

# Materials

This page introduces the different material types in V-Ray for 3ds Max.

## Overview

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There are a number of different materials for use with V-Ray for 3ds Max. These materials are quite versatile and each can be used in a number of ways to achieve different looks as needed from simulating simple surface properties like plastics and metals to complex uses such as translucent objects, subsurface materials such as skin and even light emitting objects.

For more details on each material, please see the dedicated pages.

**UI Path:** ||Material Editor|| > **Material/Map Browser** > **Materials** > **V-Ray**

In V-Ray 6, most V-Ray materials and textures use QT for their GUI in 3ds Max versions 2019 and later. This means they will follow 3ds Max's logic for RMB actions on the spinners. RMB will reset the values to minimum and Ctrl+right-click will set the values to their default.



Image courtesy of Salih Göçmen

## V-Ray Materials

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## Tools and Utilities

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Additionally, V-Ray provides a number of utilities and standalone tools for working with materials:

- [Bake Vector Displacement](#) – A utility material that allows you to generate displacement maps for Vector displacement when used along with texture baking. It requires that you have a low poly base geometry and a high poly target geometry. You can then generate a map that when used with vector displacement turns the base geometry into the target geometry. Vector displacement, unlike standard displacement which displaces only in a positive or negative direction from the surface of the low poly base, allows displacement to occur in all 3 axes. Thus instead of just being in a positive or negative direction, displacement can occur in many combined directions.
- [.vrmat exporter](#) – The .vrmat exporter can be used to export materials in 3ds Max to .vrmat files which can be loaded later using the VRayVRmatMtl material. Earlier V-Ray versions also use the [VRmat converter](#).
- [VRayParticleColor](#) – It is an operator that creates additional color information for particles. It's only used in the shading of [Metaballs](#) surfaces defined by the particles. It can be added to any Particle Flow event.

## Notes

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- Since V-Ray 5.0 VRayHairMtl is no longer exposed in the UI. Scenes containing V-RayHairMtl made with older versions of V-Ray will be loaded correctly. New VRayHairMtl cannot be made in the Material Editor or MaxScript with V-Ray 5.0. We recommend using VRayHairNextMtl instead.