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ShaderNodeBsdfHairPrincipled(ShaderNode)

base classes — [bpy_struct](#), [Node](#), [NodeInternal](#), [ShaderNode](#)

class `bpy.types.ShaderNodeBsdfHairPrincipled(ShaderNode)`

Physically-based, easy-to-use shader for rendering hair and fur

model

Select from Chiang or Huang model

- `CHIANG` Chiang – Near-field hair scattering model by Chiang et al. 2016, suitable for close-up looks, but is more noisy when viewing from a distance..
- `HUANG` Huang – Multi-scale hair scattering model by Huang et al. 2022, suitable for viewing both up close and from a distance, supports elliptical cross-sections and has more precise highlight in forward scattering directions..

TYPE:

enum in ['CHIANG', 'HUANG'], default 'HUANG'

parametrization

Select the shader's color parametrization

- `ABSORPTION` Absorption Coefficient – Directly set the absorption coefficient “sigma_a” (this is not the most intuitive way to color hair)
- `MELANIN` Melanin Concentration – Define the melanin concentrations below to get the most realistic-looking hair (you can get the concentrations for different types of hair online).
- `COLOR` Direct Coloring – Choose the color of your preference, and the shader will approximate the absorption coefficient to render lookalike hair.

TYPE:

enum in ['ABSORPTION', 'MELANIN', 'COLOR'], default 'COLOR'

classmethod `is_registered_node_type()`

True if a registered node type

RETURNS:

Result

RETURN TYPE:

boolean

classmethod `input_template(index)`

Input socket template

PARAMETERS:

index (*int in [0, inf]*) – Index

RETURNS:

result

RETURN TYPE:

[NodeInternalSocketTemplate](#)

classmethod `output_template(index)`

Output socket template

PARAMETERS:

index (*int in [0, inf]*) – Index

RETURNS:

RETURNS:

result

RETURN TYPE:

`NodeInternalSocketTemplate`

classmethod `bl_ma_get_subclass(id, default=None)`

PARAMETERS:

id (*str*) – The RNA type identifier.

RETURNS:

The RNA type or default when not found.

RETURN TYPE:

`bpy.types.Struct` subclass

classmethod `bl_ma_get_subclass_py(id, default=None)`

PARAMETERS:

id (*str*) – The RNA type identifier.

RETURNS:

The class or default when not found.

RETURN TYPE:

type

Inherited Properties

- `bpy_struct.id_data`
- `Node.type`
- `Node.location`
- `Node.location_absolute`
- `Node.width`
- `Node.height`
- `Node.dimensions`
- `Node.name`
- `Node.label`
- `Node.inputs`
- `Node.outputs`
- `Node.internal_links`
- `Node.parent`
- `Node.warning_propagation`
- `Node.use_custom_color`
- `Node.color`
- `Node.color_tag`
- `Node.select`
- `Node.show_options`
- `Node.show_preview`
- `Node.hide`
- `Node.mute`
- `Node.show_texture`
- `Node.bl_idname`
- `Node.bl_label`
- `Node.bl_description`
- `Node.bl_icon`
- `Node.bl_static_type`
- `Node.bl_width_default`
- `Node.bl_width_min`
- `Node.bl_width_max`
- `Node.bl_height_default`
- `Node.bl_height_min`
- `Node.bl_height_max`

Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.id_properties_clear`
- `Node.poll_instance`
- `Node.update`
- `Node.insert_link`
- `Node.init`

- [bpy_struct.id_properties_clear](#)
- [bpy_struct.id_properties_ensure](#)
- [bpy_struct.id_properties_ui](#)
- [bpy_struct.is_property_hidden](#)
- [bpy_struct.is_property_overridable_library](#)
- [bpy_struct.is_property_readonly](#)
- [bpy_struct.is_property_set](#)
- [bpy_struct.items](#)
- [bpy_struct.keyframe_delete](#)
- [bpy_struct.keyframe_insert](#)
- [bpy_struct.keys](#)
- [bpy_struct.path_from_id](#)
- [bpy_struct.path_resolve](#)
- [bpy_struct.pop](#)
- [bpy_struct.property_overridable_library_set](#)
- [bpy_struct.property_unset](#)
- [bpy_struct.type_recast](#)
- [bpy_struct.values](#)
- [Node.socket_value_update](#)
- [Node.is_registered_node_type](#)
- [Node.poll](#)
- [Node.copy](#)
- [Node.free](#)
- [Node.draw_buttons](#)
- [Node.draw_buttons_ext](#)
- [Node.draw_label](#)
- [Node.debug_zone_body_lazy_function_graph](#)
- [Node.debug_zone_lazy_function_graph](#)
- [Node.poll](#)
- [Node.bl_rna_get_subclass](#)
- [Node.bl_rna_get_subclass_py](#)
- [NodeInternal.poll](#)
- [NodeInternal.poll_instance](#)
- [NodeInternal.update](#)
- [NodeInternal.draw_buttons](#)
- [NodeInternal.draw_buttons_ext](#)
- [NodeInternal.bl_rna_get_subclass](#)
- [NodeInternal.bl_rna_get_subclass_py](#)
- [ShaderNode.poll](#)
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