



H420

Security Review



April 4, 2025

Contents

1. About SBSecurity	3
2. Disclaimer	3
3. Risk classification	3
3.1. Impact.....	3
3.2. Likelihood	3
3.3. Action required for severity levels.....	3
4. Executive Summary	4
5. Findings	5
5.1. Low severity.....	5
5.1.1. UniswapV3 swap structs not compatible for base implementation of the router.....	5

1. About SBSecurity

SBSecurity is a duo of skilled smart contract security researchers. Based on the audits conducted and numerous vulnerabilities reported, we strive to provide the absolute best security service and client satisfaction. While it's understood that 100% security and bug-free code cannot be guaranteed by anyone, we are committed to giving our utmost to provide the best possible outcome for you and your product.

Book a Security Review with us at sbsecurity.net or reach out on Twitter [@Slavcheww](https://twitter.com/Slavcheww).

2. Disclaimer

A smart contract security review can only show the presence of vulnerabilities **but not their absence**. Audits are a time, resource, and expertise-bound effort where skilled technicians evaluate the codebase and their dependencies using various techniques to find as many flaws as possible and suggest security-related improvements. We as a company stand behind our brand and the level of service that is provided but also recommend subsequent security reviews, on-chain monitoring, and high whitehat incentivization.

3. Risk classification

	Impact: High	Impact: Medium	Impact: Low
Likelihood: High	Critical	High	Medium
Likelihood: Medium	High	Medium	Low
Likelihood: Low	Medium	Low	Low

3.1. Impact

- **High** - leads to a significant loss of assets in the protocol or significantly harms a group of users.
- **Medium** - leads to a moderate loss of assets in the protocol or some disruption of the protocol's functionality.
- **Low** - funds are not at risk.

3.2. Likelihood

- **High** - almost **certain** to happen, easy to perform, or highly incentivized.
- **Medium** - only **conditionally possible**, but still relatively likely.
- **Low** - requires specific state or **little-to-no incentive**.

3.3. Action required for severity levels

- High - **Must** fix (before deployment if not already deployed).
- Medium - **Should** fix.
- Low - **Could** fix.



4. Executive Summary

Overview

Project	H420
Repository	Private
Commit Hash	9f78d8d588f47c0b0c326aec9744b9d44c893721
Resolution	-
Timeline	April 5, 2025

Scope

H420BuyBurnV2.sol

Issues Found

Critical Risk	0
High Risk	0
Medium Risk	0
Low/Info Risk	1

5. Findings

5.1. Low severity

5.1.1. UniswapV3 swap structs not compatible for base implementation of the router

Severity: Low Risk

Description: On the Base chain, the **deadline** parameter is missing in all the router functions of the **SwapRouter**. This will cause all the **_handleV3Swap** to revert.

```
function _handleV3Swap(address token, uint256 amountIn, uint256 minAmountOut, uint256 deadline) internal {
    IERC20(token).safeIncreaseAllowance(UNISWAP_V3_ROUTER, amountIn);
    if (isMultihopSwap[token]) {
        ISwapRouter.ExactInputParams memory params = ISwapRouter.ExactInputParams({
            path: multihopSwapOptionsV3[token],
            recipient: address(this),
            deadline: deadline, // <---
            amountIn: amountIn,
            amountOutMinimum: minAmountOut
        });
        ISwapRouter(UNISWAP_V3_ROUTER).exactInput(params);
    } else {
        SingleSwapOptionsV3 memory options = swapOptionsV3[token];
        ISwapRouter.ExactInputSingleParams memory params = ISwapRouter.ExactInputSingleParams({
            tokenIn: token,
            tokenOut: options.tokenOut,
            fee: options.fee,
            recipient: address(this),
            deadline: deadline, // <---
            amountIn: amountIn,
            amountOutMinimum: minAmountOut,
            sqrtPriceLimitX96: 0
        });
        ISwapRouter(UNISWAP_V3_ROUTER).exactInputSingle(params);
    }
}
```

Recommendation: When deploying the BnB on Base, make sure to modify the structs by removing only the deadline parameters.

Resolution: Acknowledged