

**RUBBER RESEARCH INSTITUTE OF VIETNAM
NATURAL RUBBER QUALITY MANAGEMENT CENTRE**

Address: Highway 13, Lai Hung Commune, Bau Bang District, Binh Duong Province

Tel: 84.274.3534589; Email: lab.rniv@gmail.com

TEST RESULTS

No: 959/2024/TR-BI

- Producer: BINH THUAN RUBBER CO., LTD

- Type: Natural rubber

Grade: RSS

Received date: 16/9/2024

- Sample: LOT NO: 338,339,340,341,342.

Tested date: 16/9/2024

Property	Test results						Test Methods
	1	2	3	4	5		
Dirt (retained on 45µm aperture), %m/m	0.012	0.009	0.019	0.008	0.016		TCVN 6089:2016 (ISO 249:2016)
Ash . %m/m	0.29	0.21	0.28	0.26	0.25		TCVN 6087:2010 (ISO 247-1:2018)
Volatile matter. %m/m	0.28	0.19	0.33	0.26	0.21		TCVN 6088-1:2014 (ISO 248-1:2018)
Nitrogen %m/m	0.37	0.35	0.38	0.33	0.36		TCVN 6091:2016 (ISO 1656:2019)
Initial Wallace Plasticity (Po)	43.1	44.0	42.8	45.0	43.5		TCVN 8493:2010 (ISO 2007:2018)
PRI (P ₃₀ /P ₀)x100%	78	78	80	76	79		TCVN 8494:2020 (ISO 2930:2017)
Lovibond colour:	-	-	-	-	-		TCVN 6093:2013 (ISO 4660:2011)
Mooney Viscosity ML(1'+4')100°C	84.7	85.4	84.5	85.1	86.5		TCVN 6090-1:2015 (ISO 289-1:2015)
Rheometric Cure (160°C, 1°arc 100cpm, ACS1:							TCVN 12010:2017 (ISO 6502:2016)
Torque Min, (dNm)	-	-	-	-	-		
Torque Max,(dNm)	-	-	-	-	-		
Scorch Time ts1,(m:s)	-	-	-	-	-		
Optimum cure time t90 (m:s)	-	-	-	-	-		

All tests on the samples submitted are carried out according to Vietnamese Standard TCVN 3769:2016 base on ISO 2000:2014.

Note: QUANTITY: 12.60 TONS. CONTAINER NO
PRODUCTION DATE: AUG., 2024



19/9/2024

Date of issue

Officer - in - charge of Laboratory

Nguyễn Thị Diệu Hiền

- The results in the table above match the samples sent to Natural Rubber Quality Management Center by the customer.
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Address: Highway 13, Lai Hung Commune, Bau Bang District, Binh Duong Province

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TEST RESULTS

No: 998/2024/TR-BI

- Producer: BINH THUAN RUBBER CO., LTD

- Type: Natural rubber

Grade: RSS1

Received date: 30/9/2024

- Sample: LOT NO.: 343, 344,345.

Tested date: 30/9/2024

Property	Test results						Test Methods
	1	2	3				
Dirt (retained on 45µm aperture), %m/m	0.008	0.008	0.012				TCVN 6089:2016 (ISO 249:2016)
Ash . %m/m	0.23	0.23	0.24				TCVN 6087:2010 (ISO 247-1:2018)
Volatile matter. %m/m	0.31	0.22	0.20				TCVN 6088-1:2014 (ISO 248-1:2018)
Nitrogen %m/m	0.33	0.35	0.37				TCVN 6091:2016 (ISO 1656:2019)
Initial Wallace Plasticity (Po)	43.9	46.7	47.9				TCVN 8493:2010 (ISO 2007:2018)
PRI (P ₃₀ /P ₀)x100%	75	76	78				TCVN 8494:2020 (ISO 2930:2017)
Lovibond colour:	-	-	-				TCVN 6093:2013 (ISO 4660:2011)
Mooney Viscosity ML(1'+4')100°C	84.4	87.0	88.8				TCVN 6090-1:2015 (ISO 289-1:2015)
Rheometric Cure (160°C, 1°arc 100cpm, ACS1:							TCVN 12010:2017 (ISO 6502:2016)
Torque Min, (dNm)	-	-	-				
Torque Max,(dNm)	-	-	-				
Scorch Time ts1,(m:s)	-	-	-				
Optimum cure time t90 (m:s)	-	-	-				

All tests on the samples submitted are carried out according to Vietnamese Standard TCVN 3769:2016 base on ISO 2000:2014.

Note: QUANTITY: 7.56 TONS. CONTAINER NO.: CAU262895
PRODUCTION DATE: AUG., 2024



3/10/2024

Date of issue

VILAS 063

Officer - in - charge of Laboratory

Nguyễn Thị Diệu Hiền

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TEST RESULTS

No: 999/2024/TR-BI

- Producer: BINH THUAN RUBBER CO., LTD

- Type: Natural rubber

Grade: RSS1

Received date: 30/9/2024

- Sample: LOT NO.: 346, 347, 348,349.

Tested date: 30/9/2024

Property	Test results					Test Methods
	1	2	3	4		
Dirt (retained on 45µm aperture), %m/m	0.007	0.006	0.007	0.007		TCVN 6089:2016 (ISO 249:2016)
Ash . %m/m	0.28	0.23	0.25	0.22		TCVN 6087:2010 (ISO 247-1:2018)
Volatile matter. %m/m	0.22	0.22	0.25	0.27		TCVN 6088-1:2014 (ISO 248-1:2018)
Nitrogen %m/m	0.37	0.35	0.35	0.35		TCVN 6091:2016 (ISO 1656:2019)
Initial Wallace Plasticity (Po)	46.4	46.2	47.6	45.1		TCVN 8493:2010 (ISO 2007:2018)
PRI (P ₃₀ /P ₀)x100%	80	77	77	74		TCVN 8494:2020 (ISO 2930:2017)
Lovibond colour:	-	-	-	-		TCVN 6093:2013 (ISO 4660:2011)
Mooney Viscosity ML(1'+4')100°C	88.6	86.6	87.7	84.4		TCVN 6090-1:2015 (ISO 289-1:2015)
Rheometric Cure (160°C, 1°arc 100cpm, ACS1:						TCVN 12010:2017 (ISO 6502:2016)
Torque Min, (dNm)	-	-	-	-		
Torque Max,(dNm)	-	-	-	-		
Scorch Time t ₁ ,(m:s)	-	-	-	-		
Optimum cure time t ₉₀ (m:s)	-	-	-	-		

All tests on the samples submitted are carried out according to Vietnamese Standard TCVN 3769:2016 base on ISO 2000:2014.

Note: QUANTITY: 10.08 TONS. CONTAINER NO.: TFLU29374
PRODUCTION DATE: AUG., 2024



3/10/2024

Date of issue

VILAS 063

Nguyễn Thị Diệu Hiền

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TEST RESULTS

No: 1000/2024/TR-BI

- Producer: BINH THUAN RUBBER CO., LTD

- Type: Natural rubber

Grade: RSS1

Received date: 30/9/2024

- Sample: LOT NO.: 350, 351, 352, 353.

Tested date: 30/9/2024

Property	Test results						Test Methods
	1	2	3	4			
Dirt (retained on 45µm aperture), %m/m	0.006	0.006	0.006	0.010			TCVN 6089:2016 (ISO 249:2016)
Ash . %m/m	0.22	0.21	0.22	0.25			TCVN 6087:2010 (ISO 247-1:2018)
Volatile matter. %m/m	0.22	0.31	0.27	0.22			TCVN 6088-1:2014 (ISO 248-1:2018)
Nitrogen %m/m	0.35	0.38	0.33	0.34			TCVN 6091:2016 (ISO 1656:2019)
Initial Wallace Plasticity (Po)	42.4	50.3	46.6	42.5			TCVN 8493:2010 (ISO 2007:2018)
PRI (P ₃₀ / P ₀)x100%	77	80	77	78			TCVN 8494:2020 (ISO 2930:2017)
Lovibond colour:	-	-	-	-			TCVN 6093:2013 (ISO 4660:2011)
Mooney Viscosity ML(1'+4')100°C	82.8	88.6	87.7	83.6			TCVN 6090-1:2015 (ISO 289-1:2015)
Rheometric Cure (160°C, 1°arc 100cpm, ACS1:							TCVN 12010:2017 (ISO 6502:2016)
Torque Min, (dNm)	-	-	-	-			
Torque Max,(dNm)	-	-	-	-			
Scorch Time ts1,(m:s)	-	-	-	-			
Optimum cure time t90 (m:s)	-	-	-	-			

All tests on the samples submitted are carried out according to Vietnamese Standard TCVN 3769:2016 base on ISO 2000:2014.

Note: QUANTITY: 10.08 TONS. CONTAINER NO: TELU2932574
PRODUCTION DATE: AUG., 2024

3/10/2024

Date of issue




VILAS-063
 Officer - in - charge of Laboratory

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TEST RESULTS

No: 1001/2024/TR-BI

- Producer: BINH THUAN RUBBER CO., LTD

- Type: Natural rubber

Grade: RSS1

Received date: 30/9/2024

- Sample: LOT NO.: 354, 355, 356, 357.

Tested date: 30/9/2024

Property	Test results						Test Methods
	1	2	3	4			
Dirt (retained on 45µm aperture), %m/m	0.007	0.006	0.006	0.007			TCVN 6089:2016 (ISO 249:2016)
Ash . %m/m	0.23	0.20	0.25	0.24			TCVN 6087:2010 (ISO 247-1:2018)
Volatile matter. %m/m	0.24	0.23	0.24	0.25			TCVN 6088-1:2014 (ISO 248-1:2018)
Nitrogen %m/m	0.35	0.36	0.35	0.33			TCVN 6091:2016 (ISO 1656:2019)
Initial Wallace Plasticity (Po)	42.8	43.2	42.1	46.8			TCVN 8493:2010 (ISO 2007:2018)
PRI (P ₃₀ /P ₀)x100%	76	77	79	76			TCVN 8494:2020 (ISO 2930:2017)
Lovibond colour:	-	-	-	-			TCVN 6093:2013 (ISO 4660:2011)
Mooney Viscosity ML(1'+4')100°C	84.1	86.0	84.0	87.8			TCVN 6090-1:2015 (ISO 289-1:2015)
Rheometric Cure (160°C, 1°arc 100cpm, ACS1:							TCVN 12010:2017 (ISO 6502:2016)
Torque Min, (dNm)	-	-	-	-			
Torque Max,(dNm)	-	-	-	-			
Scorch Time ts1,(m:s)	-	-	-	-			
Optimum cure time t90 (m:s)	-	-	-	-			

All tests on the samples submitted are carried out according to Vietnamese Standard TCVN 3769:2016 base on ISO 2000:2014.

Note: QUANTITY: 10.08 TONS. CONTAINER NO. HPCU238154
PRODUCTION DATE: AUG., 2024

3/10/2024

Date of issue



VILAS 063 *Nguyễn Thị Diệu Hiền*
Officer - in - charge of Laboratory

1. The results in the table above match the samples sent to Natural Rubber Quality Management Center by the customer. Without permission from Natural Rubber Quality Management Center.

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Address: Highway 13, Lai Hung Commune, Bau Bang District, Binh Duong Province
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TEST RESULTS

No: 1002/2024/TR-BI

- Producer: BINH THUAN RUBBER CO., LTD

- Type: Natural rubber

Grade: RSS1

Received date: 30/9/2024

- Sample: LOT NO.: 358, 359, 360, 361.

Tested date: 30/9/2024

Property	Test results							Test Methods
	1	2	3	4				
Dirt (retained on 45µm aperture), %m/m	0.007	0.006	0.007	0.006				TCVN 6089:2016 (ISO 249:2016)
Ash . %m/m	0.23	0.23	0.26	0.18				TCVN 6087:2010 (ISO 247-1:2018)
Volatile matter. %m/m	0.25	0.26	0.20	0.20				TCVN 6088-1:2014 (ISO 248-1:2018)
Nitrogen %m/m	0.33	0.34	0.34	0.36				TCVN 6091:2016 (ISO 1656:2019)
Initial Wallace Plasticity (Po)	45.2	45.3	41.6	41.4				TCVN 8493:2010 (ISO 2007:2018)
PRI (P ₃₀ /P ₀)x100%	77	76	77	78				TCVN 8494:2020 (ISO 2930:2017)
Lovibond colour:	-	-	-	-				TCVN 6093:2013 (ISO 4660:2011)
Mooney Viscosity ML(1'+4')100°C	86.1	86.4	84.1	84.0				TCVN 6090-1:2015 (ISO 289-1:2015)
Rheometric Cure (160°C, 1°arc 100cpm, ACS1:								TCVN 12010:2017 (ISO 6502:2016)
Torque Min, (dNm)	-	-	-	-				
Torque Max,(dNm)	-	-	-	-				
Scorch Time ts1,(m:s)	-	-	-	-				
Optimum cure time t90 (m:s)	-	-	-	-				

All tests on the samples submitted are carried out according to Vietnamese Standard TCVN 3769:2016 base on ISO 2000:2014.

Note: QUANTITY: 10.08 TONS. CONTAINER NO.: HPCU72381340
PRODUCTION DATE: AUG., 2024

3/10/2024

Date of issue



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Nguyễn Thị Diệu Hiền

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