

GAMBARAN KADAR KARBON MONOKSIDA (CO) DI JALAN LAKSDA ADISUCIPTO YOGYAKARTA TAHUN 2025

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INTISARI

Latar Belakang: Berdasarkan survei pendahuluan pada tanggal 10 April 2025 pukul 13.30 WIB untuk kadar CO didapatkan hasil di depan Balai Besar Wilayah Sungai Serayu Opak yaitu 10 ppm dan di depan Toko Elektronik Murah Jaya yaitu 12 ppm. Daya ikat CO terhadap hemoglobin lebih kuat dibandingkan Oksigen menyebabkan terhambatnya fungsi hemoglobin, sehingga berkurangnya suplai Oksigen ke seluruh tubuh dapat menyebabkan sesak napas hingga kematian.

Tujuan: Bertujuan untuk mengetahui gambaran kadar Karbon Monoksida (CO) di Jalan Laksda Adisucipto Yogyakarta Tahun 2025.

Metode: Metode observasi dengan melakukan identifikasi dan pengukuran. Pengambilan sampel di empat titik dilakukan pada *Weekday* (Selasa, Rabu, dan Kamis) dan *Weekend* (Jumat, Sabtu, dan Minggu) dengan waktu pagi (07.00-08.00 WIB) dan sore (16.00-17.00 WIB).

Hasil: Berdasarkan penelitian yang telah dilakukan di Jl. Laksda Adisucipto sepanjang minggu pada empat titik lokasi pengukuran, rata-rata kadar CO tertinggi pada pagi hari yaitu di lokasi Warteg Kharisma Bahari saat Weekend sebesar 12,9 ppm dan sore hari berada di Laboratorium Klinik Budi Sehat sebesar 17,4 ppm.

Kesimpulan: Menurut Peraturan Gubernur DIY Nomor 153 tahun 2002 baku mutu Kadar CO di udara ambien yaitu 9 ppm, rata-rata mendapatkan hasil gas Karbon Monoksida belum memenuhi NAB.

Kata kunci: Karbon Monoksida, kendaraan bermotor, Jl. Laksda Adisucipto

DESCRIPTION OF CARBON MONOXIDE (CO) LEVELS ON LAKSDA ADISUCIPTO STREET YOGYAKARTA IN 2025

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ABSTRACT

Background: Based on a preliminary survey on April 10, 2025 at 13:30 WIB for CO levels, the results obtained in front of the Serayu Opak River Basin Center were 10 ppm and in front of the Murah Jaya Electronics Store were 12 ppm. The binding power of CO to hemoglobin is stronger than oxygen causing inhibition of hemoglobin function, so that the reduced supply of oxygen to the whole body can cause shortness of breath until death.

Objective: The purpose of this study was to determine the description of Carbon Monoxide (CO) levels on Laksda Adisucipto Street Yogyakarta in 2025.

Methods: Observation method by identifying and measuring. Sampling at four points was carried out on Weekday (Tuesday, Wednesday, and Thursday) and Weekend (Friday, Saturday, and Sunday) with morning (07.00-08.00 WIB) and afternoon (16.00-17.00 WIB).

Results: Based on research that has been conducted on Jl. Laksda Adisucipto throughout the week at four measurement location points, the highest average CO levels in the morning are at the Warteg Kharisma Bahari location during the Weekend at 12.9 ppm and in the afternoon at the Budi Sehat Clinic Laboratory at 17.4 ppm.

Conclusion: According to DIY Governor Regulation No. 153 of 2002, the quality standard for CO levels in ambient air is 9 ppm, the average results of Carbon Monoxide gas have not met the NAB.

Keywords: Carbon Monoxide, motorized vehicles, Jl. Laksda Adisucipto