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Texture(ID)

base classes — [bpy_struct](#), [ID](#)

subclasses — [BlendTexture](#), [CloudsTexture](#), [DistortedNoiseTexture](#), [ImageTexture](#), [MagicTexture](#), [MarbleTexture](#), [MusgraveTexture](#), [NoiseTexture](#), [StucciTexture](#), [VoronoiTexture](#), [WoodTexture](#)

class bpy.types.Texture(ID)

Texture data-block used by materials, lights, worlds and brushes

animation_data

Animation data for this data-block

TYPE:

[AnimData](#), (readonly)

color_ramp

TYPE:

[ColorRamp](#), (readonly)

contrast

Adjust the contrast of the texture

TYPE:

float in [0, 5], default 1.0

factor_blue

TYPE:

float in [0, 2], default 1.0

factor_green

TYPE:

float in [0, 2], default 1.0

factor_red

TYPE:

float in [0, 2], default 1.0

intensity

Adjust the brightness of the texture

TYPE:

float in [0, 2], default 1.0

node_tree

Node tree for node-based textures

TYPE:

[NodeTree](#), (readonly)

saturation

Adjust the saturation of colors in the texture

TYPE:

float in [0, 2], default 1.0

type

TYPE:

enum in [Texture Type Items](#), default 'IMAGE'

use_clamp

Set negative texture RGB and intensity values to zero, for some uses like displacement this option can be disabled to get the full range

TYPE:

boolean, default False

use_color_ramp

Map the texture intensity to the color ramp. Note that the alpha value is used for image textures, enable "Calculate Alpha" for images without : alpha channel.

TYPE:

boolean, default False

use_nodes

Make this a node-based texture

TYPE:

boolean, default False

use_preview_alpha

Show Alpha in Preview Render

TYPE:

boolean, default False

users_material

Materials that use this texture

(readonly)

users_object_modifier

Object modifiers that use this texture

(readonly)

evaluate(value)

Evaluate the texture at the a given coordinate and returns the result

PARAMETERS:

value ([mathutils.Vector](#) of 3 items in [-inf, inf]) – The coordinates (x,y,z) of the texture, in case of a 3D texture, the z value is the slice of the texture that is evaluated. For 2D textures such as images, the z value is ignored.

RETURNS:

The result of the texture where (x,y,z,w) are (red, green, blue, intensity). For grayscale textures, often intensity only will be used.

RETURN TYPE:

[mathutils.Vector](#) of 4 items in [-inf, inf]

classmethod bl_rna_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_rna_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`
- `ID.name`
- `ID.name_full`
- `ID.id_type`
- `ID.session_uid`
- `ID.is_evaluated`
- `ID.original`
- `ID.users`
- `ID.use_fake_user`
- `ID.use_extra_user`
- `ID.is_embedded_data`
- `ID.is_missing`
- `ID.is_runtime_data`
- `ID.is_editable`
- `ID.tag`
- `ID.is_library_indirect`
- `ID.library`
- `ID.library_weak_reference`
- `ID.asset_data`
- `ID.override_library`
- `ID.preview`

Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `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`
- `ID.rename`
- `ID.evaluated_get`
- `ID.copy`
- `ID.asset_mark`
- `ID.asset_clear`
- `ID.asset_generate_preview`
- `ID.override_create`
- `ID.override_hierarchy_create`
- `ID.user_clear`
- `ID.user_remap`
- `ID.make_local`
- `ID.user_of_id`
- `ID.animation_data_create`
- `ID.animation_data_clear`
- `ID.update_tag`
- `ID.preview_ensure`
- `ID.bl_rna_get_subclass`
- `ID.bl_rna_get_subclass_py`

References

- [bpy.context.texture](#)
- [BlendData.textures](#)
- [BlendDataTextures.new](#)
- [BlendDataTextures.remove](#)
- [Brush.mask_texture](#)
- [Brush.texture](#)
- [CompositorNodeTexture.texture](#)
- [DisplaceModifier.texture](#)
- [DynamicPaintSurface.init_texture](#)
- [FieldSettings.texture](#)
- [FluidFlowSettings.noise_texture](#)
- [FreestyleLineStyle.active_texture](#)
- [NodeSocketTexture.default_value](#)
- [NodeTreeInterfaceSocketTexture.default_value](#)
- [ParticleSettings.active_texture](#)
- [TextureNodeTexture.texture](#)
- [TextureSlot.texture](#)
- [VertexWeightEditModifier.mask_texture](#)
- [VertexWeightMixModifier.mask_texture](#)
- [VertexWeightProximityModifier.mask_texture](#)
- [VolumeDisplaceModifier.texture](#)
- [WarpModifier.texture](#)
- [WaveModifier.texture](#)