

リスト 3.5

MultiTex.frag

```
varying vec3 P;  
varying vec3 N;  
uniform sampler2D sampler0;  
uniform sampler2D sampler1;  
uniform float mixFactor;//混合率  
  
void main(void)  
{  
    vec3 L = normalize(gl_LightSource[0].position.xyz - P);  
    N = normalize(N);  
  
    vec4 ambient = gl_FrontLightProduct[0].ambient;  
    float dotNL = dot(N, L);  
    vec4 diffuse = gl_FrontLightProduct[0].diffuse * max(0.0, dotNL);  
    vec3 V = normalize(-P);  
    vec3 H = normalize(L + V);  
    float powNH = pow(max(dot(N, H), 0.0), gl_FrontMaterial.shininess);  
    if(dotNL <= 0.0) powNH = 0.0;  
    vec4 specular = gl_FrontLightProduct[0].specular * powNH;  
    //テクスチャの色  
    vec4 texColor0 = texture2D(sampler0, gl_TexCoord[0].st);  
    vec4 texColor1 = texture2D(sampler1, gl_TexCoord[0].st);  
    vec4 texColor = mix(texColor0, texColor1, mixFactor);  
    //GL_MODULATEモード  
    gl_FragColor = (ambient + diffuse) * texColor + specular;  
    //任意の混合比  
    //gl_FragColor = mix(ambient + diffuse, texColor, 0.5) + specular;  
}
```