

# Textures

This page contains information about Chaos Phoenix textures.

## Overview

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Phoenix provides several textures for use in simulations and rendering, which can be created from the Hypershade window in Maya.

## Grid Textures

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The [Grid Texture](#) reads from the simulation's **Grid Channels** to generate a procedural texture, which can then be used to shade the simulation wherever colors are needed.

The Grid Texture can be used with the **volume shader** to color or modulate the opacity of [Fire](#) and [Smoke](#), using any of the supported Grid Channels (Smoke, Speed, RGB, etc.).

It can also be plugged into the texture slots of a material, and used to shade the meshes of simulated liquids that were exported with an **RGB Grid Channel**. In addition, it can be used as a blending mask, where the grid texture can read the RGB color of a simulator, which can then be used as a blending factor between two different materials.

Note that the [Grid Texture 2D](#) is a simplified version of the [Grid Texture](#).

## Water Textures

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Water textures are used with water effects to make them look more realistic.

- [Ocean Texture](#) - A realistic, non-cyclic procedural texture for representing an ocean surface.
- [Foam Texture](#) - Used with the [Ocean Texture](#) to create the effect of foam on cresting waves.

Note that you can also use a [Particle Shader](#) to shade foam.

## Particle Texture

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The [Particle Texture](#) can be used to read particles and color their positions.

When used to read **WetMap particles**, the Particle Texture can help to emulate wet surfaces. This is because it can act as a mask to blend between two materials, for example, a wet material and a dry surface material. As a result, geometry covered by WetMap particles can appear wet, and the rest of the geometry can appear dry.

The Particle Texture can also shade a **Particle's color** based on its **Age** or **Speed**, so that you can change the Particle's color over time, based on the behavior of those Particle Channels.

The Particle Texture can even be used as a [Surface Channel texture](#) to turn the particles into a **3D mesh**, which creates additional flexibility for shading particles to achieve more advanced effects.