

Location: AVENIDA DA FABRICA 298, PENA, PORTUGAL
Building Air Exchanges Per Hour: 0.38 (sheltered double storied)
Time: February 12, 2025 1804 hours ST (user specified)

Chemical Name: ETHYLENE OXIDE
CAS Number: 75-21-8 Molecular Weight: 44.05 g/mol
AEGL-1 (60 min): N/A AEGL-2 (60 min): 45 ppm AEGL-3 (60 min): 200 ppm
IDLH: 800 ppm LEL: 30000 ppm UEL: 1000000 ppm
Carcinogenic risk - see CAMEO Chemicals
Ambient Boiling Point: 9.8° C
Vapor Pressure at Ambient Temperature: greater than 1 atm
Ambient Saturation Concentration: 1,000,000 ppm or 100.0%

Wind: 3.3 meters/second from w at 3 meters
Ground Roughness: urban or forest Cloud Cover: 5 tenths
Air Temperature: 15° C Stability Class: D
No Inversion Height Relative Humidity: 78%

Leak from hole in horizontal cylindrical tank
 Flammable chemical escaping from tank (not burning)
 Tank Diameter: 0.77 meters Tank Length: 2 meters
 Tank Volume: 930 liters
 Tank contains liquid Internal Temperature: 15° C
 Chemical Mass in Tank: 700 kilograms
 Tank is 85% full
 Circular Opening Diameter: 1 centimeters
 Opening is 38.5 centimeters from tank bottom
 Release Duration: ALOHA limited the duration to 1 hour
 Max Average Sustained Release Rate: 17.8 kilograms/min
 (averaged over a minute or more)
 Total Amount Released: 587 kilograms
 Note: The chemical escaped as a mixture of gas and aerosol (two phase
 flow).

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Model Run: Heavy Gas
Red      : 137 meters --- (200 ppm = AEGL-3 [60 min])
Orange: 338 meters --- (45 ppm = AEGL-2 [60 min])
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