

PHAST™

Save lives by understanding fire, explosion and toxic effects



Control your hazards by knowing the consequences

Phast™ is a globally adopted solution for modelling discharge, dispersion, fires, explosions and toxic effects of a wide range of loss of containment scenarios.

Process safety professionals benefit from 40 years' worth of development and validation by our industry experts and its continued use by more than 10,000 users across 1,000 organizations.

Phast is being used in diverse industries, including oil and gas, petrochemical, liquefied natural gas (LNG), pharmaceutical, hydrogen and ammonia, carbon capture and storage (CCS), insurance, academia, and public sector (governmental and regulatory bodies).

Optimize your design, validate your process and meet your safety obligations

Whether it's to design a flare stack, provide input to your HAZOPs or plan for emergencies, Phast gives you the tools to meet your goals and to have confidence in your work.

Communicate with your customers or stakeholders using Phast's presentation of key results in 2D graphs, a 3D viewer and in Word and Excel reports.

Solve a range of problems with a diverse set of scenarios and effects

Loss of containment scenarios from pressure vessels, storage tanks, pipework and pipelines are easy to create. Phast automatically determines the type and extent of the consequence effects.

Within a matter of seconds, you can have the answer to the problem you are trying to solve.

Also supported are a range of "standalone" models, user-defined sources and adjustable parameters, giving you full control for specifying loss of containment scenarios.



Key results overlaid images for easy communication



Thermal radiation contours in a GIS

Applications of Phast

Discharge, dispersion, fire and explosion modelling software using free-field and CFD methods. Phast is great for:

- Accident and incident investigation
- Consequence estimation for HAZOP, HAZID, PHA and LOPA
- Emergency response planning
- Equipment design, facility siting and layout optimisation
- Regulatory obligations (e.g. safety reports)
- Other general consequence estimation

Phast add-ons

- Phast Explosions for advance modelling of explosion consequences by considering flammable cloud interaction with congested regions
- Phast Multi Component for advanced modelling of complex mixtures (e.g. two-phase releases)
- Phast CFD – pool fire for modelling standalone pool fire scenarios
- Phast CFD – jet fire for modelling standalone jet fire scenarios

Features

- 40+ scenario types
- Constant and time-varying discharge models, including effects of isolation and blowdown
- Weather definition (wind speed, atmospheric and substrate conditions)
- 2000+ materials from the DIPPR database
- User-specified materials
- Excel import for efficient study creation
- Map / plot plan import
- GIS coordinate systems
- Buildings for wake model or in-building releases
- Congested regions on the map for explosion modelling*
- Results in the form of dispersion concentrations, flame length, pool diameter, thermal radiations, flash fire, explosion overpressure and impulse, and toxic probit, dose and lethality
- Results presented in reports, 2D graphs, a 3D viewer, on maps or plot plans, and in tabular format

*Available with Phast Explosions add-on only

Short and long term lease options available.

Please visit store.veracity.com/phast or scan the code for more details:

