FluidFlowSettings(bpy_struct)

base class — bpy_struct

class bpy.types.**FluidFlowSettings(bpy_struct)**

Fluid flow settings

density

TYPE:

float in [0, 10], default 1.0

density_vertex_group

Name of vertex group which determines surface emission rate

TYPE:

string, default “”, (never None)

flow_behavior

Change flow behavior in the simulation

- INFLOW Inflow – Add fluid to simulation.
- OUTFLOW Outflow – Delete fluid from simulation.
- GEOMETRY Geometry – Only use given geometry for fluid.

TYPE:

enum in [‘INFLOW’, ‘OUTFLOW’, ‘GEOMETRY’], default ‘GEOMETRY’

flow_source

Change how fluid is emitted

TYPE:

enum in [‘NONE’], default ‘NONE’

flow_type

Change type of fluid in the simulation

- SMOKE Smoke – Add smoke.
- BOTH Fire + Smoke – Add fire and smoke.
- FIRE Fire – Add fire.
- LIQUID Liquid – Add liquid.

TYPE:

enum in [‘SMOKE’, ‘BOTH’, ‘FIRE’, ‘LIQUID’], default ‘SMOKE’

fuel_amount

TYPE:

float in [0, 10], default 1.0

noise_texture

Texture that controls emission strength

TYPE:

Texture

particle_size

Particle size in simulation cells

TYPE:

float in [0.1, inf], default 1.0

particle_system

Particle systems emitted from the object

TYPE:

`ParticleSystem`

smoke_color

Color of smoke

TYPE:

`mathutils.Color` of 3 items in [0, inf], default (0.7, 0.7, 0.7)

subframes

Number of additional samples to take between frames to improve quality of fast moving flows

TYPE:

int in [0, 200], default 0

surface_distance

Controls fluid emission from the mesh surface (higher value results in emission further away from the mesh surface

TYPE:

float in [0, 10], default 1.5

temperature

Temperature difference to ambient temperature

TYPE:

float in [-10, 10], default 1.0

texture_map_type

Texture mapping type

- `AUTO` Generated – Generated coordinates centered to flow object.
- `UV` UV – Use UV layer for texture coordinates.

TYPE:

enum in ['AUTO', 'UV'], default 'AUTO'

texture_offset

Z-offset of texture mapping

TYPE:

float in [0, 200], default 0.0

texture_size

Size of texture mapping

TYPE:

float in [0.01, 10], default 1.0

use_absolute

Only allow given density value in emitter area and will not add up

TYPE:

boolean, default True

use_inflow

Control when to apply fluid flow

TYPE:

boolean, default True

use_initial_velocity

Fluid has some initial velocity when it is emitted

TYPE:

boolean, default False

use_particle_size

Set particle size in simulation cells or use nearest cell

TYPE:

boolean, default True

use_plane_init

Treat this object as a planar and unclosed mesh. Fluid will only be emitted from the mesh surface and based on the surface emission value.

TYPE:

boolean, default False

use_texture

Use a texture to control emission strength

TYPE:

boolean, default False

uv_layer

UV map name

TYPE:

string, default “”, (never None)

velocity_coord

Additional initial velocity in X, Y and Z direction (added to source velocity)

TYPE:

`mathutils.Vector` of 3 items in [-1000.1, 1000.1], default (0.0, 0.0, 0.0)

velocity_factor

Multiplier of source velocity passed to fluid (source velocity is non-zero only if object is moving)

TYPE:

float in [-100, 100], default 1.0

velocity_normal

Amount of normal directional velocity

TYPE:

float in [-100, 100], default 0.0

velocity_random

velocity_random

Amount of random velocity

TYPE:

float in [0, 10], default 0.0

volume_density

Controls fluid emission from within the mesh (higher value results in greater emissions from inside the mesh)

TYPE:

float in [0, 1], default 0.0

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`

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`

References

- `FluidModifier.flow_settings`