# TECH • RATE

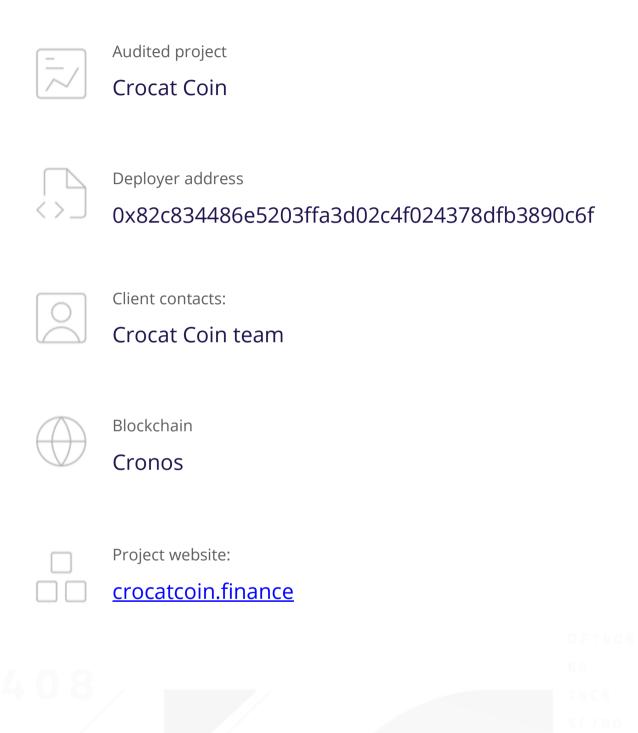
## SMART CONTRACTS SECURITY **AUDIT REPORT**







## **Audit Details**





#### 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 Crocat Coin to perform an audit of smart contracts:

https://cronoscan.com/address/0x06cd480179e3725aed98a6e26fe4362954e67961#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.



## **C**ontracts Details

#### **Token contract details for 03.04.2022**

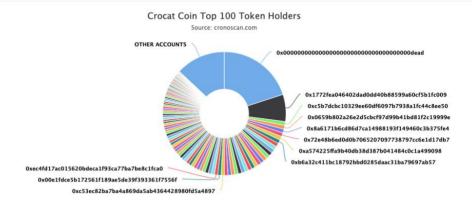
Contract name	Crocat Coin
Contract address	0x06Cd480179e3725AEd98a6E26fE4362954e67961
Total supply	1,000,000,000
Token ticker	CROCAT
Decimals	9
Token holders	562
Transactions count	6,113
Top 100 holders dominance	86.98%
Launched at	2121010
Total fee	7
Total sell fee	8
pair	0x1772fea046402dad0dd40b88599a60cf5b1fc009
Contract deployer address	0x82c834486e5203ffa3d02c4f024378dfb3890c6f
Owner address	0x82c834486e5203ffa3d02c4f024378dfb3890c6f



#### **Crocat Coin Token Distribution**

The top 100 holders collectively own 86.98% (869,760,662.52 Tokens) of Crocat Coin

○ Token Total Supply: 1,000,000,000.00 Token | Total Token Holders: 562



(A total of 869,760,662.52 tokens held by the top 100 accounts from the total supply of 1,000,000,000.00 token)

## Crocat Coin Top 10 Token Holders

Rank	Address	Quantity (Token)	Percentage
1	0x000000000000000000000000000000000000	200,000,000	20.0000%
2	ⓐ 0x1772fea046402dad0dd40b88599a60cf5b1fc009	70,887,482.127822179	7.0887%
3	0xc5b7dcbc10329ee60df6097b7938a1fc44c8ee50	9,999,239.055316036	0.9999%
4	0x0659b802a26e2d5cbcf97d99b41bd81f2c19999e	9,997,168.493564027	0.9997%
5	0x8a6171b6cd86d7ca14988193f149460c3b375fe4	9,978,143.278202538	0.9978%
6	0x72e48b6ed0d0b7065207097738797cc6e1d17db7	9,928,692.701574632	0.9929%
7	0xa574225ffa9b40db38d387b041484c0c1a499098	9,830,894.907135378	0.9831%
8	0xb6a32c411bc18792bbd0285daac31ba79697ab57	9,771,727.661884343	0.9772%
9	0x089959c182fe68906aca31c8988acb8ea41426d1	9,766,372.640240261	0.9766%
10	0x37196f50f6fc2166a836c8d6b5404af806722748	9,766,217.734828786	0.9766%

### Crocat Coin LP Token Holders

Rank	Address	Quantity	Percentage
1		63.245553203367585639	86.8789%
2	0xdd6e8e65d1d83b491cf922f49565b9a60d431b12	8.977224928464654301	12.3318%
3		0.574584327130570509	0.7893%
4	0x000000000000000000000000000000000000	0.000000000000001	0.0000%



#### **Contract functions details**

#### + [Lib] SafeMath

- [Int] add
- [Int] sub
- [Int] sub
- [Int] mul
- [Int] div
- [Int] div

#### + [Int] IBEP20

- [Ext] totalSupply
- [Ext] decimals
- [Ext] symbol
- [Ext] name
- [Ext] getOwner
- [Ext] balanceOf
- [Ext] transfer #
- [Ext] allowance
- [Ext] approve #
- [Ext] transferFrom #

#### + Auth

- [Pub] <Constructor> #
- [Pub] authorize #
- modifiers: onlyOwner
- [Pub] unauthorize #
  - modifiers: onlyOwner
- [Pub] isOwner
- [Pub] isAuthorized
- [Pub] transferOwnership #
  - modifiers: onlyOwner

#### + [Int] IDEXFactory

- [Ext] createPair #
- + [Int] IDEXRouter
  - [Ext] factory
  - [Ext] WETH
  - [Ext] addLiquidity #
  - [Ext] addLiquidityETH (\$)
  - [Ext] swapExactTokensForTokensSupportingFeeOnTransferTokens #
  - [Ext] swapExactETHForTokensSupportingFeeOnTransferTokens (\$)

- [Ext] swapExactTokensForETHSupportingFeeOnTransferTokens #
- + CROCATCOIN (IBEP20, Auth)
  - [Pub] <Constructor> #
    - modifiers: Auth
  - [Ext] <Fallback> (\$)
  - [Ext] totalSupply
  - [Ext] decimals
  - [Ext] symbol
  - [Ext] name
  - [Ext] getOwner
  - [Pub] balanceOf
  - [Ext] allowance
  - [Pub] approve #
  - [Ext] approveMax #
  - [Ext] transfer #
  - [Ext] transferFrom #
  - [Int] transferFrom #
  - [Int] basicTransfer #
  - [Int] checkTxLimit
  - [Int] shouldTakeFee
  - [Pub] getTotalFee
  - [Int] takeFee #
  - [Int] shouldSwapBack
  - [Int] swapBack #
    - modifiers: swapping
  - [Int] buyTokens #
    - modifiers: swapping
  - [Int] launched
  - [Int] launch #
  - [Ext] setTxLimit #
    - modifiers: authorized
  - [Ext] setMaxWallet #
    - modifiers: onlyOwner
  - [Ext] setIsFeeExempt #
    - modifiers: authorized
  - [Ext] setIsTxLimitExempt #
    - modifiers: authorized
  - [Ext] setFees #
    - modifiers: authorized
  - [Ext] setFeeReceiver #
    - modifiers: authorized
  - [Ext] setSwapBackSettings #
    - modifiers: authorized
  - [Ext] manualSend #

- modifiers: authorized
- [Pub] transferForeignToken #
  - modifiers: authorized
- [Pub] getCirculatingSupply
- [Pub] getLiquidityBacking
- [Pub] isOverLiquified
- (\$) = payable function
- # = non-constant function

# **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 C780
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.
- - No low severity issues found.



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

- Owner can change \_maxWalletSize.
- Owner can change \_maxTxAmount.
- Authorized addresses can include in and exclude from fee and transaction amount.
- Authorized addresses can change fees.
- Authorized addresses can change fee receivers.
- Authorized addresses can change swap threshold and disable/enable swap.
- Authorized addresses can withdraw BEP20 and native tokens to marketing address.

#### Conclusion

Smart contracts do not contain high severity issues! Liquidity pair contract's security is not checked due to out of scope. The further transfers and operations with the funds raise are not related to this particular contract.

Liquidity locking details are provided by the team:
<a href="https://www.team.finance/view-coin/0x06Cd480179e3725AEd98a6E26fE4362954e67961?name=Crocat%20Coin&symbol=CROCAT">https://www.team.finance/view-coin/0x06Cd480179e3725AEd98a6E26fE4362954e67961?name=Crocat%20Coin&symbol=CROCAT</a>

#### 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.