## FROST PROTECTION SYSTEMS FROM NIPLAST®

For chemicals that freeze in ambient temperatures or for process liquids needing to be kept at specific temperatures, Niplast has developed a number of factory fitted temperature maintenance systems. Following heat-loss calculation, accounting for liquid freezing point, lowest ambient temperature and the thermal conductivity of materials of tank construction, we will advise on the best method to employ to maintain the optimum temperature for the tank's contents.

Niplast storage tanks can be factory fitted using 3 approaches:

## Lagging and cladding the tank

This method involves lagging the outside of the storage tank with 50mm of rockwool mineral wool, which is applied to both the walls and roof. The whole tank is then clad using the same thermoplastic as the tank body, to fully encapsulate the whole system. This insulation method also has the additional benefit of extending the corrosion protection to the external tank shell.





We use two heating system methods:

## **Immersion heat system**

This approach incorporates an electric immersion heater, positioned within a stainless-steel sheath that sits within the body of the tank. This allows for the heating element to be removed as needed, without requiring the tank to be emptied. This is supplied with a thermostat and over-temperature cut-out to allow for complete control and site safety.



## Trace heating system

Working with the Lagging and Cladding system, self-limiting heating tape is applied to the outer tank body beneath the lagging, then fully clad in the same thermoplastic as the tank body. This method is preferable when the tank contains chemicals that cannot come into contact with stainless steel, as used in the Immersion method. This is supplied with a thermostat and over-temperature cutout to allow for complete control and site safety.

For expert advice on our temperature maintenance solutions, get in touch or request a no obligation quote today.



To request a quote or discuss further with an expert email **info@niplast.com** or call **0161 477 6777**