Tips on using the Sub Surface Scattering in Poser 6

Tools Needed

*** Poser 6**

Introduction
First thing to have in mind when using the SSS that comes with Poser 6, is that it is a script designed basicly for pink skin. Let's see some examples of what happens when we use the default SSS with other skin colors, and how to customize it for a better look in each case.

Step 1 - Technical Information

Let's see what the Poser 6 Manual says about the three nodes the SSS uses:

Blinn: Calculates highlights. It has four different settings: Specular Color (sets the color of the highlight); Eccentricity (creates imperfections in the surface, the manual says to use 0 for shinny surfaces and 1 for diffuse ones, the default value is 0.5); Specular Rolloff (controls thr highlight's sharpness); and reflectivity (controls the ammount of light reflected by the surface).

Fastscatter: It simulates the interaction of light with translucent materials. It's settings are Color (the tint of the subsurface area) and Attenuate (it specifies which light will have more influence in the SSS, the one originating from the camera or the one coming towards the camera).

Edge Blend: It blends two nodes based on surface and camera angles.

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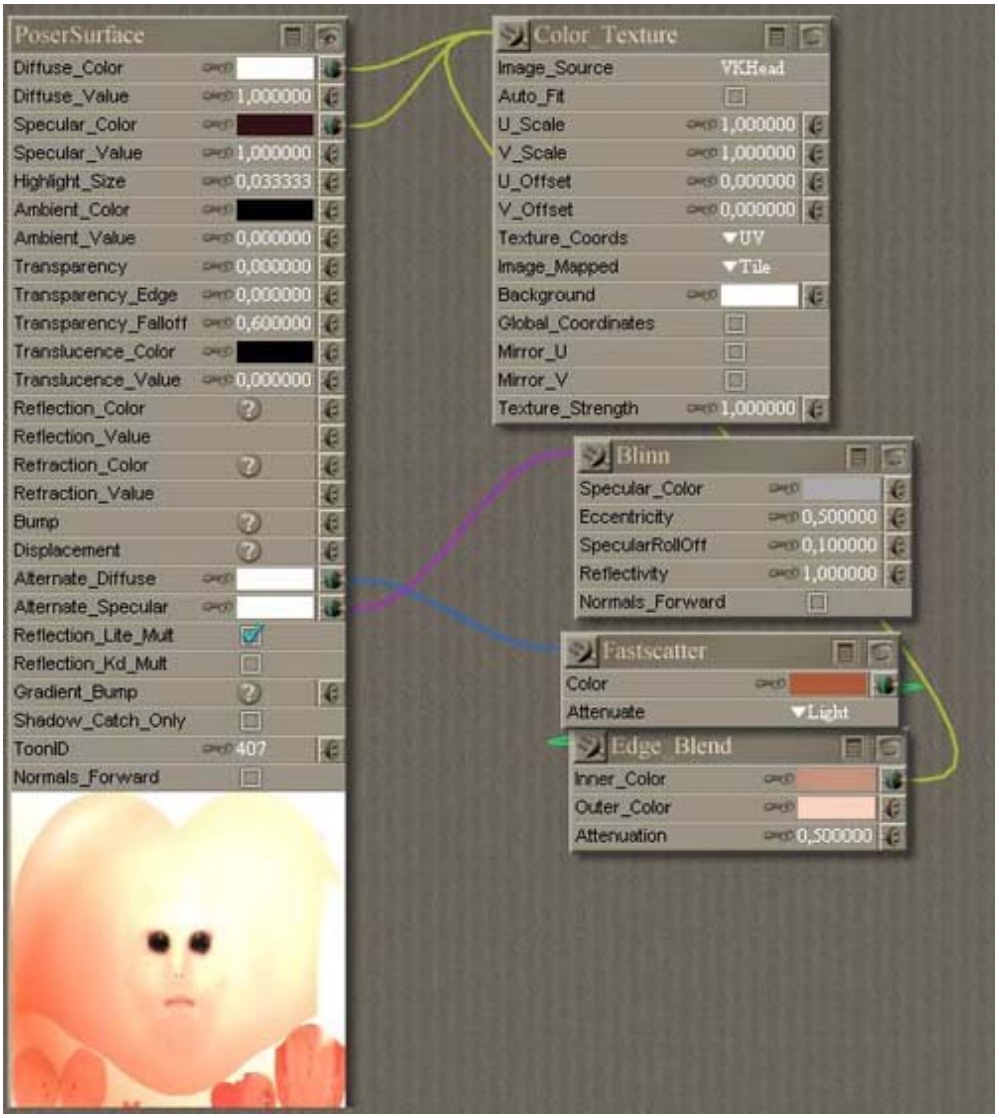
Step 2 - Goth-like White skin or really pale people.

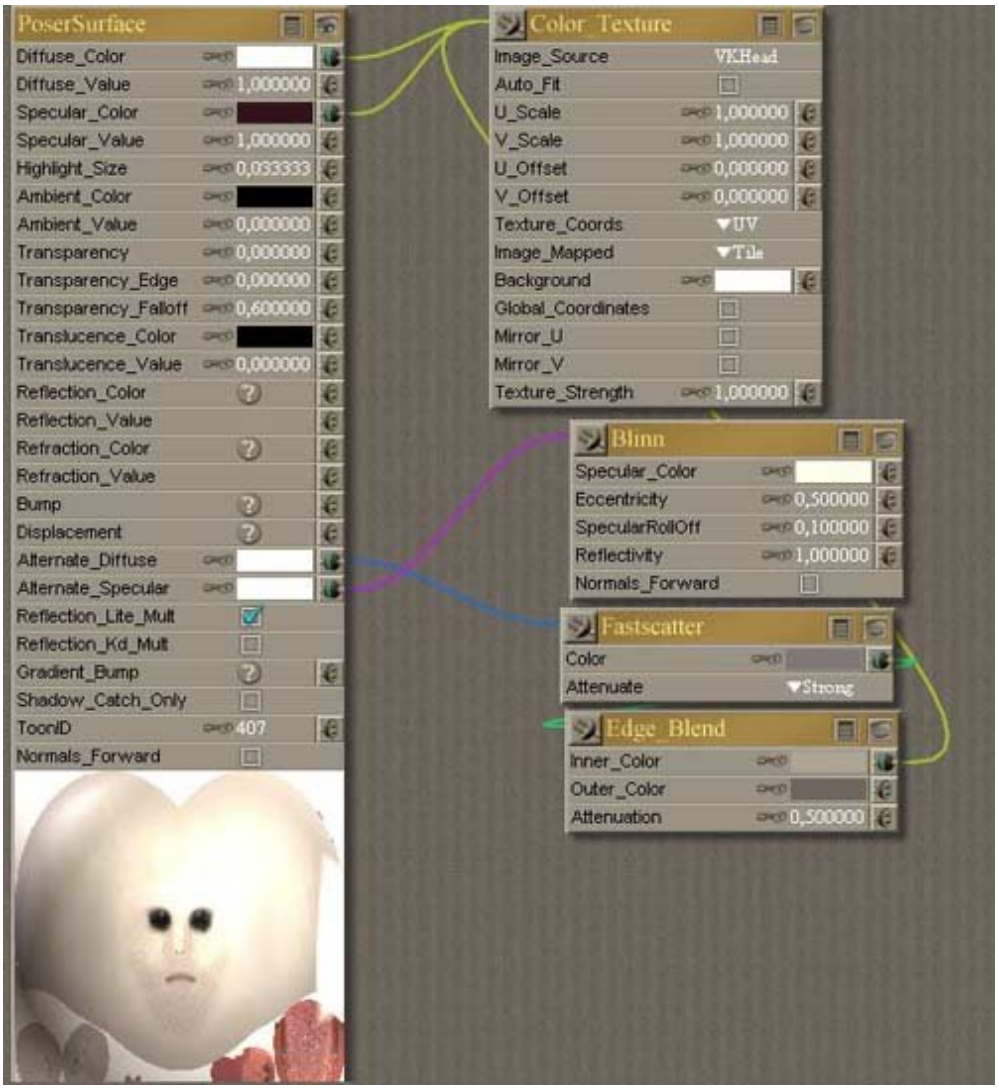
For this example, I'll be using Kaeel, for a Gothic looking character. This first render is Kaeel as it comes, no SSS whatsoever. I'll be applying the changes on the head, scalp and lips materials, leaving the other materials alone for comparison.

Now, let's see how it looks with the default SSS.

Hey! Where did my gothic dude go!!!!???? The default SSS gives him a reddish look, because of what I said in the introduction. Let's change that.

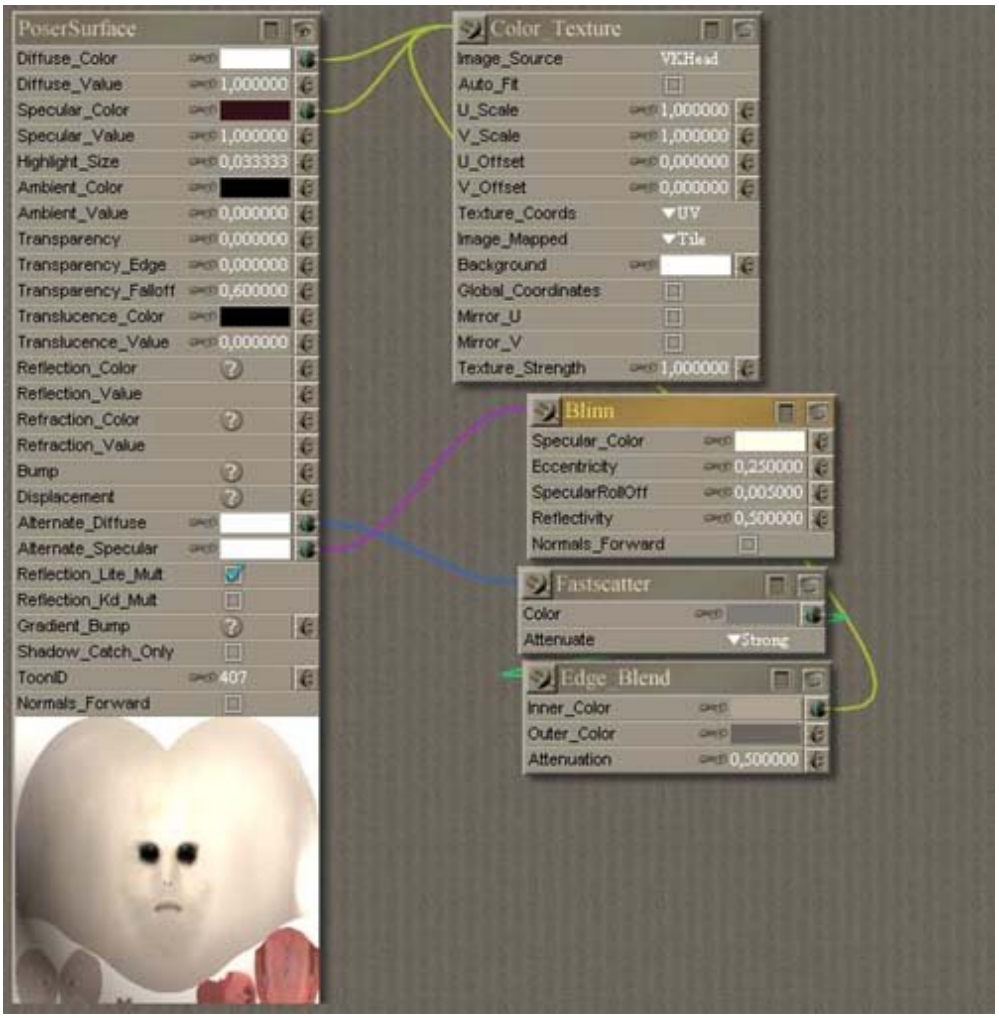


Put all color form the SSS in tones of grey. Then, start using the color picker and select the colors from the texture preview at the bottom of the Posersurface node. Remember that this preview interacts with the light already set in the scene, so if you have very bright lights, change the Attenuate setting in the fastscatter node to Strong, to recover some of the colors that get "burned" by the lights. Pick the Specular color for the blinn node from the highlights already in the texture. The Fastscatter color pick it from the darker areas of the texture (not black, but shadowy areas), and the edge blend colors pick from the texture itself, the inner color being the base color of the texture (not highlighted or shadowed in any way), and the outer color being a darker tone than the Fastscatter. Let's see how it looks now:



Step 3 - Fixing the Highlight.

Well, our goth buy is back, and now it look much more realistic, thanks to the SSS with custom colors specially picked for this skin. Let's go now to the opposite extreme. Perhaps a little too bright in the highlighted area. We'll fix that by changing the values of the Bliin node, as in the image.



Step 4 - Let go to the other extreme now: Darker Skins

Here we'll see two examples: A dark skinned monster (an orc courtesy of the M3 Creatures Combo) and an african-american charater. In both cases, well do the same we did with the Kaeel, but now taking green hues for the orc and brown hues for the african-american character, instead of greys. Let's see the before and after fo them:

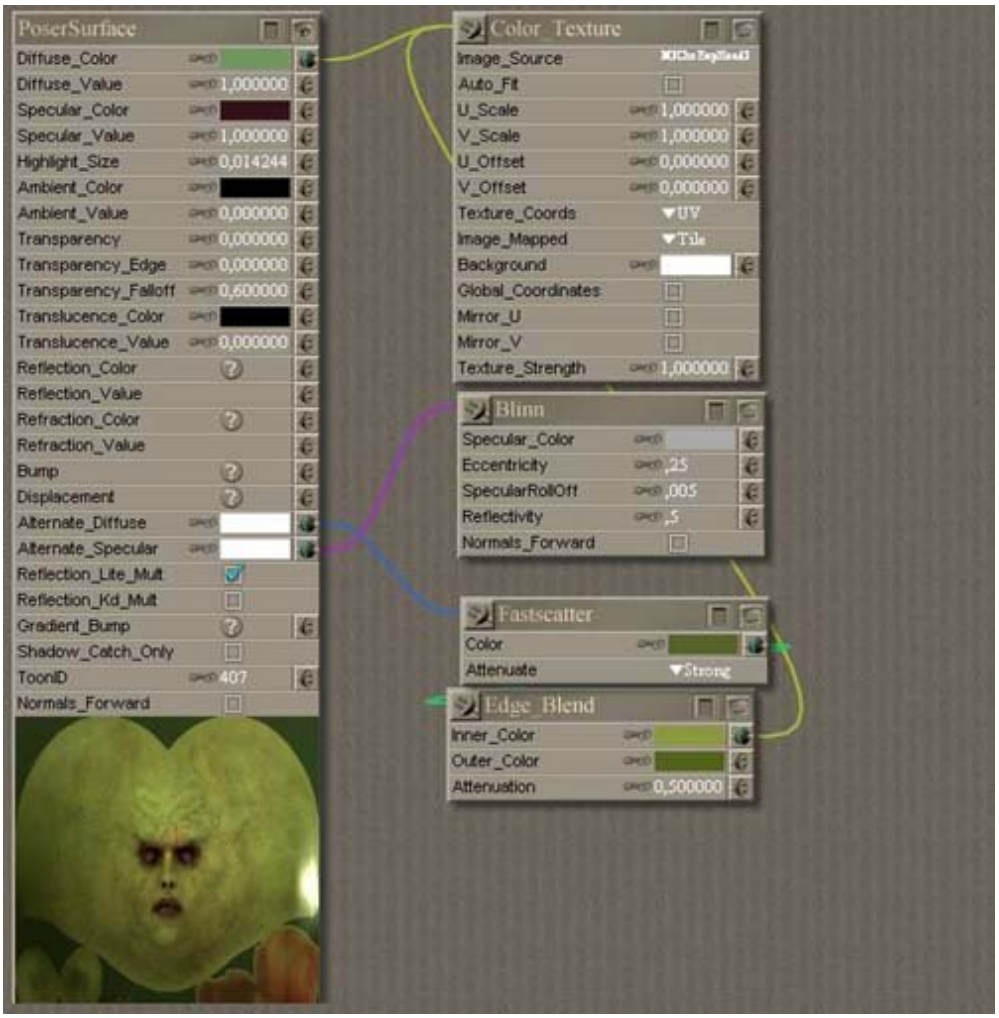
Before:

After Default SSS:

Again, in this first case, you can see how the SSS as it it applied by the WAcro changes completly the color of the skin, in a way we don't want to!.

Note: When you apply the SSS, it changes the Diffuse Color in the Posersurface node to white. if you are using a color, like in this case, to tint the texture, you'll have to apply the color again. Or apply it by means of the SSS.

First, set all the color attributes to a base color. Then, as we did before, pick the corresponding hues from the texture preview.

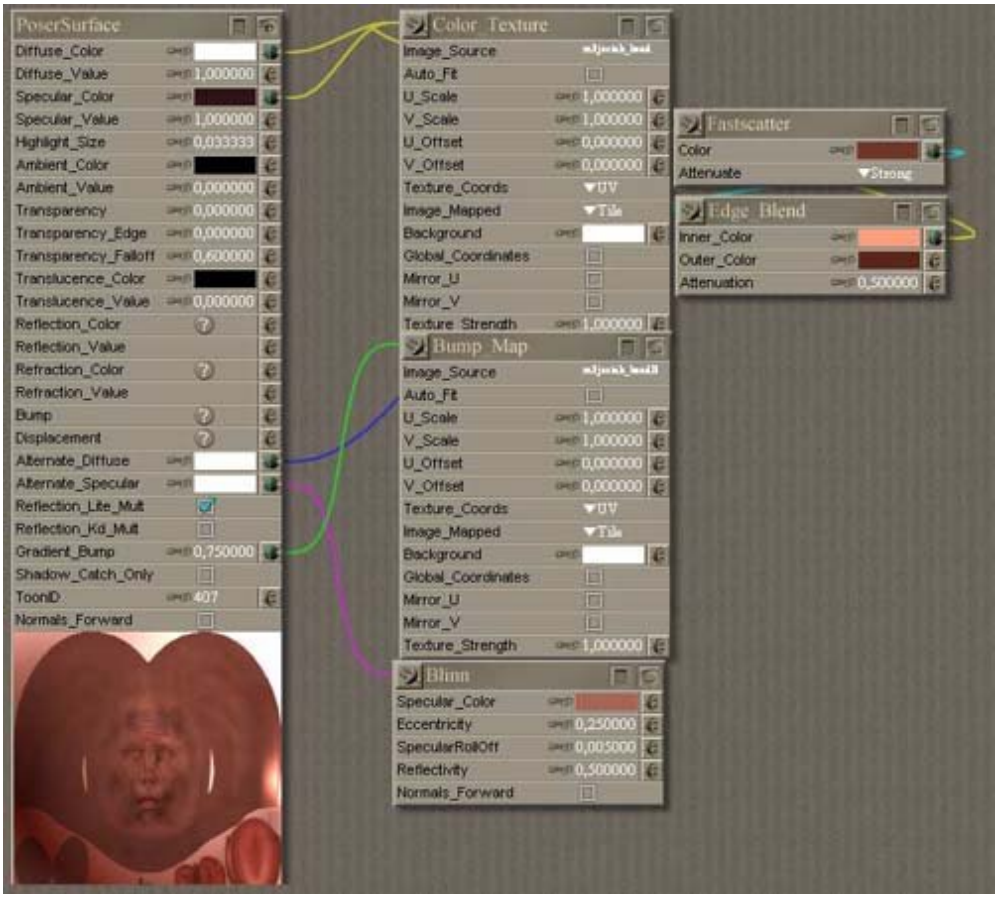


Step 5 - Second Case: African-Americcan Character

Before:

After Default SSS:

As you can see, in the second case, the default coloring gives as a correct, somewhat lighter skin tone. Here it's up to you to see which tone is right for your character. I went for tone similar to the original texture:


PoserSurface
Diffuse_Color
Diffuse_Value
Specular_Color
Specular_Value
Highlight_Size
Ambient_Color
Ambient_Value
Transparency
Transparency_Edge
Transparency_Falloff
Translucence_Color
Translucence_Value
Reflection_Color
Reflection_Value
Refraction_Color
Refraction_Value
Bump
Displacement
Alternate_Diffuse
Alternate_Specular
Reflection_Lite_Mult
Reflection_Kd_Mult
Gradient_Bump
Shadow_Catch_Only
ToonID
Normals_Forward
Color Texture
Image_Source
Auto_Fit
U_Scale
V_Scale
U_Offset
V_Offset
Texture_Coords
Image_Mapped
Background
Global_Coordinates
Mirror_U
Mirror_V
Texture_Strength
Bump Map
Blinn
Specular_Color
Eccentricity
SpecularRollOff
Reflectivity
Normals_Forward
Fastscatter
Color
Attenuate
Edge_Blend
Inner_Color
Outer_Color
Attenuation

Step 6 - Final Thoughs

Sub Surface Scattering is a very interesting and powerfull tool. It helps us not only achieve a little more realism in our renders, cutting down post work process, but helps us squeeze a little more from our textures, giving us the posibilities of tinting them and using one texture for a great variety of characters, just with a few clicks.

Good luck!