

## Appendix 11.5 Relevant Input Parameter of SAFETI

Default atmospheric temperature\_\_\_\_\_20 C  
Default atmospheric pressure\_\_\_\_\_101325 N/m<sup>2</sup>  
Relative humidity\_\_\_\_\_70 %  
Default surface roughness parameter\_\_\_\_\_0.1  
Default surface temperature\_\_\_\_\_20 C  
Atmospheric molecular weight\_\_\_\_\_28.966  
Atmospheric specific heat at constant pressure\_1004 J/kg\*K  
Number of wind directions\_\_\_\_\_12  
Angular Offset\_\_\_\_\_15 degree  
Maximum release duration\_\_\_\_\_6000 s  
Minimum temperature allowed\_\_\_\_\_ -263.15 C  
Maximum temperature allowed\_\_\_\_\_ 626.85 C  
Maximum pressure allowed\_\_\_\_\_ 1000 bar  
Maximum release velocity\_\_\_\_\_500 m/s  
Toxics: height for calculation of effects \_\_\_\_\_1 m  
Toxics: results grid step in X-direction\_\_\_\_\_25 m  
Toxics: result grid step in Y-direction\_\_\_\_\_2.5 m  
Atmospheric temp and pressure profile\_\_\_\_\_3  
Wind speed profile\_\_\_\_\_2  
Temperature reference height (m)\_\_\_\_\_10 m  
Wind speed reference height (m)\_\_\_\_\_10 m  
Cut-off height for wind speed profile (m)\_\_\_\_\_1 m  
Minimum integration step size (distance)\_\_\_\_\_0.1 m  
Maximum integration step size (distance)\_\_\_\_\_100 m  
Maximum distance for dispersion\_\_\_\_\_50000 m  
Minimum release velocity for cont. release\_\_\_\_\_0.1 m/s  
Default minimum release height\_\_\_\_\_1 m  
Maximum height for dispersion\_\_\_\_\_1000 m  
Base averaging time\_\_\_\_\_60 s  
Minimum cloud depth\_\_\_\_\_0.02 m  
Minimum case frequency considered\_\_\_\_\_1e-012  
Minimum event probability considered\_\_\_\_\_1e-012  
Fraction population outdoors, F-N\_\_\_\_\_0.1  
Fraction population outdoors, risk\_\_\_\_\_1  
Fraction out killed by toxics\_\_\_\_\_0.9  
Fraction in killed by toxics\_\_\_\_\_0.1  
Multiplying factor for toxic F-N spread\_\_\_\_\_2