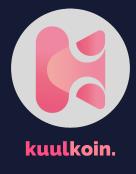
# KISHIELD

Security Audit

# **KUULKOIN Token**

April 26, 2022



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# **Audit Summary**

This report has been prepared for KUULKOIN Token on the Binance Chain network. KISHIELD provides both client-centered and user-centered examination of the smart contracts and their current status when applicable. This report represents the security assessment made to find issues and vulnerabilities on the source code along with the current liquidity and token holder statistics of the protocol.

A comprehensive examination has been performed, utilizing Cross Referencing, Static Analysis, In-House Security Tools, and line-by-line Manual Review.

The auditing process pays special attention to the following considerations:

- Ensuring contract logic meets the specifications and intentions of the client without exposing the user's funds to risk.
- Testing the smart contracts against both common and uncommon attack vectors.
- Inspecting liquidity and holders statistics to inform the current status to both users and client when applicable.
- Assessing the codebase to ensure compliance with current best practices and industry standards.
- Verifying contract functions that allow trusted and/or untrusted actors to mint, lock, pause, and transfer assets.
- Thorough line-by-line manual review of the entire codebase by industry experts.





# **Project Overview**

### **Token Summary**

Parameter	Result
Address	0xEB2eFda2cb128aD59ac548B05d90d86591047006
Name	KUULKOIN
Token Tracker	KUULKOIN (KUUL)
Decimals	18
Supply	200,000,000
Platform	Binance Chain
compiler	v0.8.11+commit.d7f03943
Optimization	Yes with 200 runs
LicenseType	MIT
Language	Solidity
Codebase	https://bscscan.com/ address/0xEB2eFda2cb128aD59ac548B05d90d86591047006
Url	https://kuulkoin.kekuul.com/?lang=en

#### **Main Contract Assessed**

Name	Contract	Live
KUULKOIN	0xEB2eFda2cb128aD59ac548B05d90d86591047006	Yes





# **Smart Contract Vulnerability Checks**

Vulnerability	Automatic Scan	Manual Scan	Result
Unencrypted Private Data On-Chain	Complete	Complete	✓ Low / No Risk
Code With No Effects	Complete	Complete	✓ Low / No Risk
Message call with hardcoded gas amount	Complete	Complete	✓ Low / No Risk
Hash Collisions With Multiple Variable Length Arguments	Complete	Complete	✓ Low / No Risk
Unexpected Ether balance	Complete	Complete	✓ Low / No Risk
Presence of unused variables	Complete	Complete	✓ Low / No Risk
Right-To-Left-Override control character (U+202E)	Complete	Complete	<b>⊘</b> Low / No Risk
Typographical Error	Complete	Complete	✓ Low / No Risk
DoS With Block Gas Limit	Complete	Complete	✓ Low / No Risk
Arbitrary Jump with Function Type Variable	Complete	Complete	✓ Low / No Risk
Insufficient Gas Griefing	Complete	Complete	✓ Low / No Risk
Incorrect Inheritance Order	Complete	Complete	✓ Low / No Risk
Write to Arbitrary Storage Location	Complete	Complete	✓ Low / No Risk
Requirement Violation	Complete	Complete	✓ Low / No Risk
Missing Protection against Signature Replay Attacks	Complete	Complete	<b>⊘</b> Low / No Risk
Weak Sources of Randomness from Chain Attributes	Complete	Complete	✓ Low / No Risk





Vulnerability	Automatic Scan	Manual Scan	Result
Authorization through tx.origin	Complete	Complete	✓ Low / No Risk
Delegatecall to Untrusted Callee	Complete	Complete	✓ Low / No Risk
Use of Deprecated Solidity Functions	Complete	Complete	✓ Low / No Risk
Assert Violation	Complete	Complete	✓ Low / No Risk
Reentrancy	Complete	Complete	✓ Low / No Risk
Unprotected SELFDESTRUCT Instruction	Complete	Complete	✓ Low / No Risk
Unprotected Ether Withdrawal	Complete	Complete	✓ Low / No Risk
Unchecked Call Return Value	Complete	Complete	✓ Low / No Risk
Outdated Compiler Version	Complete	Complete	✓ Low / No Risk
Integer Overflow and Underflow	Complete	Complete	✓ Low / No Risk
Function Default Visibility	Complete	Complete	✓ Low / No Risk

# **Contract Ownership**

The contract ownership of KUULKOIN is not currently renounced. The ownership of the contract grants special powers to the protocol creators, making them the sole addresses that can call sensible ownable functions that may alter the state of the protocol.

The current owner is the address 0x28d4dCE25eed750bd809B4a97F6bC35074a6Bf5c which can be viewed from:

#### **HERE**

The owner wallet has the power to call the functions displayed on the priviliged functions chart below, if the owner wallet is compromised this privileges could be exploited.

We recommend the team to renounce ownership at the right timing if possible, or gradually migrate to a timelock with governing functionalities in respect of transparency and safety considerations.





### **Important Notes To The Users:**

- There is a mint function.
- There is pausable function.
- There is no transfer fees.
- There is no max tx amount.
- Once the owner renounces ownership of the contract, none of the following are applicable.
- The owner CAN MINT TOKENS.
- The owner CAN STOP Trading.
- The owner can BLACKLIST ADDRESSES.
- High-risk Exploits/Vulnerabilities Were Found in token Source Code.

## **Audit Not Passed**





# **Findings Summary**

### Classification of Issues

Severity	Description
High	Exploits, vulnerabilities or errors that will certainly or probabilistically lead towards loss of funds, control, or impairment of the contract and its functions. Issues under this classification are recommended to be fixed with utmost urgency
Medium	Bugs or issues with that may be subject to exploit, though their impact is somewhat limited. Issues under this classification are recommended to be fixed as soon as possible.
Low	Effects are minimal in isolation and do not pose a significant danger to the project or its users. Issues under this classification are recommended to be fixed nonetheless.
Info	Consistency, syntax or style best practices. Generally pose a negligible level of risk, if any.

### **Findings**

Severity	Found
High	1
<ul><li>Medium</li></ul>	0
Low	0
Info	3
Total	4





# **Findings**

#### **Hidden Mint**

ID	Severity	Contract	Function
01	High	KUULKOIN	Function recoverBEP20()

#### **Description**

Owner can mint as many tokens as they like. Given that this is a token contract and not a staking or farm contract this is considered a High-risk Vulnerability for the users.

#### Recommendation

Delete the hidden mint function.

#### Variables could be declared as constant

ID	Severity	Contract	Function
02	Informational	KUULKOIN	variables name, symbol, decimalss

#### **Description**

Gas Optimization. Variables that are never changed could be declared as constant.

#### Recommendation

We recommend declaring those variables as constant.





#### Public function that could be declared external

ID	Severity	Contract	Function
03	<ul><li>Informational</li></ul>	KUULKOIN	Functions burn, recoverBEP20, blackListAddress

#### **Description**

Gas Optimization. Public function that could be declared external

#### Recommendation

Public functions that are never called by the contract should be declared external to save gas.

### **Assigment with no effects**

ID	Severity	Contract	Function
04	Informational	KUULKOIN	bool public isOpen

#### Description

Bools variables in solidity are set to false by default.

#### Recommendation

We recommend deleting the initilization of the boolean variable to false





# Priviliged Functions (onlyOwner)

Function Name	Parameters	Visibility
transferOwnership	address newOwner	public
pause		public
unpause		public
blackListAddress	address listAddress, bool isBlackListed	public
recoverBEP20	address account, uint256 amount	public





# **Statistics**

### **Liquidity Info**

Parameter	Result
Pair Address	
KUUL Reserves	0.00 KUUL
BNB Reserves	0.00 BNB
Liquidity Value	\$0 USD

### Token (KUUL) Holders Info

Parameter	Result
KUUL Percentage Burnt	0.00%
KUUL Amount Burnt	0 KUUL
Top 10 Percentage Own	100.00%
Top 10 Amount Owned	200,000,000 KUUL
Top 10 Aprox Value	\$NaN USD





#### LP (KUUL/BNB) Holders Info

Parameter	Result
KUUL/BNB % Burnt	0.00%
KUUL/BNB Amount Burnt	0 KUUL
Top 10 Percentage Owned	0.00%
Top 10 Amount Owned	0 KUUL
Locked Tokens Percentage	0.00%
Locked Tokens Amount	0 KUUL

<sup>\*</sup> All the data diplayed above was taken on-chain at block 17293685

### **Liquidity Ownership**

The token does not have liquidity at the moment of the audit, block 17293685







<sup>\*</sup> The tokens on industry-standard burn wallets are not included on the top 10 wallets calculations

#### **Disclaimer**

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