

SITE DATA:

Location: TLAJOMULCO DE ZUÑIGA, MEXICO

Building Air Exchanges Per Hour: 0.47 (unsheltered single storied)

Time: July 21, 2022 1921 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: E
No Inversion Height Relative Humidity: 50%

SOURCE STRENGTH:

Leak from hole in spherical tank

Flammable chemical escaping from tank (not burning)

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

Release Duration: 6 minutes

Max Average Sustained Release Rate: 265 kilograms/min

(averaged over a minute or more)
Total Amount Released: 891 kilograms