

## **Photoacoustic Thermal Characterization and Microstructure of API5L-X52 Steel**

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In this work we report measurements of the thermal diffusivity at room temperature of API5L-X52 carbon steel. This thermophysical parameter was determined using the photo-acoustic technique in the heat transmission configuration. The obtained value for this material is in the range of values reported for other types of low carbon steels. The study of the microstructure, was carried out using EDS-SEM and DRX, which reveals mainly a phase ferritic, with small zones of pearlite phase and the presence of solid inclusions of Al-Fe with density average of 79.4 particles per mm<sup>2</sup>.