

**SITE DATA:**

Location: TLAJOMULCO DE ZUÑIGA, MEXICO
Building Air Exchanges Per Hour: 0.48 (unsheltered single storied)
Time: July 22, 2022 1046 hours ST (using computer's clock)

CHEMICAL DATA:

Chemical Name: METHANE
CAS Number: 74-82-8 Molecular Weight: 16.04 g/mol
PAC-1: 65000 ppm PAC-2: 230000 ppm PAC-3: 400000 ppm
LEL: 50000 ppm UEL: 150000 ppm
Ambient Boiling Point: -163.8° C
Vapor Pressure at Ambient Temperature: greater than 1 atm
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

ATMOSPHERIC DATA: (MANUAL INPUT OF DATA)

Wind: 2.21 meters/second from WSW at 3 meters
Ground Roughness: open country Cloud Cover: 5 tenths
Air Temperature: 21° C Stability Class: B
No Inversion Height Relative Humidity: 50%

SOURCE STRENGTH:

Leak from hole in spherical tank
Flammable chemical is burning as it escapes from tank
Tank Diameter: 16.9 meters Tank Volume: 2,527 cubic meters
Tank contains gas only Internal Temperature: 21° C
Chemical Mass in Tank: 2430 kilograms
Circular Opening Diameter: 20 centimeters
Max Flame Length: 18 meters Burn Duration: 6 minutes
Max Burn Rate: 287 kilograms/min
Total Amount Burned: 891 kilograms