

# KISHIELD

Security Audit

**Oxfinance Token**

April 16, 2022





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# Audit Summary

This report has been prepared for Oxfinance 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	0x93C169b9A0Bf3478c9912d45228093EA339c00a3
Name	Oxfinance
Token Tracker	Oxfinance (OXFI)
Decimals	18
Supply	1,000,000
Platform	Binance Chain
compiler	v0.8.8+commit.dddeac2f
Optimization	Yes with 200 runs
LicenseType	UNLICENSED
Language	Solidity
Codebase	<a href="https://bscscan.com/address/0x93C169b9A0Bf3478c9912d45228093EA339c00a3">https://bscscan.com/ address/0x93C169b9A0Bf3478c9912d45228093EA339c00a3</a>
Url	<a href="https://oxfi.app/">https://oxfi.app/</a>

## Main Contract Assessed

Name	Contract	Live
Oxfinance	0x93C169b9A0Bf3478c9912d45228093EA339c00a3	Yes
OXFIvault	0xe90fc6fc5e8ae202d6a241338f192f182631368e	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 Oxfinance 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 0xe67d07170fe31aa31c8304f5ebcea8cb209309d6 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:

KISHIELD has created, tested, and deployed this protocol. Our goal is to bring security and trust to the project. We are certain that the contracts are secure and the logic has been properly tested. Still, we have no control over the token liquidity and the BUSD in the vault can be withdraw by the owner 30 days after deployment. We ask users to keep this is mind.

- The owner cannot mint tokens after intial deployment.
- The owner cannot stop Trading.
- The owner cannot set the fees over 10%.
- Users can exchange their tokens for BUSD in the vault at any time. Tokens exchanged to BUSD are destroyed.
- Buy taxes: 7% is converted to BUSD and deposited into the vault, 3% is sent to the marketing wallet. Sell taxes: 5% is added to liquidity, 5% is destroyed.
- The owner can change the max tx amount but it has to be at least 1% of the original supply (10,000 tokens).
- Once the owner renounces ownership of the contract, none of the following are applicable.
- The owner can add/remove addresses from fees and tx limits.
- The owner can enable/disable the auto liquidity and vault deposit mechanisms.
- No high-risk Exploits/Vulnerabilities Were Found in token Source Code.

## 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	0
● Low	0
● Info	0
Total	0



## Privileged Functions (onlyOwner)

Function Name	Parameters	Visibility
setIsFeeExempt	address holder, bool exempt	external
setIsTxLimitExempt	address holder, bool exempt	external
setBuyFeePercent	uint256 _vaultFee, uint256 _marketFee	external
setSellFeePercent	uint256 _destroyFee, uint256 _liquidityFee	external
setFeeReceivers	address _autoLiquidityReceiver, address _marketingFeeReceiver	external
setSwapBackSettings	bool _enabled, uint256 _amount	external
setTxLimit	uint256 amount	external

# Statistics

## Liquidity Info

Parameter	Result
Pair Address	0x64882551a281cc1be6c2d87d6f6ff14f921936f1
OXFI Reserves	0.00 OXFI
BNB Reserves	0.00 BNB
Liquidity Value	\$0 USD

## Token (OXFI) Holders Info

Parameter	Result
OXFI Percentage Burnt	0.00%
OXFI Amount Burnt	0 OXFI
Top 10 Percentage Own	100.00%
Top 10 Amount Owned	1,000,000 OXFI
Top 10 Aprox Value	\$NaN USD

## LP (OXFI/BNB) Holders Info

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

\* All the data displayed above was taken on-chain at block 16976796

\* 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 16976796

# KISHIELD



## 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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