

Certificate of Analysis

Specification Sheet



PRODUCT NAME	D-LIMONENE	
CAS#	138-86-3	
COUNTRY OF ORIGIN	MULTIPLE COUNTRIES	
ANALYSIS VALUE	RESULTS	
APPEARANCE/COLOR	COLORLESS CLEAR LIQUID	
ODOR	CITRUS, LEMON-LIKE AROMA	
PURITY	>95%	
SPECIFIC GRAVITY @ 25°C	0.838 – 0.843	
REFRACTIVE INDEX @ 20°C	1.471 – 1.477	
FLASH POINT	48.3 °C	
METHOD OF EXTRACTION	STEAM DISTILLED	
SOLUBILITY	OIL SOLUBLE	
SHELF LIFE	2 YEARS FROM SHIP DATE	
METALS, PESTICIDES, SOLVENTS	VALUES	RESULTS
HEAVY METALS BY ICP-MS	1 CCR 212-3, Part 4-115 (D:4)	CONFORMS
PESTICIDES BY LC-MS/MS	1 CCR 212-3, Part 4-115 (D:5b)	CONFORMS
RESIDUAL SOLVENTS BY HS-GC-MS	1 CCR 212-3, Part 4-115 (D:3)	CONFORMS
MICROBIALS	VALUES	RESULTS
STEC	< 1 cfu/g	CONFORMS
TOTAL YEAST & MOLD	< 10,000 cfu/g	CONFORMS
SALMONELLA	< 1 cfu/g	CONFORMS
A. NIGER	< 1 cfu/g	CONFORMS
A. FUMIGATUS	< 1 cfu/g	CONFORMS
A FLAVUS	< 1 cfu/g	CONFORMS
A. TERREUS	< 1 cfu/g	CONFORMS
STATEMENT SUMMARY	YES/NO	
ANIMAL TESTING FREE	YES	
BSE / TSE FREE	YES	
FOOD GRADE	YES	
GLUTEN FREE	YES	
GMO FREE	YES	
IRRADIATION FREE	YES	
PARABEN FREE	YES	
PHthalATES FREE	YES	
SLS & SLES FREE	YES	

ADDITIONAL PRODUCT INFORMATION**Storage Conditions:**

- Stable when stored in its original container securely tightened. Keep away from heat, open flames, sunlight, combustible materials, and hot surfaces.
- Store in cool dry place (60° F to 78° F)
- PROTECT FROM LIGHT

Product Use:

- Industrial Application
- GRAS Food Grade & Supplement Manufacturing
- Topicals
- Aromas & Flavoring

Product Handling:

- Ensure good ventilation of the workstation.
- Wear personal protective equipment including protective gloves, clothing and chemical goggles or safety glasses.
- Wash hands and other exposed areas with mild soap and water after handling.

Product Warnings:**Certificate of Analysis Disclaimer**

This Certificate of Analysis does not relieve buyer from acquiring their own third-party tests for assuring product quality. Product should be tested to ensure suitability of application for intended use. Lab Effects, LLC believes the information of conformity contained herein to be true and factual based on the supporting third-party data obtained by and made available to Lab Effects, LLC by third parties. It is the responsibility of buyer to perform its own analysis and investigation prior to use for verifying product suitability and quality according to its own requirements for use. The data provided herein is only true and effective for the specific product lot # listed. Lab Effects responsibility of this manufactured or distributed item will be limited to our Limitation of Product Liability policy.

Taj Ray

Quality Control & Assurance