

This SDS complies with the US OSHA HCS 2012.

1. Product and Company Identification

Product Code: C000253
Product Name: PRO-Clear
Company Name: CalibreScientific US, Inc.
 1311 SE Cardinal Ct Suite 170
 Vancouver, WA 98683
Web site address: Alphatecsystems.com
Email address: Regulatory@calibrescientific.com
Emergency Contact: INFOTRAC
 International 00-1- (352)323-3500
 North America 1 (800)535-5053
Information:
Intended Use: For Laboratory Use: Xylene substitute
Product List PRO-Clear Product Codes: 0003336 and as components of 0003336S, 0004627.

2. Hazards Identification

Flammable Liquids, Category 3
 Skin Corrosion/Irritation, Category 2
 Skin Sensitization, Category 1
 Aquatic Toxicity (Acute), Category 1
 Aquatic Toxicity (Chronic), Category 1



GHS Signal Word: **Warning**

GHS Hazard Phrases:
 H226 - Flammable liquid and vapor.
 H315 - Causes skin irritation.
 H317 - May cause an allergic skin reaction.
 H400 - Very toxic to aquatic life.
 H410 - Very toxic to aquatic life with long lasting effects.

GHS Precautionary Phrases:
 P233 - Keep container tightly closed.
 P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.
 P240 - Ground/bond container and receiving equipment.
 P241 - Use explosion-proof electrical/ventilating/lighting/.../ equipment.
 P243 - Take precautionary measures against static discharge.
 P242 - Use only non-sparking tools.
 P264 - Wash hands thoroughly after handling.
 P362+364 - Take off contaminated clothing and wash it before reuse.
 P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
 P272 - Contaminated work clothing should not be allowed out of the workplace.
 P273 - Avoid release to the environment.

GHS Response Phrases:
 P370+378 - In case of fire, use carbon dioxide (CO2) powder or alcohol resistant foam to extinguish.
 P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
 P302+352 - IF ON SKIN: Wash with plenty of soap and water.
 P332+313 - If skin irritation occurs, get medical advice/attention.
 P333+313 - If skin irritation or rash occurs, seek medical advice/attention.
 P391 - Collect spillage.

GHS Storage and Disposal Phrases:	P403+235 - Store in cool/well-ventilated place. P501 - Dispose of contents/container to safe area in accordance with state and local guidelines.
Potential Health Effects (Acute and Chronic):	Chronic: In 2-year gavage studies, there was clear evidence of carcinogenic activity of d-limonene for male rats, as shown by increased incidences of tubular cell hyperplasia, adenomas, and adenocarcinomas of the kidney. There was NO evidence of carcinogenic activity of d-limonene for female rats, for male mice, or for female mice.
Inhalation:	May cause respiratory tract irritation.
Skin Contact:	Causes skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. Prolonged and/or repeated contact may cause defatting of the skin and dermatitis.
Eye Contact:	Causes eye irritation.
Ingestion:	May cause digestive tract disturbances.

3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)	Concentration
5989-27-5	(R)-1-Methyl-4-(1-methylethenyl)-cyclohexene {(R)-(+)-Limonene}	>=99.96 %
25013-16-5	Butylated hydroxyanisole {BHA}	< 0.04 %

4. First Aid Measures

Emergency and First Aid Procedures:

In Case of Inhalation:	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.
In Case of Skin Contact:	In case of contact, immediately flush skin with soap and plenty of water. Remove contaminated clothing and shoes. Get medical aid if symptoms occur. Wash clothing before reuse.
In Case of Eye Contact:	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if symptoms occur. Get medical aid.
In Case of Ingestion:	If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.
Note to Physician:	Treat symptomatically and supportively.

5. Fire Fighting Measures

Flash Point:	48.00 C
Explosive Limits:	LEL: No data. UEL: No data.
Autoignition Pt:	255.00 C
Suitable Extinguishing Media:	Use water fog, dry chemical, carbon dioxide or alcohol type foam.
Fire Fighting Instructions:	As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Containers may explode in the heat of a fire. Flammable liquid and vapor. Vapors are heavier than air and may travel to a source of ignition and flash back. Vapors can spread along the ground and collect in low or confined areas. This liquid floats on water and may travel to a source of ignition and spread fire.
Flammable Properties and Hazards:	No data available.
Hazardous Combustion Products:	No data available.

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled: Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Forms smooth, slippery surfaces on floors, posing an accident risk. Remove all sources of ignition. Provide ventilation.

7. Handling and Storage

Precautions To Be Taken in Handling: Ground and bond containers when transferring material. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep away from heat, sparks and flame. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Use only with adequate ventilation. Avoid breathing dust, mist, or vapor.

Precautions To Be Taken in Storing: Keep away from heat, sparks and flame. Keep away from sources of ignition. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area. Separate from oxidizing materials. Partially filled containers should be blanketed with nitrogen.

8. Exposure Controls/Personal Protection

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
5989-27-5	(R)-1-Methyl-4-(1-methylethenyl)-cyclohexene {(R)-(+)-Limonene}	No data.	No data.	No data.
25013-16-5	Butylated hydroxyanisole {BHA}	No data.	No data.	No data.

Respiratory Equipment (Specify Type): A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use. Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.

Eye Protection: Wear chemical splash goggles.

Protective Gloves: Wear appropriate protective gloves to prevent skin exposure.

Other Protective Clothing: Wear appropriate protective clothing to prevent skin exposure.

Engineering Controls (Ventilation etc.): Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

9. Physical and Chemical Properties

Physical States: [] Gas [X] Liquid [] Solid

Appearance and Odor: Appearance: Clear. Almost. colorless.

pH: No data.

Melting Point: -74.00 C

Boiling Point: 175.00 C - 176.00 C / 0.0 mm Hg

Flash Point: 48.00 C

Evaporation Rate: No data.

Flammability (solid, gas): No data available.

Explosive Limits: LEL: No data. UEL: No data.

Vapor Pressure: No data.

Vapor Density (vs. Air=1): No data.

Specific Gravity (Water=1): No data.

Density:	0.8400 G/ML
Solubility in Water:	No data.
Saturated Vapor Concentration:	No data.
Octanol/Water Partition Coefficient:	No data.
Autoignition Pt:	255.00 C
Decomposition Temperature:	No data.
Viscosity:	No data.

10. Stability and Reactivity

Stability:	Unstable [] Stable [X]
Conditions To Avoid - Instability:	ignition sources, Excess heat.
Incompatibility - Materials To Avoid:	Strong oxidizing agents.
Hazardous Decomposition or Byproducts:	Carbon monoxide, irritating and toxic fumes and gases.
Possibility of Hazardous Reactions:	Will occur [] Will not occur [X]
Conditions To Avoid - Hazardous Reactions:	No data available.

11. Toxicological Information

Toxicological Information:	No data available.
Carcinogenicity/Other Information:	CAS# 5989-27-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.
Carcinogenicity:	NTP? No IARC Monographs? No OSHA Regulated? No

12. Ecological Information

General Ecological Information:	Environmental: May bioconcentrate in aquatic organisms and fish. Has low mobility in soil and may rapidly volatilize in the atmosphere. Limonene can be readily degraded in soil. Physical: No information available. Other: Dipentene, which is optically inactive limonene, is a marine pollutant.
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13. Disposal Considerations

Waste Disposal Method:	Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. RCRA P-Series: None listed. RCRA U-Series: None listed.
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14. Transport Information

GHS Classification:	Flammable Liquids, Category 3 - Warning! Flammable liquid and vapor
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Skin Corrosion/Irritation, Category 2 - Warning! Causes skin irritation
Skin Sensitization, Category 1 - Warning! May cause an allergic skin reaction
Aquatic Toxicity (Acute), Category 1 - Warning! Very toxic to aquatic life
Aquatic Toxicity (Chronic), Category 1 - Warning! Very toxic to aquatic life with long lasting effects

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Terpene hydrocarbons, n.o.s.
DOT Hazard Class: 3 FLAMMABLE LIQUID
UN/NA Number: UN2319 **Packing Group:** III

**LAND TRANSPORT (Canadian TDG):**

TDG Shipping Name: DIPENTENE.
UN Number: UN2319 **Packing Group:** III
Hazard Class: 3 - FLAMMABLE LIQUID **TDG Classification:**

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Terpene hydrocarbons, n.o.s.
UN Number: UN2319 **Packing Group:** III
Hazard Class: 3 - FLAMMABLE LIQUID

15. Regulatory Information**EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists**

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
5989-27-5	(R)-1-Methyl-4-(1-methylethenyl)-cyclohexene {{(R)-(+)-Limonene}}	No	No	No

25013-16-5	Butylated hydroxyanisole {BHA}	No	No	No
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CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
5989-27-5	(R)-1-Methyl-4-(1-methylethenyl)-cyclohexene {{(R)-(+)-Limonene}}	CA PROP.65: No; MA Oil/HazMat: Yes - Cat.; NJ EHS: No; PA HSL: No
25013-16-5	Butylated hydroxyanisole {BHA}	CA PROP.65: Yes: Canc.; MA Oil/HazMat: Yes; NJ EHS: No; PA HSL: No

16. Other Information

Revision Date: 02/28/2025 **Previous revision:** 07/13/2021

Additional Information About This Product: No data available.

This Product:

Document & Change Control Number SDS0059.E.

Company Policy or

Disclaimer:

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.