



# MiL.k

## Security Assessment

CertiK Assessed on Mar 5th, 2025





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**MiL.k**

The security assessment was prepared by Certik, the leader in Web3.0 security.

## Executive Summary

**TYPES**  
ERC-20**ECOSYSTEM**  
Ethereum (ETH)**METHODS**  
Manual Review, Static Analysis**LANGUAGE**  
Solidity**TIMELINE**  
Delivered on 03/05/2025**KEY COMPONENTS**  
N/A**CODEBASE**  
[base](#)  
View All in Codebase Page**COMMITTS**  
[641aebef6a019aa62a379007d10aa5a2e588009d](#)  
View All in Codebase Page

## Highlighted Centralization Risks

Initial owner token share is 100%

## Vulnerability Summary

**1**

Total Findings

**0**

Resolved

**1**

Mitigated

**0**

Partially Resolved

**0**

Acknowledged

**0**

Declined

**0** Critical

Critical risks are those that impact the safe functioning of a platform and must be addressed before launch. Users should not invest in any project with outstanding critical risks.

**1** Major

1 Mitigated



Major risks can include centralization issues and logical errors. Under specific circumstances, these major risks can lead to loss of funds and/or control of the project.

**0** Medium

Medium risks may not pose a direct risk to users' funds, but they can affect the overall functioning of a platform.

**0** Minor

Minor risks can be any of the above, but on a smaller scale. They generally do not compromise the overall integrity of the project, but they may be less efficient than other solutions.

**0** Informational

Informational errors are often recommendations to improve the style of the code or certain operations to fall within industry best practices. They usually do not affect the overall functioning of the code.

# TABLE OF CONTENTS | MiL.k

## **I Summary**

Executive Summary

Vulnerability Summary

Codebase

Audit Scope

Approach & Methods

## **I Findings**

TOK-01 : Initial Token Distribution

## **I Appendix**

## **I Disclaimer**

# CODEBASE | MiL.k

## Repository


base

## Commit

641aebef6a019aa62a379007d10aa5a2e588009d

# AUDIT SCOPE | MiL.k

1 file audited ● 1 file with Mitigated findings

ID	Repo	File	SHA256 Checksum
● TOK	key-inside/milk-contracts	 src/Token.sol	800604ab84e9520a1b4165af80b155f500cd8 4fd76477171b6fe876e356fc3a5

## APPROACH & METHODS | MiL.k

This report has been prepared for MiL.k to discover issues and vulnerabilities in the source code of the MiL.k project as well as any contract dependencies that were not part of an officially recognized library. A comprehensive examination has been performed, utilizing Manual Review and Static Analysis techniques.

The auditing process pays special attention to the following considerations:

- Testing the smart contracts against both common and uncommon attack vectors.
- Assessing the codebase to ensure compliance with current best practices and industry standards.
- Ensuring contract logic meets the specifications and intentions of the client.
- Cross referencing contract structure and implementation against similar smart contracts produced by industry leaders.
- Thorough line-by-line manual review of the entire codebase by industry experts.

The security assessment resulted in findings that ranged from critical to informational. We recommend addressing these findings to ensure a high level of security standards and industry practices. We suggest recommendations that could better serve the project from the security perspective:

- Testing the smart contracts against both common and uncommon attack vectors;
- Enhance general coding practices for better structures of source codes;
- Add enough unit tests to cover the possible use cases;
- Provide more comments per each function for readability, especially contracts that are verified in public;
- Provide more transparency on privileged activities once the protocol is live.

# FINDINGS

 | MiL.k**1**

Total Findings

**0**

Critical

**1**

Major

**0**

Medium

**0**

Minor

**0**

Informational

This report has been prepared to discover issues and vulnerabilities for MiL.k. Through this audit, we have uncovered 1 issues ranging from different severity levels. Utilizing the techniques of Manual Review & Static Analysis to complement rigorous manual code reviews, we discovered the following findings:

ID	Title	Category	Severity	Status
TOK-01	Initial Token Distribution	Centralization	Major	● Mitigated

## TOK-01 | INITIAL TOKEN DISTRIBUTION

Category	Severity	Location	Status
Centralization	● Major	src/Token.sol: <u>12~13</u>	● Mitigated

### Description

All of the MLK and LZM tokens are sent to the contract deployer or one or several externally-owned account (EOA) addresses. This is a centralization risk because the deployer or the owner(s) of the EOAs can distribute tokens without obtaining the consensus of the community. Any compromise to these addresses may allow a hacker to steal and sell tokens on the market, resulting in severe damage to the project.

### Recommendation

It is recommended that the team be transparent regarding the initial token distribution process. The token distribution plan should be published in a public location that the community can access. The team should make efforts to restrict access to the private keys of the deployer account or EOAs. A multi-signature (2/3, 3/5) wallet can be used to prevent a single point of failure due to a private key compromise. Additionally, the team can lock up a portion of tokens, release them with a vesting schedule for long-term success, and deanonymize the project team with a third-party KYC provider to create greater accountability.

### Alleviation

[Milk Alliance Token Team 12 Feb 2025]: MLK and LZM are not the newly issued tokens which are already listed in global well known exchanges. The token distribution plan including lock-up plans of MLK and LZM have been thoroughly managed and verified by global CEXs. Besides, the tokenomics of both tokens are published to the public through the whitepaper and also, the current circulating supply is always shared through the official website of the foundation (<https://milkalliance.io>). The deployer accounts are multi-signature wallets. Those multi-signature wallet addresses that hold the undistributed tokens are not specified yet and will be shared to the CEXs for the transparent token distribution.

[CertiK 12 Feb 2025]: The finding status can be updated once the multi-signature wallet addresses provided.

[CertiK 04 Mar 2025]:

LZM Contract Information

Contract Address: 0x723cE01b57dFD7148785B90D66275005aa2eDD17

All **LZM** tokens are distributed across multiple custom multisig wallets, all managed by the same set of owners:

- 0x001aEC03fd56b5D8415265735cb13E0CC506b6f5
- 0x002a5cbDbEae2631DD85110b487e60702dF0CF42



- [0x003abd0404858941F8bE83f6C90385B64Cd44708](#)

Threshold: 2-of-3 (requires two out of three signatures for transactions)

Wallet List:

- [0x0CA16ad93Aa76ae739B78F3AF498A148Dd965Ef2](#) (10% shares)
- [0x6240F3B55c02E63A2A5aE1e7f0938B51a35c2257](#) (10% shares)
- [0x68797eb7d8a2cfB366c2732B62432F10e09813c1](#) (10% shares)
- [0x9E98988Da4fAE6988e0F58f3C849c8584B2c50B0](#) (10% shares)
- [0xe7003B7c8eF88A8B107B6aFA76a6346284A9ef36](#) (10% shares)
- [0x528490f56449C34627D8D256F07e5CEE71d9b16D](#) (9% shares)
- [0xC2E9F80c5C24040058BAC1DD9523a72c8AFB7dec](#) (9% shares)
- [0xD5CD458F21da5327e10aebb7eaE120437Fc91282](#) (8% shares)
- [0x2fBA99ab278a2CCc98Beb42B095b5128342A3E86](#) (5% shares)
- [0x7c3CAdd0DafF7dad527fE49C034BCF45b1347Bd3](#) (3% shares)
- [0x6A7599BEe2FB75Fa691644B82E3834ba987ABEDF](#) (3% shares)
- [0x3d0cCF86F6a0005e9448211c8cC9efcde30473Ee](#) (< 1% shares)
- [0xFa5058e324B6463A73770fd56267651E7040Bbf4](#) (< 1% shares)
- [0xc01a2Bb0342ECAE71fD80Bc68BFa565EbB90048d](#) (< 1% shares)

[CertiK 04 Mar 2025]:

MLK Contract Information

Contract Address: [0x374c5FB7979d5fDBAAd2d95409e235e5CBdfD43C](#)

All **MLK** tokens have been distributed across several custom TimeLock wallets.

Wallet List:

- [0xD5CD458F21da5327e10aebb7eaE120437Fc91282](#) (44% shares)
- [0x7184810DB224562a15BEeB6F97dee8513526aF9F](#) (12% shares)
- [0x46E414378B14A28c1B893270e5b0362DEF07675a](#) (9% shares)
- [0x3146e412501EEF9B1DAcBc1bbB9F24A3dFaa9754](#) (8% shares)
- [0x68a0AEE746eB0e41c266E3bE0A06aDE68d3eA75B](#) (8% shares)
- [0xc417A47983bC42a8D6E28afe9F49843bB5ffb833](#) (7% shares)
- [0x38f0c7cf67c4f0e9A397C9Bc3dcE96c63F875Ae4](#) (5% shares)
- [0xB8914380Fb5929CcBCD76DbcFA2f00fF38B7CB0d](#) (3% shares)
- [0xc01a2Bb0342ECAE71fD80Bc68BFa565EbB90048d](#) (< 1% shares)

## APPENDIX | MiL.k

### Finding Categories

Categories	Description
Centralization	Centralization findings detail the design choices of designating privileged roles or other centralized controls over the code.

### Checksum Calculation Method

The "Checksum" field in the "Audit Scope" section is calculated as the SHA-256 (Secure Hash Algorithm 2 with digest size of 256 bits) digest of the content of each file hosted in the listed source repository under the specified commit.

The result is hexadecimal encoded and is the same as the output of the Linux "sha256sum" command against the target file.

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