Traffic Markings

Traffic marking operations consist of marking of highway center lines, edge stripes, and directional markings and painting on other paved and non-paved surfaces, such as markings in parking lots. There are two types of traffic marking paints, water-based and solvent-based paints. Solvent-based paint typically contains substantially higher volatile solvent contents than water-based paint. VOC emissions result from the evaporation of organic solvents during and shortly after the application of the marking paint. Solvent- and water-based paints have about the same durability; both begin to deteriorate about a year after their application.
The required data and resources required to calculate emissions such as total lane miles per county is obtained from Ohio's Department of Transportation (ODOT)
The National traffic paint sales figure is obtained from the Census Bureau and it is apportioned to the state using the ratio of state dollar disbursements in relation to the national disbursement. The county level apportionment of paint is made using the number of lane miles provided by ODOT. The VOC factor (3.36 lb/gal) is calculated based on Ohio's traffic paint usage of ninety (90) percent water based and ten (10) percent oil based.

References:

Environmental Protection Agency (EPA). STAPPA-ALAPCO-EPA Emission Inventory Improvement Program (EIIP). Volume III - Area Sources Preferred and Alternative Methods. May 1997

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