Skin Material | VRayMtlSkin

This page provides information on the VRayMtlSkin node.

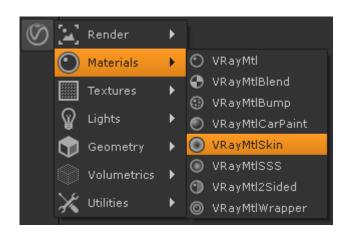
Overview

VRayMtlSkin is a material specifically designed for rendering skin. In contrast with the VRayMtlSSS material, which can also be used for the same purpose, the goal of the VRayMtlSkin node is to provide artists with greater control and to simplify the setup of the material.

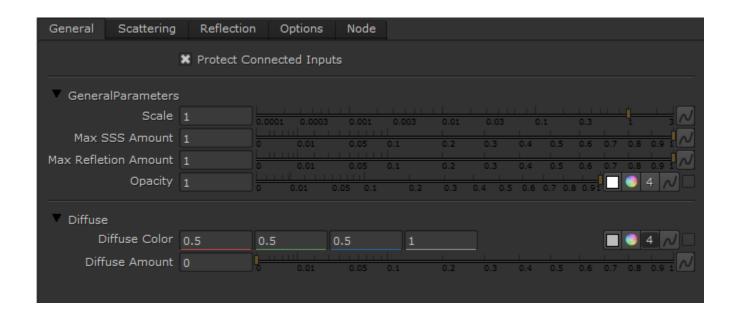
The material is composed of several different layers which are added together: a diffuse layer, three sub-surface scattering layers, and two reflection layers. The contribution of each layer relative to the other layers is controlled by an "amount" value. Additionally, the sub-surface layers are grouped so that their total contribution can be clamped. The same process is implemented for the two reflection layers.



UI Path: ||Toolbar|| > V-Ray menu icon > Materials > VRayMtlSkin



General



General Parameters

Scale – Allows the user to quickly scale the sub-surface scattering effect up or down. This is a multiplier for the individual shallow, medium and deep radius values.

Max SSS Amount – Limits the total contribution of the sub-surface scattering layers to the specified value. If the sum of the individual shallow, medium and deep scattering layers exceeds the Max sss amount value, the amounts are renormalized so that their sum is the same as the Max sss amount.

Max Reflection Amount – Limits the total contribution of the reflection layers to the specified value. If the sum of the Primary reflection amount and the Secondary reflection amount exceeds this value, the amounts are renormalized so that their sum is the same as Max reflection amount.

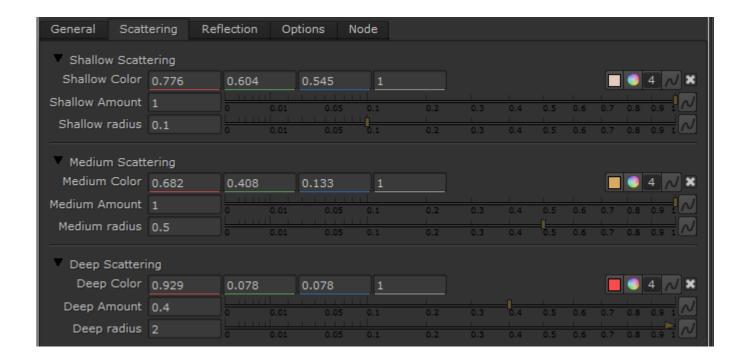
Opacity – Controls the opacity of the material where white is completely opaque and black is completely transparent. You can also assign a map by clicking the check board button. This way you can create a material that has a non-uniform opacity.

Diffuse

 $\label{eq:Diffuse Color} \textbf{Diffuse Color} - \textbf{The color for the diffuse layer}.$

Diffuse Amount – The relative contribution of the diffuse layer to the material.

Scattering



Shallow Scattering

Shallow Color – The color for the shallow scattering layer.

Shallow Amount – The relative contribution of the shallow scattering layer to the material.

Shallow radius - The distance that light is scattered within the shallow layer, in cm.

Medium Scattering

Medium Color – The color for the medium scattering layer.

Medium Amount – The relative contribution of the medium scattering layer to the material.

 $\label{eq:medium-radius} \textbf{Medium radius} - \textbf{The distance that light is scattered within the medium layer, in cm.}$

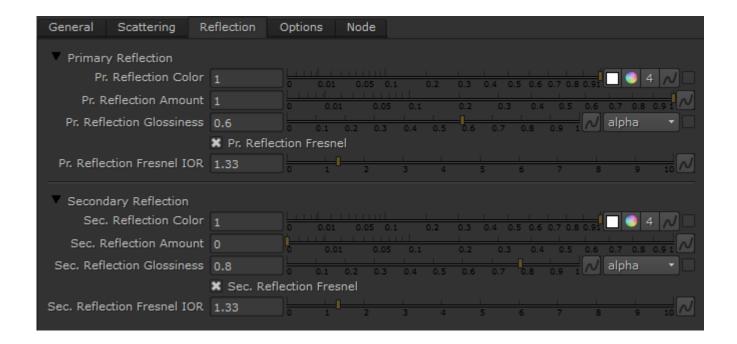
Deep Scattering

Deep Color – The color for the deep scattering layer.

Deep Amount – The relative contribution of the deep scattering layer to the material.

Deep radius – The distance that light is scattered within the deep layer, in cm.

Reflection



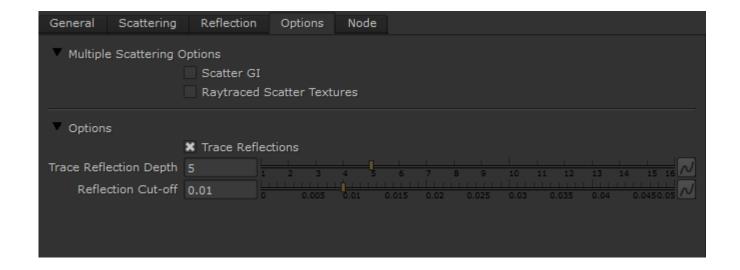
Primary Reflection

- Pr. Reflection Color The color for the primary reflections.
- Pr. Reflection Amount The relative contribution of the primary reflection layer to the material.
- Pr. Reflection Glossiness The glossiness value for the primary reflection.
- **Pr. Reflection Fresnel** When enabled, a Fresnel term will be applied to the strength of the reflection.
- Pr. Reflection Fresnel IOR The IOR value used to compute reflection strength if Pr. Reflection Fresnel is enabled.

Secondary Reflection

- Sec. Reflection Color The color for the secondary reflections.
- Sec. Reflection Amount The relative contribution of the secondary reflection layer to the material.
- **Sec. Reflection Glossiness** The glossiness value for the secondary reflection.
- Sec. Reflection Fresnel When enabled, a Fresnel term will be applied to the strength of the reflection.
- Sec. Reflection Fresnel IOR The IOR value used to compute reflection strength if Sec. Reflection Fresnel is enabled.

Options



Multiple Scattering Options

Scatter GI – When this option is enabled, GI is taken into account when calculating multiple scattering. Otherwise, GI is approximated as if the surface is diffuse. Turning this option on leads to more accurate results when using GI, but may slow down the rendering.

Raytraced Scatter Textures – This option controls whether the textures for the sub-surface scattering layers taken into account when computing the scattering. Turning this option may lead to more accurate results, but adds quite a bit of render time.

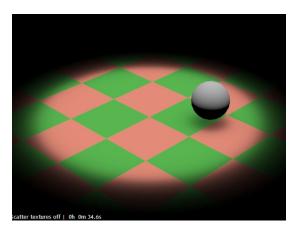
Options

Trace Reflections – This option enables tracing of reflections from the primary and secondary reflection layers. When disabled, only highlights are computed. This can be used to speed up the shader calculations when reflections do not contribute significantly to the shader's appearance.

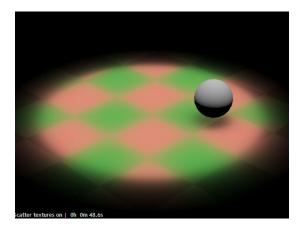
Trace Reflection Depth - Specifies the maximum reflection depth for the primary and secondary reflection layers.

Reflection Cut-off - Skips the calculation of very dim reflections the contribution of which is below the cutoff value.

Example: Raytraced Scatter Textures



Raytraced scatter textures is off, only the lighting on the surface is scattered.



Raytraced scatter textures is enabled.
The textures are also included when computing the scattering, but the render time is increased.