


QC: 0170

CERTIFICATE OF QUALITY

VESSEL : NORDSPRING  
 GRADE : CARBON BLACK  
 CERT. NO. : 039 / 2018  
 BATCH NO. : 251218/002  
 BAG NO. : 19-12-18-T2-S4-N330-J1000B-004~J1000B-021

B/L DATE : 10 / 04 / 19

TESTS	UNIT	METHOD	RESULT
Iodine Adsorption Number	g/kg	ASTM D1510	82.3
Mean Particle Size	nm	ASTM D3849	≤25
Oil Absorption Number	cm <sup>3</sup> /100 g	ASTM D2414	100.4
Sieve Residue (No. 325 Sieve)	mg/kg	ASTM D1514	60
Pour Density	kg/m <sup>3</sup>	ASTM D1513	362
Fines Content	wt. %	ASTM D1508	4.0
Heating Loss, Sample collected at dryer outlet	wt. %	ASTM D1509	0.8
Toluene Discoloration Value	%	ASTM D1618	97.4
Tint Strength	%ITRB	ASTM D3265	100.8
Sulfur	wt. %	ASTM D1619	0.08
Pelleted-Mass strength	lbf	ASTM D1937	10
Ash	%	ASTM D1506	0.04
Density @ 23°C	Mg/m <sup>3</sup>	ASTM D1817	2.02
Nitrogen Surface Area (NSA)	m <sup>2</sup> /g	ASTM D6556	74.8
Iron	mg/kg	ASTM D5600	2.6

*v. v. Subst*  


*Vijai Arur*  
 Section Leader, Laboratory - CBDC

شركة بترول أبوظبي الوطنية (أدنوك)  
 Abu Dhabi National Oil Company (ADNOC)

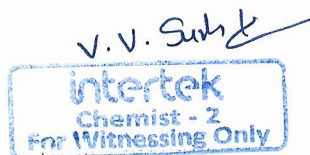
QC: 0172

CERTIFICATE OF QUALITY

VESSEL : NORDSPRING  
 GRADE : CARBON BLACK  
 CERT. NO. : 041 / 2018  
 BATCH NO. : 251218/004  
 BAG NO. : 20-12-18-T2-S4-N330-J1000B-013~J1000B-030

B/L DATE : 10 / 04 / 19

TESTS	UNIT	METHOD	RESULT
Iodine Adsorption Number	g/kg	ASTM D1510	82.4
Mean Particle Size	nm	ASTM D3849	≤25
Oil Absorption Number	cm <sup>3</sup> /100 g	ASTM D2414	101.5
Sieve Residue (No. 325 Sieve)	mg/kg	ASTM D1514	72
Pour Density	kg/m <sup>3</sup>	ASTM D1513	362
Fines Content	wt. %	ASTM D1508	4.0
Heating Loss, Sample collected at dryer outlet	wt. %	ASTM D1509	0.9
Toluene Discoloration Value	%	ASTM D1618	97.4
Tint Strength	%ITRB	ASTM D3265	101.6
Sulfur	wt. %	ASTM D1619	0.08
Pelleted-Mass strength	lbf	ASTM D1937	5
Ash	%	ASTM D1506	0.08
Density @ 23°C	Mg/m <sup>3</sup>	ASTM D1817	2.01
Nitrogen Surface Area (NSA)	m <sup>2</sup> /g	ASTM D6556	75.6
Iron	mg/kg	ASTM D5600	2.5



Vijai Anur

f Section Leader, Laboratory - CBDC

شركة بترول أبوظبي الوطنية (أدنوك)  
Abu Dhabi National Oil Company (ADNOC)

QC: 0169

CERTIFICATE OF QUALITY

VESSEL : NORDSPRING  
 GRADE : CARBON BLACK  
 CERT. NO. : 038 / 2018  
 BATCH NO. : 251218/001  
 BAG NO. : 18-12-18-T2-S4-N330-J1000B-009~J1000B-023  
 19-12-18-T2-S4-N330-J1000B-001~J1000B-003

B/L DATE : 10 / 04 / 19

TESTS	UNIT	METHOD	RESULT
Iodine Adsorption Number	g/kg	ASTM D1510	82.4
Mean Particle Size	nm	ASTM D3849	≤25
Oil Absorption Number	cm <sup>3</sup> /100 g	ASTM D2414	100.3
Sieve Residue (No. 325 Sieve)	mg/kg	ASTM D1514	62
Pour Density	kg/m <sup>3</sup>	ASTM D1513	374
Fines Content	wt. %	ASTM D1508	4.8
Heating Loss, Sample collected at dryer outlet	wt. %	ASTM D1509	0.9
Toluene Discoloration Value	%	ASTM D1618	97.2
Tint Strength	%ITRB	ASTM D3265	101.1
Sulfur	wt. %	ASTM D1619	0.08
Pelleted-Mass strength	lbf	ASTM D1937	10
Ash	%	ASTM D1506	0.04
Density @ 23°C	Mg/m <sup>3</sup>	ASTM D1817	2.03
Nitrogen Surface Area (NSA)	m <sup>2</sup> /g	ASTM D6556	74.6
Iron	mg/kg	ASTM D5600	2.8

V.V. Sankar



Vijai Arun

f Section Leader, Laboratory - CBDC

شركة بترول أبوظبي الوطنية (أدنوك)  
 Abu Dhabi National Oil Company (ADNOC)

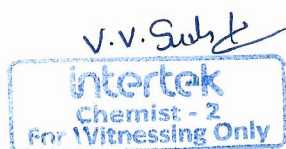
QC: 0173

CERTIFICATE OF QUALITY

VESSEL : NORDSPRING  
 GRADE : CARBON BLACK  
 CERT. NO. : 042 / 2018  
 BATCH NO. : 251218/005  
 BAG NO. : 21-12-18-T2-S4-N330-J1000B-001~J1000B-018

B/L DATE : 10 / 04 / 19

TESTS	UNIT	METHOD	RESULT
Iodine Adsorption Number	g/kg	ASTM D1510	81.5
Mean Particle Size	nm	ASTM D3849	≤25
Oil Absorption Number	cm <sup>3</sup> /100 g	ASTM D2414	101.9
Sieve Residue (No. 325 Sieve)	mg/kg	ASTM D1514	60
Pour Density	kg/m <sup>3</sup>	ASTM D1513	366
Fines Content	wt.%	ASTM D1508	3.8
Heating Loss, Sample collected at dryer outlet	wt.%	ASTM D1509	0.9
Toluene Discoloration Value	%	ASTM D1618	97.0
Tint Strength	%ITRB	ASTM D3265	101.8
Sulfur	wt.%	ASTM D1619	0.08
Pelleted-Mass strength	lbf	ASTM D1937	10
Ash	%	ASTM D1506	0.07
Density @ 23°C	Mg/m <sup>3</sup>	ASTM D1817	2.04
Nitrogen Surface Area (NSA)	m <sup>2</sup> /g	ASTM D6556	75.8
Iron	mg/kg	ASTM D5600	3.2



  
 Section Leader, Laboratory - CBDC

شركة بترول أبوظبي الوطنية (أدنوك)  
 Abu Dhabi National Oil Company (ADNOC)

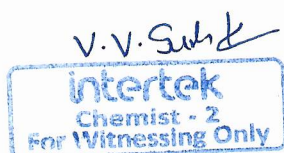
QC: 0165

CERTIFICATE OF QUALITY

VESSEL : NORDSPRING  
 GRADE : CARBON BLACK  
 CERT. NO. : 033 / 2018  
 BATCH NO. : 191218/004  
 BAG NO. : 17-12-18-T2-S4-N330-J1000B-007~J1000B-014  
 18-12-18-T2-S4-N330-J1000B-001~J1000B-008

B/L DATE : 10 / 04 / 19

TESTS	UNIT	METHOD	RESULT
Iodine Adsorption Number	g/kg	ASTM D1510	82.8
Mean Particle Size	nm	ASTM D3849	≤25
Oil Absorption Number	cm <sup>3</sup> /100 g	ASTM D2414	100.9
Sieve Residue (No. 325 Sieve)	mg/kg	ASTM D1514	55
Pour Density	kg/m <sup>3</sup>	ASTM D1513	382
Fines Content	wt. %	ASTM D1508	5.0
Heating Loss, Sample collected at dryer outlet	wt. %	ASTM D1509	0.6
Toluene Discoloration Value	%	ASTM D1618	97.4
Tint Strength	%ITRB	ASTM D3265	102.6
Sulfur	wt. %	ASTM D1619	0.08
Pelleted-Mass strength	lbf	ASTM D1937	10
Ash	%	ASTM D1506	0.08
Density @ 23°C	Mg/m <sup>3</sup>	ASTM D1817	2.02
Nitrogen Surface Area (NSA)	m <sup>2</sup> /g	ASTM D6556	75.4
Iron	mg/kg	ASTM D5600	1.4



Vijai Arun

f Section Leader, Laboratory - CBDC

شركة بترول أبوظبي الوطنية (أدنوك)  
Abu Dhabi National Oil Company (ADNOC)