Lava

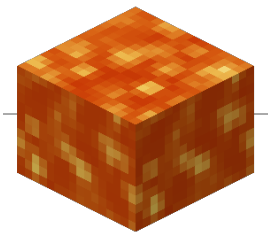
re article feedback

v t *This article is about the fluid. For the bucket, see Lava Bucket.*

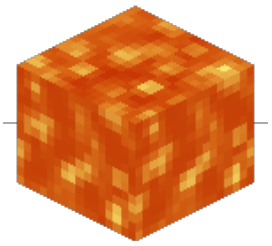
Lava is a light-emitting fluid that causes fire damage, mostly found in the lower reaches of the Overworld and the Nether.

Contents

Lava



Java Edition



Bedrock Edition

Renewable	Yes
Transparent	Yes
Luminance	Yes (15)
Blast resistance	100
Tool	
Creates sources?	No
Flow distance	4 blocks (Overworld, End) 8 blocks (Nether)
Flow speed	30 ticks/block (Overworld, End) 10 ticks/block (Nether)

Obtaining

Lava can be collected by using a bucket on a lava source block or a full lava cauldron, converting the bucket to a lava bucket. Lava may be obtained renewably from cauldrons, as pointed dripstone with a lava source above it can slowly fill a cauldron with lava (if in the Nether, the source of lava isn't necessary).

In *Java Edition*, lava does not have a direct item form, but in *Bedrock Edition* it may be obtained as an item via inventory editing or add-ons.

Natural generation

During world generation, lava replaces air blocks generated in caves and canyons between Y=-55 and Y=-63. Aquifers are sometimes filled with lava below Y=0. Lava does not replace air blocks inside mineshafts, monster rooms, amethyst geodes, or strongholds.

Lava can also occur as lava flows from a single spring block, pouring down walls into pools. The spring block can be on the side of a cave, ravine, mineshaft, or stone cliff above ground.

Lava also generates as small lava lakes, which can be found above Y=0 within any biome.

Two blocks of lava can also be found in plains, snowy plains, and desert village weaponsmith buildings, or one source in savanna village weaponsmith buildings.

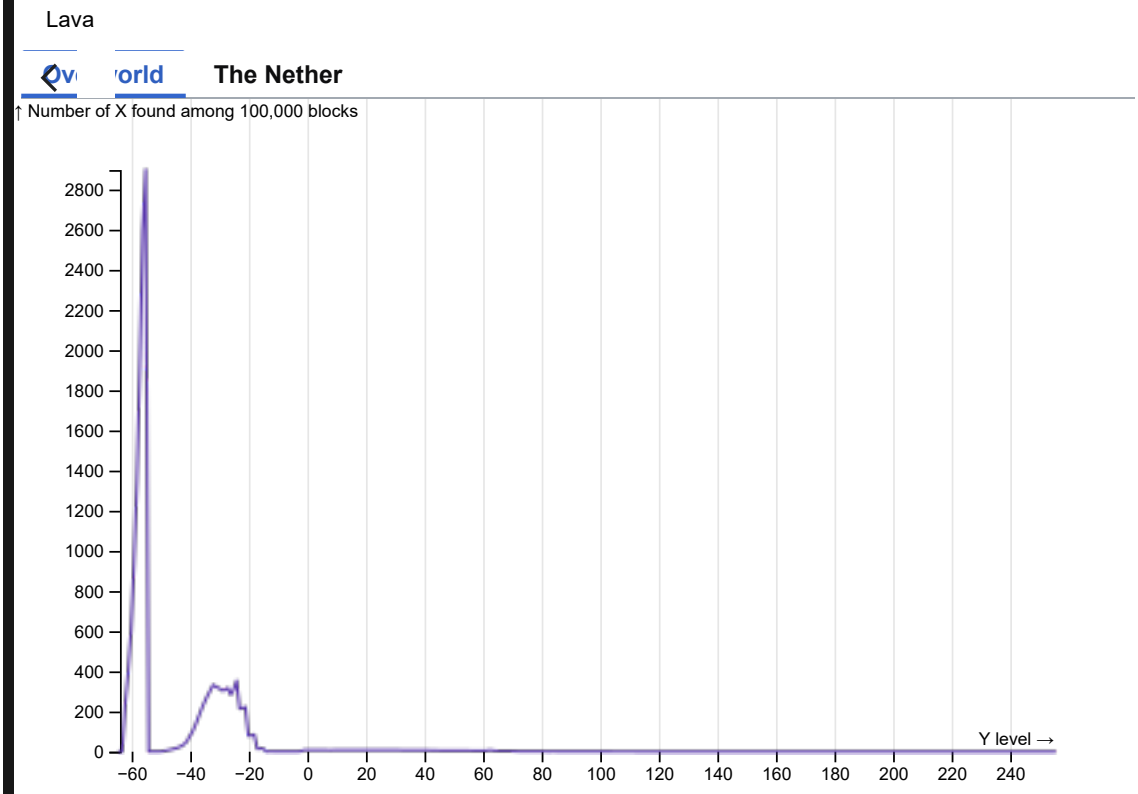
Fifteen blocks of lava can be found in the End portal room of a stronghold: 3 along each side wall, and 9 below the portal frame.

Lava also generates in woodland mansions: two blocks of lava generate in the "forge room", and 25 blocks of lava generate in a secret "lava room".

In the Nether, lava is more common than water is in the Overworld. Seas of lava occur, with sea level at y-level 32, about a quarter of the total height of the Nether (as the usable space in the Nether is 128 blocks tall). They can extend down to about y-level 19-22. Lava also randomly appears in single blocks inside netherrack formations. There are also large pockets of lava generated under y=19 and can reach all the way down to bedrock level. These pockets are generally over 12 blocks in height and often connect to a large lava lake on y=32; the size of these pockets in 1.18 can range from the size of a singular pre-1.18 ravine to multiple ravines combined.

Lava generates as delta shapes, which can be found commonly in the basalt deltas biome. Lava is also generated as a single source in well rooms in Nether fortresses. Lava also generates in ruined portals and bastion remnants.

Block distribution for Lava in Java Edition 1.21.7



Logarithmic scale
Slight difference in the Y-coordinate represents a large change in the relative frequency of a block type, making it useful to see small changes on the graph when there is a large spike.

Renewability

If there is a lava source above a pointed dripstone stalactite, there is a $^{15}\!/_{256}$ (~5.9%) chance for it to completely fill an empty cauldron within 10 blocks under the tip with lava after a random tick. This lava can then be scooped with a bucket, making it a renewable resource.


Using a pointed dripstone to refill a cauldron with lava

Post-generation

Unlike water source blocks, new lava source blocks cannot be created in a space by two or more adjacent source blocks. However in *Java Edition*, if the game rule `lavaSourceConversion` is set to `true`, new lava source blocks can form in a similar way to water source blocks.

Usage

Burning

Most entities take 4 (❤❤) damage every tick (although damage immunity reduces this to once every half-second) while in contact with lava, and are set on fire. An entity or player in lava also has its `remainingFireTicks` set to 300, setting it on fire for 15 seconds. This timer is reset to 300 every tick that the victim spends in lava, so it starts counting down once the victim leaves the lava. Once the victim does exit the lava source, it burns for just under 15 seconds, taking fire damage 14 times. This is due to the fact that for the

first tick outside of lava, its `remainingFireTicks` decreases to 299, and entities take fire damage when `remainingFireTicks` is a multiple of 20 and greater than 0. If the victim touches water or rain, the fire is extinguished, but the lava continues to damage them directly.

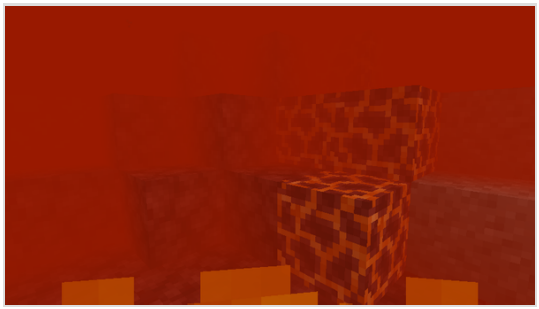
In addition, a dense fog effect is applied for players under lava to obscure vision. This can be slightly mitigated via the Fire Resistance effect. In Spectator mode, the fog effect is removed and players can see through lava.

In *Bedrock Edition*, a player with the Fire Resistance effect or a total Fire Protection of 7 or higher does not catch fire.

Most of the Nether mobs (blazes, ghasts, magma cubes, striders, wither skeletons, zoglins, and zombified piglins), agents, NPCs, vexes, ender dragons, shulkers, wardens, withers, and players or mobs affected by the Fire Resistance effect are not damaged when touching lava.

The embers or fireballs that fly out of lava are purely decorative and do not cause fires or damage to entities. When rain falls on lava, the black ember particles appear more frequently.

What it looks like inside lava.



What it looks like inside lava using Fire Resistance in *Java Edition*.

A player in lava lasts a few seconds before dying:

Java Edition

- 2.5 seconds with no armor
- 3.5 seconds with full leather armor, no enchantments
- 4 seconds with full gold armor, no enchantments
- 4.5 seconds with full chainmail armor, no enchantments
- 5.5 seconds with full iron armor, no enchantments
- 10.5 seconds with full diamond armor, no enchantments
- 11 seconds with full netherite armor, no enchantments

Bedrock Edition

- 2.5 seconds with no armor
- 3.5 seconds with full leather armor, no enchantments
- 4.5 seconds with full gold armor, no enchantments
- 5 seconds with full chainmail armor, no enchantments
- 6.5 seconds with full iron armor, no enchantments
- 12.5 seconds with full diamond armor, no enchantments
- 12.5 seconds with full netherite armor, no enchantments

A player who is wearing armor enchanted with Fire Protection can survive even longer. With the maximum bonus, the damage is small enough that the natural healing from a full hunger bar can outpace it,[*JE only*] so a player who has food and armor that resists damage (non-netherite armor is damaged by lava) could survive indefinitely. This damage-resisting condition can be attained by wearing two pieces of armor with Fire Protection IV and one with Protection IV, or one piece of armor with Fire Protection IV and three with Protection IV.

Fire spread

Lava—of any depth, both source blocks and flowing—can cause fires by turning air blocks to fire blocks.

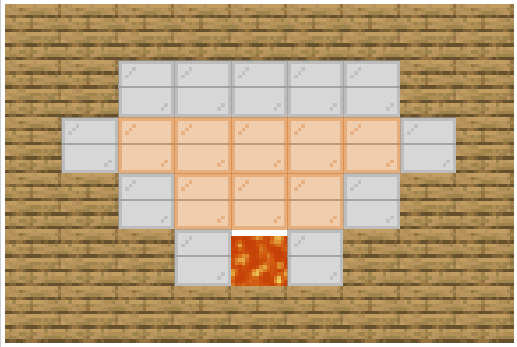
In order for air above lava to turn to fire, a block adjacent to the air has to be flammable, or one of the wood-constructed non-flammable blocks. Since catching fire depends on air blocks, even torches or lava itself can prevent a flammable block from catching fire. Additionally, not all flammable or wood-constructed blocks can be ignited by lava. Fire can spread at a distance from the lava, and it can spread through at least non-solid blocks (like glass blocks).

Additional conditions must be met, depending on the edition of Minecraft.

Java Edition

Air block must be in a 3×1×3 area right above the lava or in a 5×1×5 2 blocks above the lava.

An air block in the 5×1×5 area does not catch on fire if the 3×1×3 area is completely filled, even if the latter is filled with flammable blocks.



Example for JE. The orange area represents areas where air could catch flame if the gray and orange areas contain flammable blocks. The planks are all at a safe distance.

Bedrock Edition

The block to be set on fire must be in a 3×3×3 cube centered on a lava block, above which there must be either air or an ignitable block.

Flow

See also: Fluid

Lava flows from "source blocks". Most streams or "lava-falls" come from a single source block, but lava lakes (including the "flood lava" in the bottom 10 layers) are composed entirely of source blocks. A source block can be captured only with a bucket.

In the Overworld and the End, lava travels 3 blocks in any horizontal direction from a source block. Lava flows far more slowly than water (1 block every 30 game ticks, or 1.5 seconds), and sourceless lava flows linger for a short time more. In the Nether, lava travels 7 blocks horizontally and spreads 1 block every 10 game ticks, or 2 blocks per second, which is half the speed of water in the Overworld. In all dimensions, lava spreading uses the same mechanic as water: For every adjacent block it can flow into it tries to find a way down that is reachable in four or fewer blocks from the block it wants to flow to. When found, the flow weight for that direction is set to the shortest path distance to the way down. (This can result in lava flows turning toward dropoffs that they cannot reach in the Overworld and the End.)

Flowing lava destroys certain non-solid blocks similarly to water. However, those blocks do not drop their loot when destroyed by lava. Sugar canes hold back lava, but disappear if the sugar cane's water source is destroyed by the lava.

A one-block lava flow can be redirected by receiving block updates, which causes it to reset the flow toward the now-nearest terrain depression, but does not cut off its current direction of flow. The change cannot be reversed.

In Bedrock Edition the /setblock command can be used to create stationary lava without the use of barriers.

Flowing lava can push entities, including those that do not take lava damage.

Flow arrangement tables

Overworld and the End

			4			
		4	3	4		
	4	3	2	3	4	
4	3	2	1	2	3	4
	4	3	2	3	4	
		4	3	4		
			4			

Range		Height in blocks
1	block	1
2	blocks	0.75-1
3	blocks	0.5-0.75
4	blocks	0.25-0.5

The Nether

							8							
						8	7	8						
					8	7	6	7	8					
				8	7	6	5	6	7	8				
			8	7	6	5	4	5	6	7	8			
		8	7	6	5	4	3	4	5	6	7	8		
	8	7	6	5	4	3	2	3	4	5	6	7	8	
8	7	6	5	4	3	2	1	2	3	4	5	6	7	8
	8	7	6	5	4	3	2	3	4	5	6	7	8	
		8	7	6	5	4	3	4	5	6	7	8		
			8	7	6	5	4	5	6	7	8			
				8	7	6	5	6	7	8				
					8	7	6	7	8					
						8	7	8						
							8							

Range		Height in blocks
1	block	1
2	blocks	0.75-1
3	blocks	0.625-0.75
4	blocks	0.5-0.625
5	blocks	0.375-0.5
6	blocks	0.25-0.375
7	blocks	0.125-0.25

Lava and water

Main article: Fluid § Mixing

Water and lava can produce stone, cobblestone, or obsidian based on how they interact. Lava can also generate basalt when above soul soil and touching blue ice.

Light source

Lava blocks emit a light level of 15.

Other

An entity moving in lava has its horizontal movement speed reduced by 50% and its vertical movement speed reduced by 20%. A player cannot sprint-swim in lava.

Lava can partially or completely absorb fall damage: for each tick an entity spends inside of lava, its fall distance[1] is halved.

If there is lava flowing above a block, the lava seeps through.

Lava above a block that has a top surface that is 1+ blocks high (excluding blocks with the `impermeable` block tag) produces dripping particles on the underside of that block (unless said block has a 0 blocks high bottom surface and another block with a 1+ blocks high top surface below itself). These droplets do not do anything other than warn the player that a deluge of lava lies above that block. The particles function identically to their water counterparts, except that they drip slower.

Flowing lava can set off tripwires because it breaks placed string. Lava triggers a tripwire only once.

Any item dropped into lava is immediately destroyed, except for netherite-related items.

Lava can be placed in an empty cauldron.

If lava is above a non-transparent block supporting pointed dripstone, dripping particles are created on the end. These can fill cauldrons with lava.

Farming

Main article: Tutorial:Lava farming

Lava farms can be created by placing a lava source block on top of a solid block and placing a pointed dripstone and a cauldron underneath it.

Sounds

Java Edition

Sounds [hide]								
Sound	Closed captions	Source	Description	Identifier	Translation key	Volume	Pitch	Attenuation distance
	Lava pops	Blocks	Randomly	`block.lava.ambient`	`subtitles.block.lava.ambient`	0.2-0.4	0.9-1.05	16
	Lava hisses	Blocks	When lava mixes with water, making a block	`block.lava.extinguish`	`subtitles.block.lava.extinguish`	0.5	1.8-3.4	16
	Lava pops	Blocks	When a lava bubble particle spawns	`block.lava.pop`	`subtitles.block.lava.ambient`	0.2-0.4	0.9-1.05	16
	Bucket empties	Blocks	When lava is placed with a bucket	`item.bucket.empty_lava`	`subtitles.item.bucket.empty`	1.0	1.0	16
	Bucket fills	Players	When lava is collected with a bucket	`item.bucket.fill_lava`	`subtitles.item.bucket.fill`	1.0	1.0	16
	Fire extinguishes	Blocks	When something freezing is dunked into lava	`entity.generic.extinguish_fire`	`subtitles.entity.generic.extinguish_fire`	0.7	1.2-2.0	16

Bedrock Edition:

Sounds [hide]							
Sound	Closed captions [*upcoming: BE 26.0*]	Source	Description	Identifier	Translation key [*upcoming: BE 26.0*]	Volume	Pitch
	?	Blocks	Randomly	`liquid.lava`	?	0.4-0.6	0.9-1.05
	?	Blocks	When lava mixes with water, making a block	`random.fizz`	?	0.5	1.8-2.4
	?	Blocks	When a lava bubble particle spawns	`liquid.lavapop`	?	0.4-0.6	0.9-1.05
	?	Blocks	When lava is placed with a bucket	`bucket.empty_lava`	?	1.0	1.0
	?	Blocks	When lava is collected with a bucket	`bucket.fill_lava`	?	1.0	1.0
	?	Blocks	When something freezing is dunked into lava	`random.fizz`	?	?	?

Data values

ID

Java Edition:

Name	Identifier	Form	Block tags	Translation key [hide]
Lava	`lava`	Block	`strider_warm_blocks`	`block.minecraft.lava`

Fluid	Identifier	Fluid tags [hide]
Lava	`lava`	`lava`
Flowing Lava	`flowing_lava`	`lava`

Bedrock Edition:

Name	Identifier	Numeric ID	Form	Item ID[i 1]	Translation key [hide]
Flowing Lava	`flowing_lava`	`10`	Block & Ungiveable Item[i 2]	Identical[i 3]	`tile.flowing_lava.name`
Lava	`lava`	`11`	Block & Ungiveable Item[i 2]	Identical[i 3]	`tile.lava.name`

1. ID of block's direct item form, which is used in savegame files and addons.
2. Unavailable with `/give` command
3. The block's direct item form has the same ID as the block.

Lava spends most of its time as stationary, rather than 'flowing' – regardless of its level, or whether it contains a current downward or to the side. When specifically triggered by a block update, lava changes to 'flowing', update its level, then change back to stationary. Lava springs are generated as flowing, and lava lakes are generated as stationary.

Block states

See also: Block states

Java Edition:

Name	Default value	Allowed values	Description [hide]

level	`0`	`0`
		`1`
		`2`
		`3`
		`4`
		`5`
		`6`
		`7`
		`8`
		`9`
		`10`
		`11`
		`12`
		`13`
		`14`
		`15`
			Value 0 is used for lava source blocks. Values from 1 to 7 are reversed compared to fluidstate level values: for example, a lava block with a level 1 fluidstate will have a level 7 blockstate, a lava block with a level 2 fluidstate will have a level 6 blockstate, and so on. Value 8 matches its fluidstate counterpart. Values above 8 can only be obtained with commands. For more informations about how lava spreads, see fluid#Level.

Bedrock Edition:
Lava and flowing lava

Name	Metadata Bits	Default value	Allowed values	Values for Metadata Bits	Description [hide]
liquid_depth	0x1 0x2 0x4 0x8	0	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	If bit 0x8 is set, this fluid is "falling" and spreads only downward. At this level, the lower bits are essentially ignored, since this block is then at its highest fluid level. This level is equal to the falling lava above, equal to 8 plus the level of the non-falling lava above it. The lower three bits are the fluid block's level. 0 is the highest fluid level (not necessarily filling the block - this depends on the neighboring fluid blocks above each upper corner of the block). Data values increase as the fluid level of the block drops: 1 is the next highest, 2 lower, on through 7, the lowest fluid level. Along a line on a flat plane, lava drops one level per meter in the Nether and two everywhere else. So in the End and Overworld, only 2, 4 and 6 are used.

Fluid states

See also: Block states

Java Edition:
Lava

Name	Default value	Allowed values	Description [hide]
falling	false	true false	Always false.

Flowing lava

Name	Default value	Allowed values	Description [hide]
falling	false	false true	True for flowing lava that has other lava above itself.
level	1	1 2 3 4 5 6 7 8	Height of the lava. 8 is used when *falling* is true.

Achievements

[hide]

Icon		Achievement	In-game description	Actual requirements (if different)	Gamerscore earned	Trophy type (PS)
PS4	Other					
		Super Fuel	Power a Furnace with Lava	Smelt an item using a lava bucket on a furnace, blast furnace or smoker and pick up the resulting item from the output slot.	20	Bronze
		Stayin' Frosty	Swim in lava while having the Fire Resistance effect.	—	20	Bronze
		Feels Like Home	Take a Strider for a loooong [*sic (https://en.wikipedia.org/wiki/Sic)*] ride on a lava lake in the Overworld.	In the Overworld, use a strider to ride on a lava lake for a distance of 50 blocks from the point where the ride starts.	20	Silver

Advancements

Icon	Advancement	In-game description	Actual requirements (if different) [hide]
	Hot Stuff	Fill a Bucket with lava	Have a lava bucket in the inventory.
	Feels Like Home	Take a Strider for a loooong [*sic (https://en.wikipedia.org/wiki/Sic)*] ride on a lava lake in the Overworld	While riding a strider, travel 50 blocks on lava in the Overworld. *Only horizontal displacement is counted. Traveling in a circle for more than 50 blocks doesn't count.*

Videos

History

There is an associated page listing all historical changes related to the appearance and/or sounds associated with this block in further detail than below; see /Asset history.
There is an associated technical blocks page for the internal item form of this block; see Technical blocks/Lava.

There is an associated page detailing the algorithm used for generating this fluid's texture in legacy versions; see Procedural animated texture generation/Lava.

This section would benefit from the addition of isometric renders.
Please remove this notice once you have added suitable isometric renders to the article.
The specific instructions are:
PE unshaded lava with the old texture, used from 0.12.1 build 6 through 0.14.2

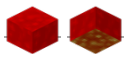
Announcement

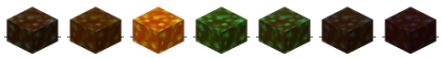
May 19, 2009	Lava is shown.
May 20, 2009 (https://web.archive.org/web/20110302004111/http://notch.tumblr.com/post/110459630/health-and-food)	Notch mentions lava damage.

Java Edition

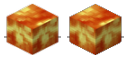
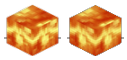
Java Edition Classic		[hide]
0.0.12a	release	 Added lava.
		The texture is transparent.
		Lava spreads by duplicating itself to open horizontal and downward squares.
		Lava is slower than water and can be easily outrun.
		Model has z-fighting with blocks below lava.
0.0.13a		 The texture has changed to be opaque.
0.0.13a_03		Lava lakes no longer generate.
0.0.15a		 The model is no longer shaded.
0.0.19a		 Added a procedural animated texture to lava. Old texture is still retained for use as a placeholder.
		Upscaled model 2% to fix z-fighting with blocks below lava, which made lava or water models overlap and z-fight with each other.
		Added lava layer to the bottom of the map.
0.0.20a_02		 Changed model scale back to normal with 1% offset on all coordinates.
0.0.22a		 Lava's generated texture has changed - it now appears brighter overall.
August 25, 2009 (https://web.archive.org/web/20090828041746/https://notch.tumblr.com/post/170887079/survival-mode-status-update-video-with-plenty-of)		Lava has been shown to deal damage.
0.24_SURVIVAL_TEST		Lava now deals damage.
0.27 SURVIVAL TEST		 UV mapping on side faces now has 11% v offset up.
0.28		 Fixed UV mapping.
Java Edition Indev		[hide]
0.31	20091223-1457	Lava is now luminous.
	20100110	Lava now sets fire to flammable materials.
	20100122-2251	Added lava spawners that spawn lava on sides and bottom.
		It appears in the player's inventory in a stack of 5.
		Lava now flows, but more slowly than water.[2]
		Dropped items now burn in lava.
		Shot arrows catch fire and not burn in lava.
	20100124-2119	Lava spawners can no longer be found in the player's inventory. Instead, a full stack (99) can be found inside the starting house chests.
	20100125	Lava now has particle effects.
	20100130	Re-added the infinite lava sea to the bottom of the map.

20100218-0011		Due to a bug, lava now only deals 1 (♥) to players who are touching it. Note this does only affect players.
20100219		 The model is shaded again.
Java Edition Infdev		[hide]
20100227-1414		Lava no longer flows due to changes in chunk handling for infinite worlds.
20100607		 UV mapping now has 1% uv offset on top and bottom faces and 1% u, 11% v offset on side faces.
20100608		 Fixed UV mapping, once again.
20100615		 The model has been changed.
		Added flowing lava.
		Lava now creates flowing lava for a total distance of 7 blocks "away" from the source block.
		Flowing lava flows in a single line toward the nearest terrain depression within four blocks.
		Buckets are added; you can now pick up lava.
20100616-1808		 Added flowing lava texture for sides and vertex offset.
		Lava and flowing lava now have visual connection to blocks.
		A large lava flow is now visible in the dark from a long distance.
		Lava now replaces air below Y=12.[*verify*]
20100617-1531		 Removed vertex offset.
		Lava now flows 3 blocks horizontally instead of 7.
		Lava and flowing lava touching water, flowing water, water spawner, or lava spawner now replaces with obsidian.
		Removed the infinite lava sea at the bottom of the map.
Java Edition Alpha		[hide]
v1.0.2_02		Flowing of lava has been tweaked.
v1.0.4		Added ice and snow, which lava can melt.
v1.0.15		Lava now sets nearby blocks on fire.
v1.2.0	**preview**	Added the Nether, which contains lava.
	?	Lava now deals 4 (♥♥) damage instead of 10 (♥♥♥♥♥) damage to entities that are in contact with it. This does not affects players, which do receive 1 (♥) damage due to a bug present since Indev.
v1.2.2		Fixed the bug above.
		Lava now flows further in the Nether.
v1.2.6		Added lava lakes, which can generate at any altitude.
Java Edition Beta		[hide]
1.8	**Pre-release**	 Changed lighting.

		When lava is touched by rain, it emits smoke particles.
		Lava now generates in the blacksmiths of the newly added villages.
Java Edition [hide]		
1.0.0	Beta 1.9 Prerelease	Added lava dripping.
		Lava blocks now form stone when falling directly onto water source blocks.
		Lava now generates in Nether fortresses.
	Beta 1.9 Prerelease 2	Entities are now set on fire for 15 seconds (300 ticks) instead of 30 seconds (600 ticks) after being directly hurt by lava.
	Beta 1.9 Prerelease 3	Lava now generates in the newly added End portal rooms of strongholds.
	Beta 1.9 Prerelease 5	Only in this version (before 22w44a), it is possible to create an infinite lava source using a plus-sign shaped arrangement of blocks with four lava source blocks flowing into a central empty block.
	RC1	 Faces on model now 0.1% moved to center to fix z-fighting on inner faces.
1.2.1	12w05a	Lava (as well as the embers that pop out of it) now makes sounds. These sounds were in the game files for a long time, but they had not played in-game.
1.3.1	12w18a	As a result of singleplayer being changed to an internal server, blocks spawned from contact between water and lava are no longer accompanied by smoke particles.
	12w21a	Lava can now be collected and dispensed by dispensers containing buckets.
	12w30a	Lava now replaces air below Y=11.
1.4.2	12w38a	Flowing lava now has a constant sound.
1.5	13w02a	 The model of lava now uses animated texture files.
		There is now "hidden lava" in the Nether.
		Lava now flows much more quickly in the Nether.
1.6.1	13w18a	Lava no longer lingers after the source is removed.
1.7.2	13w37a	Flowing lava, which previously could be destroyed by a few blocks of TNT, can no longer be destroyed by explosions.
1.10	16w21a	 Lava is now colored red (▢#ff0000) except for the bottom face.[3]
	16w21b	 Lava is no longer colored.
		Added 2 splashes referencing colored lava: "Rule #1: it's never my fault", "Replaced molten cheese with blood?".
1.11	16w39a	Lava can now generate in woodland mansions.
1.13	18w10c	 The model of lava has been changed.

	18w15a	 Lava is now biome colored except for the bottom face. This is linked to new biome coloring for water.[4]
	18w16a	 Lava is no longer biome colored.
1.14	**19w14a**	Blocks spawned from contact between water and lava are once again accompanied by smoke particles.
1.16	**20w09a**	Lava now pushes entities.
	20w13a	Added striders, which can be saddled and ridden across lava.
		When lava flows over soul soil next to blue ice, it now turns into basalt.
	20w16a	Lava now generates as part of bastion remnants and ruined portals.
	pre3	Visibility under lava is now slightly better when under the effect of Fire Resistance.
1.17	**20w45a**	Cauldrons can now be filled with lava.
	20w48a	Added a renewable way of obtaining lava through cauldrons and pointed dripstone.
	21w06a	Lava no longer replaces air below Y=11.
	21w08a	Lava now replaces air below Y=-53.
		Lava springs are able to generate below Y=0.
	21w10a	Lava now replaces air below Y=-55.
	21w11a	Lava again replaces air below Y=-53.
	21w11a	Spectator mode players can now see through lava.[5]
	21w13a	Lava is now fully renewable, as pointed dripstone can be obtained in Survival without custom generation.
	21w15a	The changes to lava generation in 21w06a and 21w08a have been reverted.
1.18	**Experimental Snapshot 1**	The changes to lava generation in the 1.17 snapshots have been reintroduced.
		Aquifers below Y=0 sometimes generate with lava instead of water.
	21w40a	Lava now replaces air below Y=-54.
1.18.2	**22w05a**	 The model of lava has been changed.
1.19.3	**22w44a**	Added game rule `lavaSourceConversion`, which allows the formation of new lava source blocks when set to `true`.

Bedrock Edition

Pocket Edition Alpha [hide]		
v0.1.0		 Added lava. It uses the internal placeholder texture, even on higher end devices where water is animated.
v0.3.3		Lava no longer creates fire, due to a game breaking spreading bug.
v0.7.0		Lava now lights flammable blocks around it on fire.
		 Lava now uses a procedurally animated texture.
v0.8.0	build 5	Lava flowing directly into water now actually spreads out over it.
v0.9.0	build 1	Underground ponds of lava can now be found, making lava much more easy to obtain.
		Lava dripping particles have been added.
		Lava now generates in village blacksmiths and stronghold End portal rooms.
v0.12.1	build 1	Players are now able to swim in lava.
		Lava now generates in the Nether.
	build 6	Lava is no longer shaded on the sides and bottom.
	build 8	Lava now cancels all fall damage.
v0.14.2		 Lava now uses a pre-made animation instead of being procedurally generated. The new texture is distinct from both the old version and the version used in Java Edition 1.5 onward.
Pocket Edition [hide]		
1.1.0	alpha 1.1.0.0	Lava now generates in woodland mansions.
Bedrock Edition [hide]		
1.9.0	beta 1.9.0.2	Cauldrons can now be filled with lava.
1.11.0	beta 1.11.0.5	 The texture for lava has been changed to match *Java Edition*.
1.16.0	beta 1.16.0.51	Lava can now push entities.
		Visibility under lava is now slightly better when under the effect of Fire Resistance.
	beta 1.16.0.57	Lava now generates as a delta that can be found in basalt deltas.
		Lava now generates as part of bastion remnants and ruined portals.
		When lava flows over soul soil next to blue ice, it now turns into basalt.
	beta 1.16.0.59	Lava can no longer push entities.
1.17.30	beta 1.17.20.22	Lava can now push entities, once again.[6]

Legacy Console Edition

Legacy Console Edition [hide]							
Xbox 360	Xbox One	PS3	PS4	PS Vita	Wii U	Switch	
TU1	CU1	1.00	1.00	1.00	Patch 1	1.0.1	Added lava.
TU2							Added a warning message when attempting to place lava near the spawn area. 
TU12							Lava (as well as the embers that pop out of it) now makes sounds.
							The texture for lava has been changed.
TU25	CU14	1.17	1.17	1.17			Lava can be used in custom superflats. It appears as a 3D block in the block selection screen of the custom superflat interface.
TU54	CU44	1.52	1.52	1.52	Patch 24	1.0.4	Lava can now generate in woodland mansions.
TU69		1.76	1.76	1.76	Patch 38		It is now possible to drown in lava to match *Bedrock Edition*. [*is this the correct version?*]
			1.88				Cauldrons can now be filled with lava.

New Nintendo 3DS Edition

New Nintendo 3DS Edition [hide]	
0.1.0	Added lava.
1.9.19	Lava can now generate in woodland mansions.

Data history

Java Edition [hide]		
1.13	17w47a	Prior to *The Flattening*, these blocks' numeral IDs were 10 and 11.

Issues

Issues relating to "Lava" are maintained on the bug tracker. Issues should be reported and viewed there (https://bugs.mojang.com/issues/?jql=project%20in%20%28MC%2C%20MCPE%29%20AND%20%28resolution%20is%20EMPTY%20OR%20resolution%20in%20%281%2C%202%2C%206%29%29%20AND%20%28summary%20~%20%22Lava%22%29%20ORDER%20BY%20resolution%20DESC).

Trivia

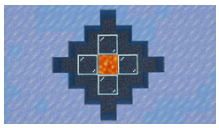
- An arrow catches fire when shot into flowing lava, but not still lava.
- Water flows into lava-occupied blocks as though it were empty space, and vice versa.
- Although lava is a fluid, it is not possible to drown in lava. This applies to all mobs. However, it is still possible to suffocate in lava. This applies to almost every mob.[*Bedrock Edition only*][7]
- If the lava texture is changed to be transparent via a resource pack, it does not become transparent.
- In *Bedrock Edition*, lava does not deactivate elytra like water does.
- Geologically, lava in the Overworld is consistent with felsic lava, and lava in the Nether is consistent with mafic lava. Felsic lava is slow, sticky, and does not run as far as mafic lava, which is relatively thin and

runny.

- In 22w44a, when the gamerule `lavaSourceConversion` was added, the title of the game rule in the "Edit Game Rules" section of the "Create World Screen" had "lava" misspelled as "lave".[8] A splash text was later added in 1.19.3-pre1 that says "Made with lave!".

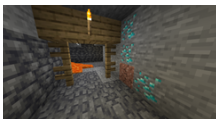
Gallery

Screenshots

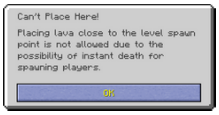


Lava's melting pattern for snow and ice.

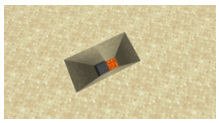
A natural lava spring near a waterfall.



A naturally-occurring stream of lava next to diamond ore.

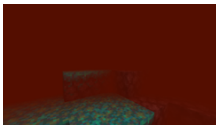


The warning in Legacy Console Edition when trying to place lava near the spawn point.



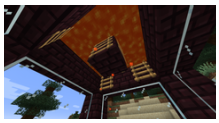
A running lava source (origin not seen) uncovered six blocks below the surface of desert terrain.

Lava fog is so dense that it even fades held items on the HUD.

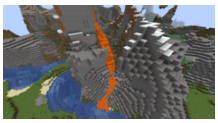


Lava fog with Fire Resistance.

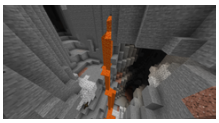
The inside view of lava with the night vision effect.



Ladders can stop lava from flowing.



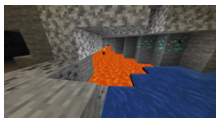
A lava spring.



Lava in a ravine.

Lava generates on bedrock.

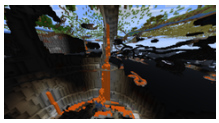
Lava being extinguished into obsidian near bedrock.



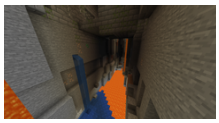
Lava pool and water pool meeting each other naturally.

Two lava springs meeting water in a windswept savanna.

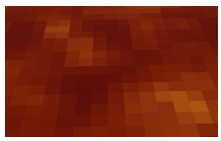
Sugar cane growing with lava flowing around it.



Tall lavafall flowing into ravine.



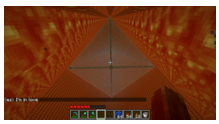
Ravine with multiple ores, water and lava falls, and stronghold bridge over it.



Lava texture in Classic 0.0.21a_01.

Lava setting fire to grass.

Mojang screenshots



Ez inside a lava pyramid.

Lava in a Nether fortress.

A village ravaged by lava.

Steve surrounded by lava.

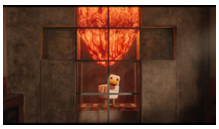
Steve surrounded by even more lava.

In other media

Lava soup in a bowl.

An officially licensed lava block moodlight.

Light up lava.



Lava in *A Minecraft Movie*.

References

1. As in the value used by the game to determine the amount of fall damage to apply to a falling entity once it lands.
2. wordofnotch:347976621
3. MC-102511
4. MC-128233
5. MC-71530 — resolved as "Fixed".
6. MCPE-75124
7. MCPE-17073
8. MC-257104

External links

- Block of the Week: Lava (https://www.minecraft.net/en-us/article/block-week-lava) – Minecraft.net on September 29, 2017
- Real-life lava on Wikipedia
- Real-life magma on Wikipedia

Navigation

Fluids [hide]

Fluids	Water Lava
Related	Bubble Column Powder Snow
Buckets	Water Lava Milk Powder Snow
Bottles	Water Potion Honey
Containers	Bucket Cauldron Glass Bottle

Blocks [hide]

Structural [show]

Ornamental [show]

Natural [hide]

Sediment/Soil	Clay Dirt (Coarse Grass Block Mycelium Podzol Rooted Dirt) Gravel Mud Nylium (Crimson Warped) Sand (Red) Soul Sand (Soil)

Misc. rock	Bedrock Magma Block Obsidian Calcite Pointed Dripstone (Block)
Ore/Mineral	Amethyst Bud (Cluster Budding Amethyst) Ancient Debris Coal Ore (Deepslate) Copper Ore (Deepslate Raw Block) Diamond Ore (Deepslate) Emerald Ore (Deepslate) Gold Ore (Deepslate Nether) Iron Ore (Deepslate Raw Block) Lapis Lazuli Ore (Deepslate) Nether Quartz Ore Redstone Ore (Deepslate)
Plant	Azalea (Flowering) Bamboo (Shoot) Beetroots Big Dripleaf (Small) Bush Cactus Carrots Cave Vines Chorus Plant (Flower) Cocoa Creaking Heart Dead Bush Fern (Large) Firefly Bush Hanging Roots Leaf Litter Leaves Lily Pad Mangrove Propagule Mangrove Roots (Muddy) Melon (Stem) Moss Block (Carpet) Pale Hanging Moss Pale Moss Block (Carpet) Potatoes Pumpkin (Carved Stem) Resin Clump Saplings Seagrass (Tall) Short Dry Grass (Tall) Short Grass (Tall) Sugar Cane Sweet Berry Bush Vines Wheat Crops (Hay Bale)
Flower	Allium Azure Bluet Blue Orchid Cactus Flower Cornflower Dandelion Eyeblossom Lilac Lily of the Valley Oxeye Daisy Peony Pink Petals Pitcher Plant (Crop) Poppy Rose Bush Spore Blossom Sunflower Torchflower (Crop) Tulips Wildflowers Wither Rose
Fungus & Related	Nether Fungi (Crimson Warped) Glow Lichen Mushrooms (Brown Red Blocks Stem) Nether Sprouts Nether Wart Wart Block (Nether Warped) Crimson Roots Warped Roots Shroomlight Twisting Vines Weeping Vines
Fauna & algae	Coral (Dead) Coral Blocks (Dead) Coral Fans (Dead) Dried Ghast Kelp (Dried Block) Sea Pickle
Fauna/Related	Bee Nest Bone Block Cobweb Dragon Egg Frogspawn Infested Blocks Sniffer Egg Turtle Egg
Sculk	Sculk Sculk Catalyst Sculk Sensor (Calibrated) Sculk Shrieker Sculk Vein
Fluid & Related	Lava Water (Bubble Column) Ice (Blue Packed) Snow (Powder Block)
Non-physical	Air (Cave[*JE only*] Void[*JE only*]) Invisible Bedrock[*BE & edu only*] Fire (Soul)
Utility	[show]
Creative or commands only	[show]
Removed	[show]
Unused	[show]
Unimplemented	[show]
Joke	[show]
Extreme metadata variants	[show]

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