

Security Assessment

# **Magic Shiba Starter**

Verified on 05/09/2023



#### **SUMMARY**

Project		CHAIN			METHODOLOG	Υ
Magic Shiba Star	ter	ETH			Manual & Auton	natic Analysis
FILES		DELIVER'	Υ		TYPE	
Single		05/09/202	3		Standard Audit	
	3	0	0	0	0	3
	J	O				3
	Total Findings Cr	itical M	1ajor	Medium	Minor	Informational
	Total i manigo	Triodi IV	iajoi	Wicalam	Willion	momational
0 Critical	0 Pending					can affect the contract al events that can risk and
					disrupt the contra	ct
0 Major	0 Pending				An exposure that	can affect the outcome ontract that can serve as
						nipulating the contract in
0 Medium	0 Pending					ould affect the outcome in
o Medium	o r chang				executing the cor situation	tract in a specific
	0 Pending					pesn't have an impact on
0 Minor					the functionality of	f the contract
3 Information	nal 3 Pending			An opening that consists information but will not risk or affect the contract		
STATUS	<b>√</b> AUDIT	DASSED				
JIAIOO	V AUDIT	FAUUED				



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### **DISCLAIMER** Magic Shiba Starter

<u>ContractWolf</u> audits and reports should not be considered as a form of project's "Advertisement" and does not cover any interaction and assessment from "Project Contract" to "External Contracts" such as PancakeSwap, UniSwap, SushiSwap or similar.

**ContractWolf** does not provide any <u>warranty</u> on its released report and should not be used as a <u>decision</u> to invest into audited projects.

**ContractWolf** provides a transparent report to all its "Clients" and to its "Clients Participants" and will not claim any guarantee of bug-free code within its **SMART CONTRACT**.

**ContractWolf**'s presence is to analyze, audit and assess the Client's Smart Contract to find any underlying risk and to eliminate any logic and flow errors within its code.

Each company or project should be liable to its security flaws and functionalities.



# SCOPE OF WORK | Magic Shiba Starter

**Magic Shiba Starter** team has agreed and provided us with the files that need to be tested (*Github, BSCscan, Etherscan, Local files etc*). The scope of audit is the main contract.

The goal of this engagement is to identify if there is a possibility of security flaws in the implementation of smart contract and its systems.

ContractWolf will be focusing on contract issues and functionalities along with the project claims from smart contract to their website, whitepaper, repository which has been provided by **Magic Shiba Starter**.



### AUDITING APPROACH Magic Shiba Starter

Every line of code along with its functionalities will undergo manual review to check for security issues, quality of logic and contract scope of inheritance. The manual review will be done by our team that will document any issues that they discovered.

#### **METHODOLOGY**

The auditing process follows a routine series of steps:

- 1. Code review that includes the following:
- Review of the specifications, sources and instructions provided to ContractWolf to make sure we understand the size, scope and functionality of the smart contract.
- Manual review of code. Our team will have a process of reading the code line-by-line with the intention of identifying potential vulnerabilities, underlying and hidden security flaws.
- 2. Testing and automated analysis that includes:
- Testing the smart contract function with common test cases and scenarios to ensure that it returns the expected results.
- 3. Best practices and ethical review. The team will review the contract with the aim to improve efficiency, effectiveness, clarifications, maintainability, security and control within the smart contract.
- 4. Recommendations to help the project take steps to eliminate or minimize threats and secure the smart contract.



# TOKEN DETAILS | Magic Shiba Starter



The launchpad for the upcoming Shibarium network. We thoroughly research new meme projects so you can safely invest!

Token Name	Symbol	Decimal	Total Supply	Chain
Magic Shiba	MSHIB	18	20,000,000,000	ETH

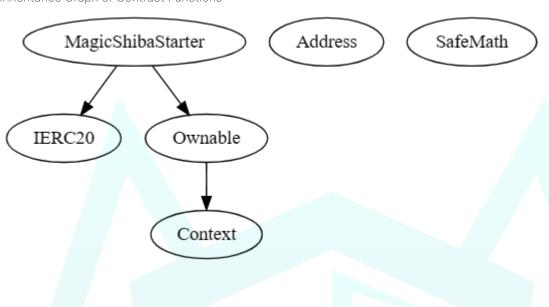
#### SOURCE

Source Sent Via local-files



### INHERITANCE GRAPH Magic Shiba Starter

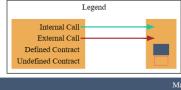
Inheritance Graph of Contract Functions

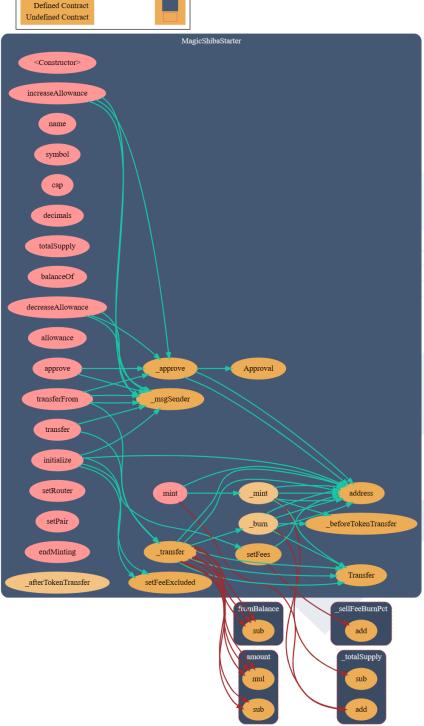




### **CALL GRAPH** Magic Shiba Starter

Call Graph of Contract Functions







# FINDINGS | Magic Shiba Starter

3	0	0	0	0	3
Total Findings	Critical	Major	Medium	Minor	Informational

This report has been prepared to state the issues and vulnerabilities for Magic Shiba Starter through this audit. The goal of this report findings is to identify specifically and fix any underlying issues and errors

ID	Title	File & Line #	Severity	Status
SWC-103	Floating Pragma is set	shibaToken.sol, L:	Informational	<ul><li>Pending</li></ul>
CW-011	Unused Code	shibaToken.sol, L: 310	Informational	<ul><li>Pending</li></ul>
CW-012	SafeMath Override	SafeMath.sol	Informational	<ul><li>Pending</li></ul>



### **SWC ATTACKS** Magic Shiba Starter

Smart Contract Weakness Classification and Test Cases

ID	Description	Status
SWC-100	Function Default Visibility	<ul> <li>Passed</li> </ul>
SWC-101	Integer Overflow and Underflow	<ul> <li>Passed</li> </ul>
SWC-102	Outdated Compiler Version	<ul> <li>Passed</li> </ul>
SWC-103	Floating Pragma	<ul> <li>Not Passed</li> </ul>
SWC-104	Unchecked Call Return Value	<ul> <li>Passed</li> </ul>
SWC-105	Unprotected Ether Withdrawal	<ul> <li>Passed</li> </ul>
SWC-106	Unprotected SELF DESTRUCT Instruction	<ul> <li>Passed</li> </ul>
SWC-107	Reentrancy	<ul> <li>Passed</li> </ul>
SWC-108	State Variable Default Visibility	<ul> <li>Passed</li> </ul>
SWC-109	Uninitialized Storage Pointer	<ul> <li>Passed</li> </ul>
SWC-110	Assert Violation	<ul> <li>Passed</li> </ul>
SWC-111	Use of Deprecated Solidity Functions	<ul> <li>Passed</li> </ul>
SWC-112	Delegatecall to Untrusted Callee	<ul> <li>Passed</li> </ul>
SWC-113	DoS with Failed Call	<ul> <li>Passed</li> </ul>
SWC-114	Transaction Order Dependence	<ul> <li>Passed</li> </ul>
SWC-115	Authorization through tx.origin	<ul> <li>Passed</li> </ul>
SWC-116	Block values as a proxy for time	<ul> <li>Passed</li> </ul>
SWC-117	Signature Malleability	<ul> <li>Passed</li> </ul>
SWC-118	Incorrect Constructor Name	<ul> <li>Passed</li> </ul>
SWC-119	Shadowing State Variables	<ul> <li>Passed</li> </ul>
SWC-120	Weak Sources of Randomness from Chain Attributes	<ul> <li>Passed</li> </ul>
SWC-121	Missing Protection against Signature Replay Attacks	<ul> <li>Passed</li> </ul>
SWC-122	Lack of Proper Signature Verification	<ul> <li>Passed</li> </ul>



ID	Description	Status
SWC-123	Requirement Violation	<ul> <li>Passed</li> </ul>
SWC-124	Write to Arbitrary Storage Location	<ul> <li>Passed</li> </ul>
SWC-125	Incorrect Inheritance Order	<ul> <li>Passed</li> </ul>
SWC-126	Insufficient Gas Griefing	<ul> <li>Passed</li> </ul>
SWC-127	Arbitrary Jump with Function Type Variable	<ul><li>Passed</li></ul>
SWC-128	DoS With Block Gas Limit	<ul><li>Passed</li></ul>
SWC-129	Typographical Error	<ul><li>Passed</li></ul>
SWC-130	Right-To-Left-Override control character(U+202E)	<ul><li>Passed</li></ul>
SWC-131	Presence of unused variables	<ul><li>Passed</li></ul>
SWC-132	Unexpected Ether balance	<ul><li>Passed</li></ul>
SWC-133	Hash Collisions With Multiple Variable Arguments	<ul><li>Passed</li></ul>
SWC-134	Message call with hardcoded gas amount	<ul><li>Passed</li></ul>
SWC-135	Code With No Effects	<ul><li>Passed</li></ul>
SWC-136	Unencrypted Private Data On-Chain	<ul> <li>Passed</li> </ul>



### **CW ASSESSMENT** Magic Shiba Starter

ContractWolf Vulnerability and Security Tests

ID	Name	Description	Status
CW-001	Multiple Version	Presence of multiple compiler version across all contracts	V
CW-002	Incorrect Access Control	Additional checks for critical logic and flow	<b>V</b>
CW-003	Payable Contract	A function to withdraw ether should exist otherwise the ether will be trapped	<b>V</b>
CW-004	Custom Modifier	major recheck for custom modifier logic	<b>V</b>
CW-005	Divide Before Multiply	Performing multiplication before division is generally better to avoid loss of precision	<b>V</b>
CW-006	Multiple Calls	Functions with multiple internal calls	<b>V</b>
CW-007	Deprecated Keywords	Use of deprecated functions/operators such as block.blockhash() for blockhash(), msg.gas for gasleft(), throw for revert(), sha3() for keccak256(), callcode() for delegatecall(), suicide() for selfdestruct(), constant for view or var for actual type name should be avoided to prevent unintended errors with newer compiler versions	<b>V</b>
CW-008	Unused Contract	Presence of an unused, unimported or uncalled contract	<b>V</b>
CW-009	Assembly Usage	Use of EVM assembly is error-prone and should be avoided or double-checked for correctness	<b>V</b>
CW-010	Similar Variable Names	Variables with similar names could be confused for each other and therefore should be avoided	V
CW-011	Commented Code	Removal of commented/unused code lines	×
CW-012	SafeMath Override	SafeMath is no longer needed starting Solidity v0.8+. The compiler now has Built in overflow checking.	×



#### FIXES & RECOMMENDATION

**SWC-103** A Floating Pragma is Set

Code

pragma solidity ^0.8.19;

The compiler version should be a fixed one to avoid undiscovered compiler bugs. Fixed version sample below

pragma solidity 0.8.19;



#### **cw-011** Unused Code

function \_afterTokenTransfer(address from, address to, uint256 amount) internal
virtual {}

The afterTokenTransfer function can be safely removed from the contract as it is currently not being utilized. Doing so will not affect the contract's functionality and can save gas costs during contract execution.



### **cw-012** | SafeMath Override

#### library SafeMath

SafeMath is no longer needed starting Solidity v0.8+. The compiler now has Built in overflow checking.



### AUDIT COMMENTS Magic Shiba Starter

Smart Contract audit comment for a non-technical perspective

- Owner can renounce and transfer ownership
- Owner can initialize contract
- Owner can change router address
- Owner can update total sell fees up to 20% and total buy fees up to 15%
- Owner can exclude/include addresses from pair
- Owner can exclude/include addresses from fees
- Owner can disable minting
- Owner can mint after initial deployment up to 20,000,000 total supply or until minting is disabled
- Owner cannot burn tokens
- Owner cannot set max transaction limit
- Owner cannot pause contract
- Owner cannot block users



# CONTRACTWOLF

**Blockchain Security - Smart Contract Audits**