

## **Thermophysical Properties of Liquid Al-Ti Based Alloys**

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Surface tension and density of three liquid AlTi-based alloys (AlTiV, AlTiNb, and AlTiTa) have been measured, using electromagnetic levitation as a tool for containerless processing. For these high-temperature and highly reactive alloys this is the best processing environment. Surface tension has been determined by the oscillating drop method, while the density was measured using a shadowgraph technique. Both quantities were determined over a wide temperature range, including the undercooled regime. The measured data were compared to thermodynamic calculations using Quasi-Lattice theory and the Butler equation. Generally, good agreement was found.