADSAILS (3)																					
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Flying	Measurer	Meas.Date	Manufacture	Material	Comment					
2	0.06	0.74	1.14	2.80	4.22	5.45	11.18	146%	30.68		No										
1	0.08	0.66	1.28	2.56	3.89	5.41	11.15	145%	29.28		No										
3	0.09	0.54	1.04	2.10	3.31	4.53	11.01	121%	24.17		No	EST 1									
SYMMETRIC SPINNAKERS (3)																					
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment										
1	11.36	11.36	11.36	6.50	6.49	61.52															
2	11.35	11.35	11.35	6.49	6.40	61.22	EST 1														
3	10.69	10.69	10.69	6.12	5.76	53.88															
ASYMMETRIC SPINNAKERS (0)																					
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment									

2020

ORC Club Certificate Appendix

BOAT

Name **MERCURIUS**
Sail Nr **EST 45**

Certificate Number **EST045**
Issued On **4/17/2020**

TIME ALLOWANCES

Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1222.8	1044.6	923.5	853.6	828.4	819.0	827.1
52°	804.5	685.8	620.3	592.0	579.0	573.9	573.0
60°	762.2	649.8	600.4	577.8	564.4	557.7	554.7
75°	733.5	627.5	586.3	565.4	549.8	537.3	524.6
90°	741.5	631.4	578.6	555.0	543.6	529.2	504.1
110°	743.0	617.1	569.1	542.3	519.2	500.4	481.9
120°	761.7	629.7	574.2	545.8	521.1	498.5	467.0
135°	826.5	682.5	597.8	562.4	537.2	513.0	471.7
150°	958.0	771.3	658.6	592.2	561.4	538.2	494.8
Run VMG	1106.2	889.5	757.5	666.9	603.5	569.3	524.3
Selected Courses							
Windward / Leeward	1164.5	967.1	840.5	760.2	716.0	694.1	675.7
Circular Random	997.3	808.9	707.9	649.6	614.4	592.5	567.8
Coastal / Long Distance	1158.7	907.8	758.2	669.0	624.7	592.1	540.9
Non Spinnaker	1052.4	848.0	737.2	672.3	632.8	608.0	579.9

Velocity Prediction in Knots for True Wind Speeds

Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	42.4°	42.8°	42.2°	40.9°	40.1°	39.8°	40.5°
Beat VMG	2.94	3.45	3.90	4.22	4.35	4.40	4.35
52°	4.47	5.25	5.80	6.08	6.22	6.27	6.28
60°	4.72	5.54	6.00	6.23	6.38	6.46	6.49
75°	4.91	5.74	6.14	6.37	6.55	6.70	6.86
90°	4.86	5.70	6.22	6.49	6.62	6.80	7.14
110°	4.85	5.83	6.33	6.64	6.93	7.19	7.47
120°	4.73	5.72	6.27	6.60	6.91	7.22	7.71
135°	4.36	5.27	6.02	6.40	6.70	7.02	7.63
150°	3.76	4.67	5.47	6.08	6.41	6.69	7.28
Run VMG	3.25	4.05	4.75	5.40	5.97	6.32	6.87
Gybe Angles	148.0°	152.0°	152.5°	162.0°	180.0°	180.0°	180.0°