5 types of latent heat

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Latent heat is energy released or absorbed by a body or a thermodynamic system during a constant-temperature process. Two common forms of latent heat are latent heat of fusion and latent heat of vaporization . These names describe the direction of energy flow when changing from one phase to the next: from solid to liquid, and liquid to gas.

Types of Latent Heat Transfer. Latent heat and sensible heat are two types of heat transfer between an object and its environment. Tables are compiled for the latent heat of fusion and latent heat of vaporization. Sensible heat, in turn, depends on the composition of a body.

Types of Latent Heat Transfer. Lets us discuss some of the different types of latent heat that can occur. Latent Heat of Fusion. The latent heat of fusion is the heat consumed or discharged when matter melts, changing state from solid to fluid structure at a consistent temperature.

latent heat, energy absorbed or released by a substance during a change in its physical state (phase) that occurs without changing its temperature. The latent heat associated with melting a solid or freezing a liquid is called the heat of fusion; that associated with vaporizing a liquid or a solid or condensing a vapour is called the heat of ...

Types of Latent Heat. Latent Heat of Fusion: The energy required to change a substance from solid to liquid at its melting point. For water, it is approximately 334 J/g. Latent Heat of Vaporization: The energy needed to transform a liquid into a gas at its boiling point. For water, this value is around 2260 J/g.

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Latent heat is defined as the heat or energy that is absorbed or released during a phase change of a substance. It could either be from a gas to a liquid or liquid to a solid and vice versa. Latent heat is related to a heat property called enthalpy.

However, an important point that we should consider regarding latent heat is that the temperature of the substance remains constant. As far as the mechanism is concerned, latent heat is the work that is needed to overcome the attractive forces that hold molecules and atoms together in a substance.

The Scottish scientific expert, Joseph Black, presented the idea of latent heat somewhere close to the period 1750 and 1762. Scotch bourbon producers had employed Black to decide the best blend of fuel and water for refining and to examine changes in volume and weight at a steady temperature. Dark applied calorimetry for his investigation and recorded latent heat esteems.

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The latent heat of fusion is the heat consumed or discharged when matter melts, changing state from solid to fluid structure at a consistent temperature.

The ‘enthalpy’ of fusion is a latent heat, in light of the fact that during softening, the heat energy expected to change the substance from solid to fluid at air pressure is the latent heat of fusion, as the temperature stays steady during the procedure. The latent heat of fusion is the enthalpy change of any measure of substance when it dissolves.

The fluid state has higher inward energy than the solid state. This implies that energy must be provided to the solid so as to dissolve it, and energy is discharged from a fluid when it solidifies on the grounds that the particles in the fluid experience more fragile intermolecular force, and thus have higher potential energy (a sort of bond-separation energy for intermolecular powers).

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