

KISHIELD

Security Audit

Cycling Token

April 27, 2022





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Audit Summary

This report has been prepared for CyclingToken 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	0xd1a130e94E2eECF4eDe9f6674F313E4942123e22
Name	CyclingToken
Token Tracker	CyclingToken (CYC)
Decimals	18
Supply	50,000,000
Platform	Binance Chain
compiler	v0.8.7+commit.e28d00a7
Optimization	Yes with 200 runs
LicenseType	None
Language	Solidity
Codebase	https://bscscan.com/ address/0xd1a130e94E2eECF4eDe9f6674F313E4942123e22
Url	https://www.cycling.finance/

Main Contract Assessed

Name	Contract	Live
CyclingToken	0xd1a130e94E2eECF4eDe9f6674F313E4942123e22	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	✓ 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	✓ 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 CyclingToken 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 0xba0855BFe04440fFee8752A2d3c9f93B5b429171 which can be viewed from:
[HERE](#)

The owner wallet has the power to call the functions displayed on the privileged 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:

- The owner cannot mint tokens after initial deployment.
- The owner cannot stop Trading.
- The owner cannot change the fees amounts.
- There is not a max tx amount restriction.
- There is not a max wallet size restriction.
- There is selling cooldown of ~15 seconds after a sell.
- Once the owner renounces ownership of the contract, none of the following are applicable.
- The owner can add/remove addresses from fees.
- The owner can change the selling cooldown with no restrictions.
- If the owner sets the selling cooldown to a high value users nor owner will not be able to sell.

Audit 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	0
● Medium	1
● Low	0
● Info	3
Total	4

Findings

Error on selling cooldown setter

ID	Severity	Contract	Function
01	● Medium	CyclingToken	Function setCooldownForTrades()

Description

If the owner sets the selling cooldown to a high value users nor owner will not be able to sell.

Recommendation

Add a require statement to limit the cooldown time to a reasonable time.

Code with no effects

ID	Severity	Contract	Function
02	● Informational	CyclingToken	isBlacklist mapping

Description

Mapping is used by the transfer function in the contract, but there is no initialization nor a function to add wallets/contracts to the blacklist.

Recommendation

We recommend deleting or creating a onlyOwner function to add contracts to the blacklist.

Unused Private Function

ID	Severity	Contract	Function
03	Informational	CyclingToken	functions _burn()

Description

These functions are private but never used by the contract logic.

Recommendation

We recommend deleting this function or setting the visibility to external if they are meant to be used.

Boolean equality

ID	Severity	Contract	Function
04	Informational	CyclingToken	Function _transfer()

Description

Statement 'liquidityPool[sender] == true' Boolean constants can be used directly and do not need to be compared to true or false.

Recommendation

Remove the equality to the boolean constant. In case of comparing to false make use of '! bool'

Privileged Functions (onlyOwner)

Function Name	Parameters	Visibility
renounceOwnership	none	public
transferOwnership	address newOwner	public
setCooldownForTrades	uint8 _tradeCooldown	external
setLiquidityPoolStatus	address _lpAddress, bool _status	external
setMarketingPool	address _marketingPool	external
setWhitelist	address _address, bool _status	external

Statistics

Liquidity Info

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

Token (CYC) Holders Info

Parameter	Result
CYC Percentage Burnt	0.00%
CYC Amount Burnt	0 CYC
Top 10 Percentage Own	100.00%
Top 10 Amount Owned	50,000,000 CYC
Top 10 Aprox Value	\$NaN USD

LP (CYC/BNB) Holders Info

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

* All the data displayed above was taken on-chain at block 17323324

* The tokens on industry-standard burn wallets are not included on the top 10 wallets calculations

Liquidity Ownership

The token does not have liquidity at the moment of the audit, block 17323324

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Disclaimer

KISHIELD has conducted an independent audit to verify the integrity of and highlight any vulnerabilities or errors, intentional or unintentional, that may be present in the codes that were provided for the scope of this audit. This audit report does not constitute agreement, acceptance or advocacy for the Project that was audited, and users relying on this audit report should not consider this as having any merit for financial advice in any shape, form or nature. The contracts audited do not account for any economic developments that may be pursued by the Project in question, and that the veracity of the findings thus presented in this report relate solely to the proficiency, competence, aptitude and discretion of our independent auditors, who make no guarantees nor assurance that the contracts are completely free of exploits, bugs, vulnerabilities or deprecation of technologies.

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