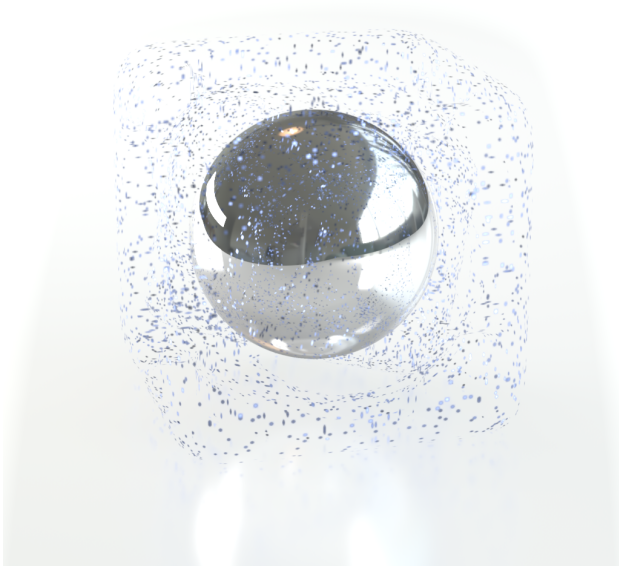


Flakes

This page provides information on the Flakes Node in V-Ray for Blender.

Overview

The **Flakes** material can be used to simulate car paints, snow and other glittery materials. It works by simulating the aggregated effect of a large number of mirror-like flakes scattered over the surface of an object at render time. The material is somewhat similar to the **Car Paint** material, but uses less memory and avoids the tiling issues for these materials. The term *stochastic* means "using a random variable".



UI Path

||Node Editor|| > **Add > BRDF > Flakes**

Node

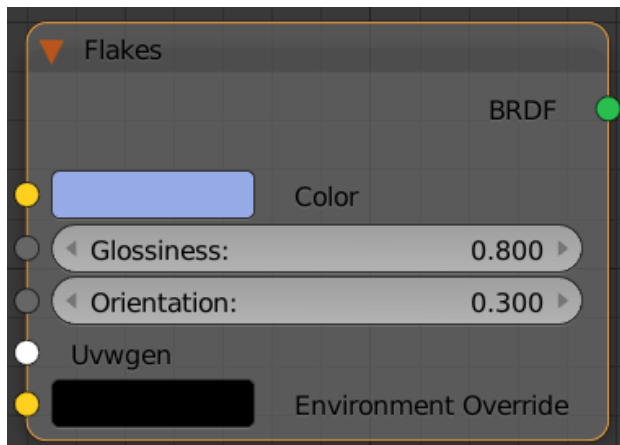
Color - The color of the metal flakes.

Glossiness - The glossiness of the metal flakes. It is not recommended to set this above 0.9 as it may produce artifacts.

Orientation - Controls the orientation of the flakes relative to the surface normal. When this is 0.0, all flakes are perfectly aligned with the surface. When it is 1.0, the flakes are rotated completely randomly with respect to the normal. Values above 0.5 are not recommended as they can produce artifacts.

Uvwgen - Specifies the UUV mapping of the flakes

Environment Override - An input slot to connect a custom environment.



Parameters

Density - The density (number of flakes) for a certain area. Lower values produce less flakes and higher values produce more flakes. Set this to 0.0 to produce a material without flakes.

Scale - Scales the entire flake structure.

Size - The size of the flakes relative to the distance between them. Higher values produce bigger flakes and lower values produce smaller flakes.

Flake filtering - Determines the way the flakes are filtered. Filtering is extremely important to reduce the work required to produce a clean image. The possible values are:

- **Simple** - This method is faster and uses less RAM but is less accurate. It averages the orientation of the flakes together, which may alter the appearance of the material when viewed from a distance.
- **Directional** - This method is slightly slower and uses more RAM, but is more accurate. It groups the flakes based on their orientation before performing the filtering, so that the material appearance is preserved.

Map size - This parameter determines the size of the bitmaps. Internally the material creates several bitmaps to store the generated flakes. Lower values reduce RAM usage, but may produce noticeable tiling in the flake structure. Higher values require more RAM, but tiling is reduced. Be careful when using the Directional filtering method, as it may quickly take up gigabytes of RAM for larger map sizes.

Seed - The random seed for the flakes. Changing this produces different flake patterns.

Trace Reflection - Allows you to enable or disable the tracing of reflection for that material.

Subdivs - Determines the amount of samples for the glossy reflections of the different layers. This parameter has effect only when the **Use Local Subdivs** option is enabled from the [Global DMC Sampler Settings](#).

Cutoff - Cutoff threshold for the reflections of the different layers.

Double Sided - When enabled, V-Ray will flip the normal for back-facing surfaces with this material. Otherwise, the lighting on the "outer" side of the material will be computed always. You can use this to achieve a fake translucent effect for thin objects like paper.

Flake Mapping type - Specifies the method for mapping the flakes. The possible values are:

- **Explicit** - The flakes are mapped using the specified channel.
- **Triplanar** - The material automatically computes mapping coordinates in object space based on the surface normals.

Mapping channel - The mapping channel for the flakes when the **Flake mapping type** is set to **Explicit**.

Environment Priority - Specifies how to determine the environment to use if a reflected or refracted ray goes through several materials each of which has an environment override.

▼ Properties

Density: 0.500	Directional
Scale: 0.010	Map Size: 1024
Size: 0.500	Seed: 1
<input checked="" type="checkbox"/> Trace reflections	
Options:	
Subdivs: 8	Explicit
Cutoff: 0.001	Mapping Channel: 0
Double sided: 1	
Environment Priority: 0	