Transparency

Specular reflection (coating)

Emission
/additive/

Specular reflection (metal)

Specular reflection

Specular transmission*

Specular retro-reflection (sheen)*

Diffuse reflection

Diffuse transmission*

Subsurface scattering*

Transparency				
			Specular reflection (coating)	

Transparency

Specular reflection (coating)

Emission *additive*

Specular reflection (metal)

Specular reflection

Specular transmission*

Specular retro-reflection (sheen)*

Diffuse reflection

Diffuse transmission*

Subsurface scattering*

standard_surface

+ : 1 - **opacity** → transparency
+ : **opacity** →

+ : **coat** → coat_brdf
+ : lerp(**coat**, white, **coat_color** * (1 - reflectance(coat_brdf)))

+ : **emission** * **emission_color** → emission
+ : **metalness** → metal_brdf
+ : 1 - **metalness**

+ : **specular** * **specular_color** → spec_brdf
+ : 1 - **specular** * **specular_color** * reflectance(spec_brdf)

+ : **transmission** * **transmission_color** → spec_btdf
+ : 1 - **transmission**

+ : **sheen** * **sheen_color** → sheen_brdf
+ : 1 - **sheen** * reflectance(sheen_brdf)

+ : (1 - **subsurface**) * **base** * **base_color** → diffuse_brdf
+ : **subsurface** * **subsurface_color**

+ : **thin_walled** → diffuse_btdf
+ : 1 - **thin_walled** → subsurface