



Section 1: Product & Company Information

Product Name: Tech King
Chemical Family: Monocyclic Terpene Hydrocarbons C₁₀-H₁₆
Product Use:

Workplace Hazardous Materials Information Systems Data (WHMIS):

	Class ID	Class	Workplace Hazard
	B-3	Combustible Liquid	Combustible Liquid
	D-2-B	Materials Causing Other Toxic Effects - Toxic	Skin and eye irritant

Manufacturer Name: HiTech Fluid Systems
Address: #1800, 505 3rd Street SW, Calgary, AB T2P 3E6 Canada
General Phone Number: (403)547-2906
General Fax Number: (403)547-3129
MSDS Revision Date: June 1, 2008
Supercedes: June 23, 2005
Prepared By: HiTech Fluid Systems
Preparer's Phone: (403)547-2906

Section 2: Composition/Information on Ingredients

Chemical Name	Concentration	CAS#
D-Limonene	60% - 100%	5989-27-5

Section 3: Hazards Identification

Emergency Overview:

Routes of Entry:

Skin Contact: Yes
Skin Absorption: No
Eye Contact: Yes
Inhalation: Yes
Ingestion: Yes

Potential Health Effects:

Skin:	Can cause skin irritation.
Eye:	May cause eye damage.
Inhalation:	May cause irritation to the respiratory tract.
Ingestion:	Harmful if swallowed.

Section 4: First Aid Measures

Eye Contact:	Flush eyes with water and seek medical attention.
Skin Contact:	Wash immediately with soap and water.
Inhalation:	Remove patient to fresh air. If breathing has stopped, administer artificial respiration. Seek immediate medical attention.
Ingestion:	Do NOT induce vomiting. Administer two glasses of water to drink. Seek immediate medical attention.

Other First Aid:

Section 5: Fire Fighting Measures

Conditions Of Flammability:

Extinguishing Media:	Dry powder, foam, CO ₂
Flashpoint:	48.9°C (closed cup)
Upper Flammable Limit:	6.1%
Lower Flammable Limit:	0.7%
Autoignition Temperature:	
Protective Equipment:	Class B fire procedure
Sensitivity To Impact or Static Discharge:	
Hazardous Combustion Products:	Combustible liquid. Keep away from heat, sparks, and open flames. May liberate <chemical>CO_x</chemical> and unidentified organic compounds in black smoke upon combustion.

Fire Comment:

Section 6: Accidental Release Measures

Personnel Precautions:	Use proper personal protective equipment as listed in section 8.
Spill Cleanup Measures:	Small spills should be absorbed with dirt, sand, or other suitable absorbent for disposal. Large spills can be dyked with dirt, then pumped to tank truck for disposal.

Section 7: Handling & Storage

Handling: All handling equipment should be electrically grounded. Handle with care. Do not ingest or inhale product. Wash product off skin.

Storage: Storage requirements are usual precautions for combustible liquids.

Section 8: Exposure Controls, Personal Protection, Exposure Guidelines

Engineering Controls: Local exhaust should be adequate.

Personal Protective Equipment: Wear chemical-resistant gloves, splash goggles or faceshield, and appropriate clothing and footwear for the workplace.

Respiratory Protection: Not normally required, but if vapour concentrations become high, use an air-purifying respirator with appropriate organic vapour cartridges.

Exposure Limits:

Chemical Name	ACGIH TLV-TWA	OSHA PEL-TWA
D-Limonene	Not Available	Not Available

Section 9: Physical & Chemical Properties

Physical State: Liquid

Odour And Appearance: Orange liquid; citrus odour

Odour Threshold:

Boiling Point: 176°C

Evaporation Rate: N/A

Melting Point:

Freezing Point: -74.5°C

Specific Gravity: 0.84@25°C

Solubility in Water: None

Vapour Density: 4.73

Vapour Pressure: 2.6664kPa@68°C

pH: N/A

Flash Point: 48.9°C (closed cup)

Volatility (% by volume): 60% - 100%

Coefficient of Water to Oil distribution:

Section 10: Stability & Reactivity

Chemical Stability:	Yes
Hazardous Polymerization:	Will not occur.
Conditions Of Chemical Instability:	
Incompatible Substances:	Avoid strong oxidizing agents. Reacts violently with iodine pentafluoride in tetrafluoroethylene. Keep away from heat, sparks and open flames. Avoid acids and oxidizing materials.
Special Decomposition Products:	May liberate CO _x and unidentified organic compounds in black smoke.

Section 11: Toxicological Information

Chemical Name	LD ₅₀ (Oral Rat)	LD ₅₀ (Dermal Rabbit)	LC ₅₀ (Inhalation Rat)
D-Limonene	Not Available	Not Available	Not Available

Effects Of Acute Exposure:

Effects Of Chronic Exposure:

General Irritancy Of Product:

Sensitization:

Carcinogenicity:

Reproductive Toxicity:

Teratogenicity:

Embryotoxicity: Not Available

Mutagenicity:

Synergistic Products:

Section 12: Ecological Information

Ecotoxicity: Not Available

Environmental Fate: Not Available

Section 13: Disposal Considerations

Waste Disposal: Dispose in landfill approved for same, away from water supplies. Burning is an alternative method. Observe federal, provincial, and local regulations.

Section 14: Transport Information



TDG Classification:

DOT UN Number:

Shipping Notes:

Section 15: Regulatory Information

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	B-3	Combustible Liquid	Combustible Liquid
	D-2-B	Materials Causing Other Toxic Effects - Toxic	Skin and eye irritant

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

Section 16: Additional Information

MSDS Revision Date: June 1, 2008

MSDS Revision Notes:

MSDS Author: HiTech Fluid Systems

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