

Editorial Comment:

„Investigation on the possibility of Rusing natural rubber seed oil as brake fluid ”

by

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The editorial quality of the paper is very poor and thus not sufficient for publication. The following necessary amendments and minor corrections have to be made.

I. Necessary amendments

1. You have „brake fluid” in the paper title, while in the body of the paper you often apply „a brake fluid”. Please choose one option and be consistent in the title and in the body of the paper.
2. The abstract. Introduce abbreviations SBF and NRF in the abstract. You use them later on in the paper without explanation. I propose „The laboratory properties of both standard brake fluid (SBF) and natural rubber fluid (NRF) obtained from seed oil were determined.” instead of the current version.
3. Page 4, formulae (3) and (4). We should have: „ $\frac{1}{2} J(\omega_1^2 - \omega_2^2)$ ” and „ $\frac{1}{2} J\omega_1^2$ ” instead of the current version of the equations. Explanation what „ J ” is (moment of inertia), is necessary in the text below equation (3).
4. Page 4, equation (6). Totally wrong notation is applied. We should have „ $W = F_t \cdot \pi d \cdot N \cdot t$ ” instead of the current version. Units for N (1/s) should be provided in the text. We should also have „ π ” instead of „ Γ ”.
5. Section MATERIAL AND METHODS. It is necessary to include in this section a brief description on how the formulae (1)-(10) are applied for the obtainment of the table results presented in RESULTS AND DISCUSSION. The alternative is location of such a description in section MODELS AND THEORIES below each equation.
6. The whole paper. All units should be written in the same manner throughout the paper. I propose „[m]” instead of „ m ” or „(m)” applied currently. Note that this is only an example. You have to double check the entire paper and make format of all units consistent.
7. The whole paper. You place full stops „.” ending sentences in wrong manner. For example, you have „...brake drum .When rotating members...” instead of „...brake drum. When rotating members...”. Please double check the entire paper for the corrections of this type.
8. The whole paper. Use the same font and style for the mathematical quantities in the text and in the equations. For example you have „ E ” in the text below (1) and „ E_1 ” in the equation (1). Application of plain Arial font in the text and italic Times New Roman font in the equation is misleading to the reader. Please remove all mistakes of this type from the paper.
9. The entire paper. You use either Arial or Times New Roman fonts for numbers in the text. You have „7.0” and „11.5” but „304” and „9.81” on page 2. Please be consistent throughout the paper with the journal requirements in this matter.
10. The whole paper. The citation style in the paper is not consistent. You have „Bernard (2001)” but also „(Hannah et al., 1985)”. Please make all the citations consistent with the journal requirements.
11. REFERENCES. Please double check the references. You are inconsistent in using capital letters in titles of the referenced papers, application of commas „,” and the spacing between the words. The

examples are: „Heinemann Educational books” instead of „Heinemann Educational Books”, „Chand an company Ltd.” instead of „Chand and Company Ltd.”, „New Delhi,2006” instead of the correct „New Delhi, 2006”, „West Bengal India” instead of „West Bengal, India”, „Vol.6” instead of „Vol. 6”, „International center for advance studies” instead of „International Center for Advance Studies”, etc. These are not all mistakes, however. Please check the entire references.

II. Minor corrections

1. Line 20. „In fluids, deformation takes place...” instead of the current version.
2. Line 21. „...1995)” instead of „...1995}”.
3. Line 23/24. „of the fluid” instead of „of fluid”.
4. Line 28. „of a breaking system” instead of the current version.
5. Line 30. „silicone-based break fluids must...”
7. Line 32. „(DOT) (1971)” instead of „(DOT)(1971)”.
8. Line 34. „J1704” and „J1705” instead of wrong „JI704” and „J17O5”.
9. Line 35. „4925 Specifications”
10. Line 38. „304 [°C]”
11. Line 42. „These properties are: dry and wet equilibrium boiling points, viscosity, ph value, fluid stability, corrosion resistance, fluidity and appearance at low temperature, water tolerance, resistance to oxidation, swellness, compressibility, chemical stability and compatibility.”
12. Line 48. „...variance of operating temperatures.”
13. Line 61. „...in dry kernel varies from 35 to 45%.”
14. Line 63. „consists” instead of „consist”.
15. Line 70. „is absorbed” instead of „is absorbed”.
16. Line 71. I propose „...on the type of motion. Such motion...”.
17. Line 76. „ m ” instead of „m”.
18. Line 75/76. „...final velocities, respectively.”
19. Line 88. „... d is the diameter of the brake drum, N is the mean speed of the brake drum and Π is a constant.”
20. Line 92. „in order to”.
21. Line 94/95. Please insert coma „ , ” after equation (8) and start the next line with „where H_g is...” (replace capital “W” with “w”).
22. Line 95. “...normal force acting at the contact surface...”.
23. Line 95/96. “...the normal force pressure [N/m²] between the braking surfaces, A the area [m²] and v the peripheral velocity [m/s].”
24. Line 98. “ $C(t_1-t_2)A_t$ ”.

25. Line 99. “C” instead of “C” and “[W/m²/°C]” instead of the current version.
26. Line 100. “...the temperatures of the exposed radiating surface and the surrounding air...”.
27. Line 103/104. Put coma “ , ” after equation (10) and start the next line with “where c is the specific heat...”.
28. Line 104. “[J/kg °C]” instead of the current version.
29. Line 106. “(hevea brasiliensis)”
30. Line 108. “...for three days to ensure” – “(3)” should be removed.
31. Line 111. Wrong font – please write “analytical grade”.
32. Line 112/113. “...the dry boiling and wet boiling points, ph value, fluid stability, corrosion test results of the oil were all determined...” – be also careful with commas “ , ” and spaces “ ” between the words.
33. Line 116. “was conducted” – the redundant space should be removed.
34. Line 118. “A point was marked on...”.
35. Line 119. “When the car finally came to rest...”.
36. Line 120. “The distance between the points...”.
37. Line 120. “...when the car stopped...”.
38. Line 121. “...was measured, too. ”
39. Line 122. “...between 20 [km/h] and 90 [km/h].”
40. Line 125. “...are presented in table 1.”
41. Line 126. “match closely” – the redundant space between the words should be removed.
42. Line 128. “...that is less hygroscopic.”
43. Line 129. “...than that of DOT 3 equal to 43.90 ·10⁻⁶ [m²/s], and this may...”
44. Line 132. “...as shown in table1.”
45. Line 139. “The ph value...”.
46. Line 140. “...which has a ph value of 9.5 at...”.
47. Line 141. “...measured temperature (table1).”
48. Line 142. “...are presented in table 2.”.
49. Line 144. **“Perfotmace test of the standard brake fluid”**
50. Line 148/149. **“Corrosive effect of standard brake and natural rubber seed oil on metal strips”.**
51. Line 150. “Table 4 shows...”.
52. Line 153. “...used in this case study. The breaking efficiency...”

53. Table 4, first row, the second and third columns. "SBF" and "NRF" are missing.
54. Table 4, first row, the fourth and fifth columns. "...efficiency of a standard..." and "...efficiency of the natural rubber...".
55. Table 4, the last but one row of the table. You have "9.87" vs. "9.83". Then, why you have "99.2" vs. "99.8". Is this correct? When the deceleration decreases also the breaking efficiency should decrease.
56. Line 173. Is "Plc" written correctly? Shoudn't we have "PLC"? Please decide.

Author's Feedback:

I have painstakingly made corrections as per your notes and I do hope the 2 revised papers will meet your purpose.