to calculate the probability of fatality for flammable effects on exposed populations for BLEVE, pool fire, and jet fire effects. This method is applied to each grid cell independently and then the cumulative consequence outcome for a specific flammable effect is obtained by summing all the grid cells.

The consequence outcomes for the classes of flammable effects are summarized (the flame envelope is defined as the area between the lower flammable limit, LFL, and upper flammable limit, UFL):

- BLEVE, pool fire, jet fire—all persons, indoor and outdoor, within the flame envelope are considered fatalities. All persons, indoor and outdoor, exposed to radiation levels exceeding 11,000 BTU/hr/ft^2 (35 kW/m^2) are considered fatalities. For smaller radiation levels, the Probit method is utilized to calculate the probability of fatality.
- Flash fire—all persons, indoor and outdoor, within the flame envelope are considered fatalities. All persons, indoor and outdoor, outside of the flame envelope are not considered fatalities.
- Explosion—all persons, indoor and outdoor, exposed to overpressures exceeding 4.35 psig (0.3 barg) are considered fatalities. All indoors persons exposed to pressures exceeding 1.45 psig (0.1 barg) are considered have a probability of fatality 2.5% of the time. All other exposures are not considered fatalities. The Baker-Strehlow-Tang (BST) explosion method is used to calculate the overpressure profile for explosion. The BST model inputs are provided in Table 29. The clouds were conservatively assumed to entirely occupy congested regions.

Table 29. Model inputs for the Baker-Strehlow-Tang (BST) modeling of explosions in PHAST Risk.

Parameter	Value
Material Reactivity	Low
Flame Expansion Factor	3
Obstacle Density	Low
Ground Reflection Factor	2
Congested Fraction	100%