

Fundamental Study on Application of Traction Oil to Wheel/Rail Lubricants

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Possibility of application of the traction oil to wheel/rail lubricants was investigated. The traction oil is one of the latest materials of the lubricants and expected to possess higher traction coefficient than conventional lubricating oils. As the results of laboratory tests, it was found out that it had high traction coefficient of 0.14 and traction coefficient property would be decided by the oil type. It was also found out that anti-wear property could be controlled by the quantity of the anti-wear additives. Traction oil is considered to be a hopeful material as the wheel/rail lubricant, however more efforts should be required for clarifying the effect on the practical factors such as braking distance, lateral force and so on.