

Report Date: 21/04/2018

## Analysis Report: ST18-03203.001

BESTON (HENAN) MACHINERY CO., LTD  
CHINA

The results shown in this test report specifically refer to the sample(s) tested as received unless otherwise stated. All tests have been performed using the latest revision of the methods indicated, unless specifically marked otherwise on the report. Precision parameters apply in the determination of the below results. Users of the data shown on this report should refer to the latest published revisions of ASTM D3244; IP 367 and ISO 4259 and when utilising the test data to determine conformance with any specification or process requirement. With respect to the UOP methods listed in the report below the user is referred to the method and the statement within it specifying that the precision statements were determined using UOP Method 999. This Test Report is issued under the Company's General Conditions of Service (copy available upon request or on the company website at www.sgs.com). Attention is drawn to the limitations of liability, indemnification and jurisdictional issues defined therein. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARNING: The sample to which the findings recorded herein relate was drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativeness of any goods and strictly relate to the sample. The Company accepts no liability with regard to the origin or source from which the sample is said to be extracted.

JOB ORDER NO. :	OBOCJ1800114-01FO	BOSS ORDER NO.:	--
SAMPLE SOURCE :	Supplied by Client	PRODUCT DESCRIPTION :	Fuel Oil - waste tyre oil
SAMPLE TYPE :	--		
SAMPLED :	--	RECEIVED :	11/04/2018
ANALYSED :	19/04/2018 - 21/04/2018	COMPLETED :	21/04/2018
CONTAINER:	2x500mL Plastic Bottle		
REPORT COMMENT :	The test report shall only be used for clients' scientific research, teaching, internal quality control, product research and development, etc... and just for internal reference.		

PROPERTY	METHOD	RESULT UNITS	MIN	MAX
Appearance	Visual	DARK ---	--	--
ASTM Colour	ASTM D1500-12(2017)	D8.0 ---	--	--
Density at 15°C	ASTM D1298-12b(2017)	917.8 kg/m³	--	--
Distillation of Petroleum Products at Atmospheric Pressure	ASTM D86-17			
Initial boiling point (IBP)		56.1 °C	--	--
10 % Recovered at		143.6 °C	--	--
50 % Recovered at		292.3 °C	--	--
90 % Recovered at		391.3 °C	--	--
Flash Point by PMCC	ASTM D93-16a(Procedure A)	<40.0 °C	--	--
Copper Strip corrosion (3h / 50°C {122°F})	ASTM D130-12	1a Rating	--	--
Total Sulfur Content	ASTM D2622-16	0.933 % (m/m)	--	--
Kinematic Viscosity at 40°C	ASTM D445-17a	3.543 mm²/s	--	--
Conradson Carbon Residue	ASTM D189-06(2014)	0.58 % (m/m)	--	--
Water Content	ASTM D6304-16e1(Procedure A)	769 mg/kg	--	--
Ash from Petroleum Products	ASTM D482-13			
Ash		0.001 % (m/m)	--	--
Sediment by Extraction	ASTM D473-07(2017)e1	0.08 % (m/m)	--	--
Gross Heat of Combustion	GB/T 384-81(2004)	42.755 MJ/kg	--	--
Net Heat of Combustion of Light Oil	GB/T 384-81(2004)	40.210 MJ/kg	--	--

REPORTED BY

AUTHORISED SIGNATORY

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Chemist

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Section Head



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Report Date: 21/04/2018

## Analysis Report: ST18-03203.002

BESTON (HENAN) MACHINERY CO., LTD  
CHINA

WARNING: The sample to which the findings recorded herein relate was drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativeness of any goods and strictly relate to the sample. The Company accepts no liability with regard to the origin or source from which the sample is said to be extracted.

JOB ORDER NO. :	OBOCJ1800114-01FO	BOSS ORDER NO.:	--
SAMPLE SOURCE :	Supplied by Client	PRODUCT DESCRIPTION :	Fuel Oil - tyre oil after distillation
SAMPLE TYPE :	--		
SAMPLED :	--	RECEIVED :	11/04/2018
ANALYSED :	19/04/2018 - 20/04/2018	COMPLETED :	20/04/2018
CONTAINER:	2x500mL Plastic Bottle		
REPORT COMMENT :	The test report shall only be used for clients' scientific research, teaching, internal quality control, product research and development, etc... and just for internal reference.		

PROPERTY	METHOD	RESULT UNITS	MIN	MAX
<b>Appearance</b>	Visual	Clear & Bright	--	--
<b>ASTM Colour</b>	ASTM D1500-12(2017)	L2.0	--	--
<b>Density at 15°C</b>	ASTM D1298-12b(2017)	860.0 kg/m <sup>3</sup>	--	--
<b>Distillation of Petroleum Products at Atmospheric Pressure</b>	ASTM D86-17			
Initial boiling point (IBP)		92.7 °C	--	--
10 % Recovered at		137.0 °C	--	--
50 % Recovered at		182.3 °C	--	--
90 % Recovered at		258.0 °C	--	--
95 % Recovered at		279.7 °C	--	--
Final boiling point (FBP)		296.8 °C	--	--
<b>Flash Point by PMCC</b>	ASTM D93-16a(Procedure A)	<40.0 °C	--	--
<b>Copper Strip corrosion (3h / 50°C {122°F})</b>	ASTM D130-12	3a Rating	--	--
<b>Total Sulfur Content</b>	ASTM D2622-16	0.639 % (m/m)	--	--
<b>Kinematic Viscosity at 40°C</b>	ASTM D445-17a	1.114 mm <sup>2</sup> /s	--	--
<b>Conradson Carbon Residue</b>	ASTM D189-06(2014)	<0.10 % (m/m)	--	--
<b>Water Content</b>	ASTM D6304-16e1(Procedure A)	264 mg/kg	--	--
<b>Ash from Petroleum Products</b>	ASTM D482-13			
Ash		0.002 % (m/m)	--	--
<b>Sediment by Extraction</b>	ASTM D473-07(2017)e1	0.01 % (m/m)	--	--
<b>Gross Heat of Combustion</b>	GB/T 384-81(2004)	43.960 MJ/kg	--	--
<b>Net Heat of Combustion of Light Oil</b>	GB/T 384-81(2004)	41.415 MJ/kg	--	--

----- End of Analytical Results -----

This document is only valid in its entirety and your attention is drawn to the Terms and Conditions on Page 1 of this report.

REPORTED BY

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