



# **Smart Contract Security Audit**

<u>TechRate</u> December, 2021

### **Audit Details**



**Audited project** 

Realliq



Deployer address

0x720bf57c84b79ec000b2bf95ab02cf6218efba3c



**Client contacts:** 

Realliq team



Blockchain

**Binance Smart Chain** 



Project website:



### **Disclaimer**

This is a limited report on our findings based on our analysis, in accordance with good industry practice as at the date of this report, in relation to cybersecurity vulnerabilities and issues in the framework and algorithms based on smart contracts, the details of which are set out in this report. In order to get a full view of our analysis, it is crucial for you to read the full report. While we have done our best in conducting our analysis and producing this report, it is important to note that you should not rely on this report and cannot claim against us on the basis of what it says or doesn't say, or how we produced it, and it is important for you to conduct your own independent investigations before making any decisions. We go into more detail on this in the below disclaimer below – please make sure to read it in full.

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The analysis of the security is purely based on the smart contracts alone. No applications or operations were reviewed for security. No product code has been reviewed.

### **Background**

TechRate was commissioned by Realliq to perform an audit of smart contracts:

https://bscscan.com/address/0x19bB77FD24fc09Dd0C3E8Ea8b3781172479791E4#code

The purpose of the audit was to achieve the following:

- Ensure that the smart contract functions as intended.
- Identify potential security issues with the smart contract.

The information in this report should be used to understand the risk exposure of the smart contract, and as a guide to improve the security posture of the smart contract by remediating the issues that were identified.

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# **Contracts Details**

#### Token contract details for 17.12.2021

Contract name	Realliq
Contract address	0x19bB77FD24fc09Dd0C3E8Ea8b3781172479791E4
Total supply	100,000,000
Token ticker	RLQ
Decimals	9
Token holders	2
Transactions count	2
Top 100 holders dominance	100.00%
Staking reward fee	5
tax fee	0
md fee	3
Contract deployer address	0x720bf57c84b79ec000b2bf95ab02cf6218efba3c
Contract's current owner address	0x720bf57c84b79ec000b2bf95ab02cf6218efba3c

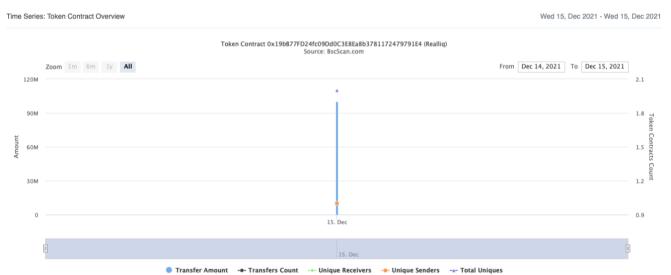
## **Realliq Token Distribution**





(A total of 100,000,000.00 tokens held by the top 100 accounts from the total supply of 100,000,000.00 token)

# Realliq Contract Interaction Details



# Realliq Top 10 Token Holders

Rank	Address	Quantity (Token)	Percentage
1		91,886,232.312	91.8862%
2	0x720bf57c84b79ec000b2bf95ab02cf6218efba3c	8,113,767.688	8.1138%



### **Contract functions details**

#### + [Int] IERC20 - [Ext] totalSupply - [Ext] balanceOf - [Ext] transfer # - [Ext] allowance - [Ext] approve # - [Ext] transferFrom # + [Lib] SafeMath - [Int] tryAdd - [Int] trySub - [Int] tryMul - [Int] tryDiv - [Int] tryMod - [Int] add - [Int] sub - [Int] mul - [Int] div - [Int] mod - [Int] sub - [Int] div - [Int] mod + Context - [Int] \_msgSender - [Int] \_msgData + [Lib] Address - [Int] isContract - [Int] sendValue # - [Int] functionCall # - [Int] functionCall # - [Int] functionCallWithValue # - [Int] functionCallWithValue # - [Int] functionStaticCall - [Int] functionStaticCall - [Int] functionDelegateCall # - [Int] functionDelegateCall # - [Prv] verifyCallResult + Ownable (Context) - [Pub] <Constructor># - [Pub] owner - [Pub] renounceOwnership # - modifiers: onlyOwner - [Pub] transferOwnership # - modifiers: onlyOwner

- + Realliq (Context, IERC20, Ownable)
  - [Pub] <Constructor>#
  - [Pub] name

```
- [Pub] symbol
- [Pub] decimals
- [Pub] totalSupply
- [Pub] balanceOf
- [Pub] transfer #
- [Pub] allowance
- [Pub] approve #
- [Pub] transferFrom #
- [Pub] increaseAllowance #
- [Pub] decreaseAllowance #
- [Pub] deliver #
- [Prv] tokenFromReflection
- [Prv] _transferBothExcluded #
- [Pub] excludeFromFee #
 - modifiers: onlyOwner
- [Pub] includeInFee #
 - modifiers: onlyOwner
- [Ext] setTaxFeePercent #
 - modifiers: onlyOwner
- [Ext] setRndFeePercent#
 - modifiers: onlyOwner
- [Ext] setStakingrewardFeePercent #
 - modifiers: onlvOwner
- [Prv] _reflectFee #
- [Prv] getValues
- [Prv] _getTValues
- [Prv] getRValues
- [Prv] _getRate
- [Prv] getCurrentSupply
- [Prv] takeRnd#
- [Prv] takeStakingreward #
- [Prv] calculateTaxFee
- [Prv] calculateRndFee
- [Prv] calculateStakingrewardFee
- [Prv] removeAllFee #
- [Prv] restoreAllFee #
- [Pub] isExcludedFromFee
- [Prv] approve #
- [Prv] _transfer #
- [Prv] tokenTransfer #
- [Prv] _transferStandard #
```

(\$) = payable function # = non-constant function

- [Prv] \_transferToExcluded #- [Prv] \_transferFromExcluded #

# **Issues Checking Status**

Issue description	Checking status
1. Compiler errors.	Passed
2. Race conditions and Reentrancy. Cross-function race conditions.	Passed
3. Possible delays in data delivery.	Passed
4. Oracle calls.	Passed
5. Front running.	Passed
6. Timestamp dependence.	Passed
7. Integer Overflow and Underflow.	Passed
8. DoS with Revert.	Passed
9. DoS with block gas limit.	Passed
10. Methods execution permissions.	Passed
11. Economy model of the contract.	Passed
12. The impact of the exchange rate on the logic.	Passed
13. Private user data leaks.	Passed
14. Malicious Event log.	Passed
15. Scoping and Declarations.	Passed
16. Uninitialized storage pointers.	Passed
17. Arithmetic accuracy.	Passed
18. Design Logic.	Passed
19. Cross-function race conditions.	Passed
20. Safe Open Zeppelin contracts implementation and usage.	Passed
21. Fallback function security.	Passed

#### **Security Issues**

No high severity issues found.

**⊘** Medium Severity Issues

No medium severity issues found.

**⊘** Low Severity Issues

No low severity issues found.

# Owner privileges (In the period when the owner is not renounced)

- Owner can change the tax, rnd and staking reward fees.
- Owner can exclude from the fee.

#### Conclusion

Smart contracts do not contain high severity issues! Liquidity pair contract's security is not checked due to out of scope.

Liquidity locking details provided by the team: https://www.pinksale.finance/#/pinklock/detail/0x8851e23156fbDdc 584C7899Ad4921D19c45a3596?chain=BSC

#### TechRate note:

Please check the disclaimer above and note, the audit makes no statements or warranties on business model, investment attractiveness or code sustainability. The report is provided for the only contract mentioned in the report and does not include any other potential contracts deployed by Owner.

