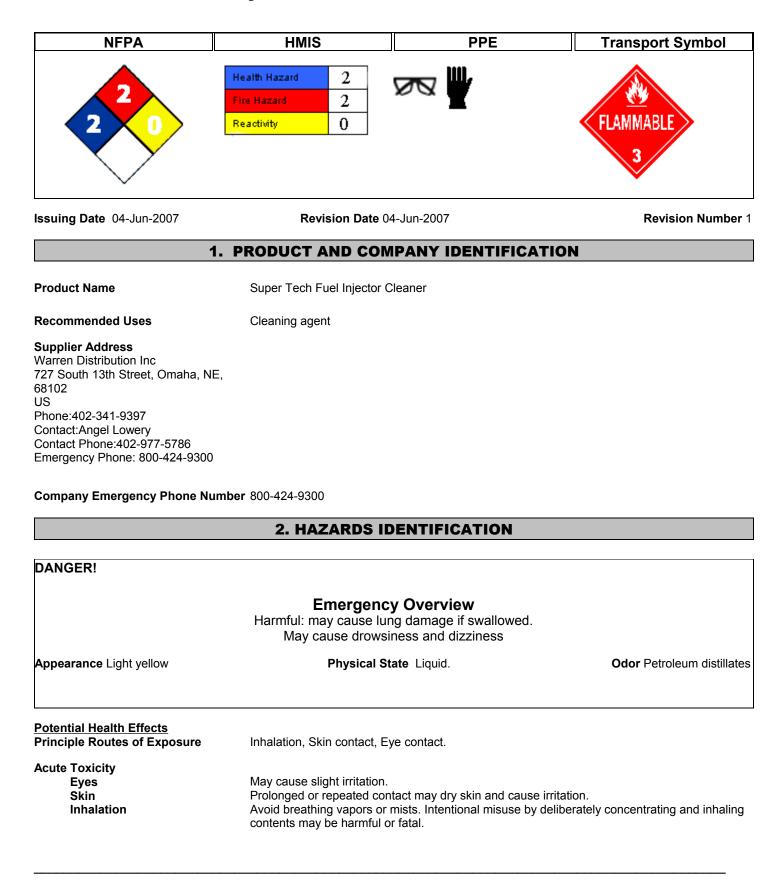
Material Safety Data Sheet



Ingestion	Harmful if swallowed. Potential for aspiration if swallowed.
Chronic Effects	Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization of susceptible persons. Repeated or prolonged exposure may cause central nervous system damage.
Aggravated Medical Conditions	Central nervous system. Preexisting eye disorders. Skin disorders.
Interactions with Other Chemicals	Use of alcoholic beverages may enhance toxic effects.
Environmental Hazard	See Section 12 for additional Ecological information

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Kerosene	8008-20-6	60 - 100
Solvent naphtha (petroleum), medium aliphatic	64742-88-7	5 - 10
Trimethyl benzene	25551-13-7	1 - 5
Pseudocumene	95-63-6	0.1 - 1
Nonane	111-84-2	0.1 - 1
Octane	111-65-9	0.1 - 1
1,3,5-Trimethylbenzene	108-67-8	0.1 - 1
Ethyl benzene	100-41-4	< 0.1

4. FIRST AID MEASURES

General Advice	Show this safety data sheet to the doctor in attendance.
Eye Contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.
Skin Contact	Wash off immediately with plenty of water.
Inhalation	Move to fresh air. If symptoms persist, call a physician. If breathing is irregular or stopped, administer artificial respiration. If breathing has stopped, contact emergency medical services immediately.
Ingestion	Do not induce vomiting. Rinse mouth. Drink plenty of water. Call a physician immediately.
Notes to Physician	Treat symptomatically
Protection of First-aiders	Remove all sources of ignition.

5. FIRE-FIGHTING MEASURES

Flammable Properties	Flammable/combustible material. May be ignited by friction, heat, sparks or flames.
Flash Point	42°C / 108°F
Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

Uniform Fire Code	 Combustible Liquid: II Toxic: Liquid Other Health Hazard: Target Organ ToxinLiquid
Hazardous Combustion Products	Carbon oxides
Explosion Data	
Sensitivity to mechanical impact	Not sensitive
Sensitivity to static discharge	Yes
Specific Hazards Arising from the Chemical Flammable.	
Protective Equipment and Precautions for Firefigh As in any fire, wear self-contained breathing apparatus gear	ters pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective

<u>NFPA</u>	Health Hazard 2	Flammability 2	Stability 0	Physical and Chemical
				Hazards -

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment.
Methods for Containment	Prevent further leakage or spillage if safe to do so
Methods for Cleaning Up	Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Handling

Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Use only in an area containing flame proof equipment. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded.

Storage

Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep away from heat and sources of ignition.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Kerosene	TWA: 200 mg/m ³		
	Skin		

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Trimethyl benzene	TWA: 25 ppm	TWA: 125 mg/m ³	
-		TWA: 25 ppm	
Pseudocumene	TWA: 25 ppm	TWA: 125 mg/m ³	
		TWA: 25 ppm	
Nonane	TWA: 200 ppm	TWA: 1050 mg/m ³	
		TWA: 200 ppm	
Octane	TWA: 300 ppm	TWA: 1450 mg/m ³	1000 ppm
		TWA: 300 ppm	
		STEL: 1800 mg/m ³	
		STEL: 375 ppm	
		TWA: 2350 mg/m ³	
		TWA: 500 ppm	
1,3,5-Trimethylbenzene	TWA: 25 ppm	TWA: 125 mg/m ³	
		TWA: 25 ppm	
Ethyl benzene	TWA: 100 ppm	TWA: 100 ppm	800 ppm

NIOSH IDLH: Immediately Dangerous to Life or Health

Engineering Measures	Showers Eyewash stations Ventilation systems
Personal Protective Equipment Eye/Face Protection Skin and Body protection Respiratory Protection	Tightly fitting safety goggles. Antistatic boots. Wear fire/flame resistant/retardant clothing. Impervious gloves. No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required
Hygiene Measures	When using, do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Light yellow	Odor	Petroleum distillates
Odor Threshold	No information available	Physical State	Liquid
рН	7		
Flash Point	42°C / 108°F	Autoignition Temperature	Not applicable
Decomposition Temperature	No data available	Boiling Point/Range	No data available
Melting Point/Range	No data available		
Flammability Limits in Air	No data available	Explosion Limits	No data available

Specific Gravity	No data available	Water Solubility	No data available
Solubility	No data available	Evaporation Rate	No data available
Vapor Pressure	No data available	Vapor Density	No data available
VOC Content	1.437	Partition Coefficient (n- octanol/water)	

10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage conditions
Conditions to Avoid	Heating in air.
Incompatible Products	None known based on information supplied
Hazardous Decomposition Products	None known based on information supplied
Hazardous Polymerization	Hazardous polymerization does not occur

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information

LD50 Oral VALUE (mg/kg) LD50 Dermal VALUE LC50 Inhalation (VAPOR) VALUE

5042 mg/kg (rat) estimated 2117 mg/kg (rat) estimated 18 ml/m³ (vapor) estimated

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Kerosene	5000 mg/kg (Rat)	2000 mg/kg (Rabbit)	5.28 mg/L (Rat)4 h
Solvent naphtha (petroleum), medium	5000 mg/kg (Rat)	3000 mg/kg (Rabbit)	5.28 mg/L (Rat)4 h
aliphatic			
Trimethyl benzene	8970 mg/kg (Rat)		
Pseudocumene	3400 mg/kg (Rat)	3160 mg/kg (Rabbit)	18 g/m³ (Rat)4 h
Nonane			3200 ppm (Rat)4 h
Octane			118 g/m³ (Rat)4 h
1,3,5-Trimethylbenzene	8970 mg/kg (Rat)		24 g/m³ (Rat)4 h
Ethyl benzene	3500 mg/kg (Rat)	15354 mg/kg (Rabbit)	17.2 mg/L (Rat)4 h

Chronic Toxicity

Chronic Toxicity

Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization of susceptible persons. Repeated or prolonged exposure may cause central nervous system damage.

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Kerosene	A3			
Ethyl benzene	A3	Group 2B		Х

Mutagenicity

Reproductive Toxicity	This product does not contain any known or suspected reproductive hazards
Target Organ Effects	Central nervous system (CNS), Eyes, Respiratory system, Skin.
Endocrine Disruptor Information	This product does not contain any known or suspected endocrine disruptors

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated. May cause long-term adverse effects in the environment.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Microtox	Daphnia Magna (Water Flea)
Solvent naphtha (petroleum),	EC50 = 450 mg/L 96 h	LC50= 800 mg/L Pimephales		EC50 > 100 mg/L 48 h
medium aliphatic		promelas 96 h		
Trimethyl benzene		LC50= 7.72 mg/L Pimephales		
_		promelas 96 h		
Pseudocumene		LC50= 7.72 mg/L Pimephales		EC50 = 6.14 mg/L 48 h
		promelas 96 h		-
Octane			EC50 = 890 mg/L 30 min	EC50 = 0.38 mg/L 48 h
1,3,5-Trimethylbenzene		LC50= 3.48 mg/L Pimephales		EC50 = 50 mg/L 24 h
-		promelas 96 h		_
Ethyl benzene	EC50 = 4.6 mg/L 72 h	LC50= 14.0 mg/L	EC50 = 9.68 mg/L 30 min	EC50 1.8 - 2.4 mg/L 48 h
-		Oncorhynchus mykiss 96 h	-	_

Chemical Name	Log Pow
Pseudocumene	3.63
Octane	5.18
Ethyl benzene	3.118

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method

This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

Contaminated Packaging

Dispose of in accordance with local regulations

US	EPA	Waste	Number	
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Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Ethyl benzene - 100-41-4		Included in waste stream:		
-		F039		

This product contains one or more substances that are listed with the State of California as a hazardous waste.

D001

Chemical Name	California Hazardous Waste Status
Pseudocumene	Toxic
Octane	Toxic; Ignitable
Ethyl benzene	Toxic; Ignitable

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name Hazard Class Consumer commodity ORM-D

14. TRANSPORT INFORMATION		
Consumer commodity,ORM-D,		
Flammable liquid, n.o.s.		
3		
UN1993		
III FLAMMABLE LIQUID, N.O.S.(Kerosene),3,UN1993,PG III		
Flammable liquid, n.o.s.		
3		
UN1993 III		
UN1993 Flammable liquid, n.o.s.(Kerosene),3,III		
UN1993		
Flammable liquid, n.o.s.* 3		
 Ⅲ		
Flammable liquid, n.o.s.*(Kerosene),3,UN1993,PG III		
UN1993		
Flammable liquid, n.o.s.* 3		
3 III		
3L		
UN1993,Flammable liquid, n.o.s.*(Kerosene),3,PG III		
Flammable liquid, n.o.s.		
3		
UN1993		
F-E, _S-E_ UN1993, Flammable liquid, n.o.s.(Kerosene),3,PG III		
Flammable liquid, n.o.s.		
3		
UN1993		
III F1		
UN1993 Flammable liquid, n.o.s.(Kerosene),3,III,RID		
3		
Flammable liquid, n.o.s.		
Flammable liquid, n.o.s. 3 UN1993		

14. TRANSPORT INFORMATION

	Packing Group Classification Code ADR/RID-Labels	lll F1 3
<u>ADN</u>		
	Proper Shipping Name	Flammable liquid, n.o.s.
	Hazard Class	3
	Packing Group	III
	Classification Code	F1
	Special Provisions	274, 330, 601, 640E
	Description	UN1993 Flammable liquid, n.o.s.(Kerosene),3,III
	Hazard Labels	3
	Limited Quantity	LQ7
	Ventilation	VE01

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL	Complies
EINECS/ELINCS	Complies
ENCS	Does not Comply
CHINA	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values
Pseudocumene	95-63-6	0.1 - 1	1.0
Ethyl benzene	100-41-4	< 0.1	0.1

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Ethyl benzene	1000 lb	Х	Х	Х

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following substances which are listed hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act:

Chemical Name	CAS-No	Weight %	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Ethyl benzene	100-41-4	< 0.1		Group I		

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Ethyl benzene	1000 lb	

U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical Name	CAS-No	California Prop. 65
Ethyl benzene	100-41-4	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Kerosene	Х	Х	Х		Х
Pseudocumene	Х	Х	Х	Х	Х
Nonane	Х	Х	Х		Х
Octane	Х	Х	Х		Х
1,3,5-Trimethylbenzene	Х	Х	Х	Х	Х
Ethyl benzene	Х	Х	Х	Х	Х

International Regulations

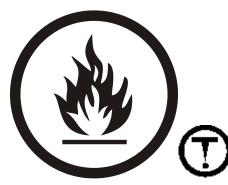
Mexico - Grade Moderate risk, Grade 2

Chemical Name	Carcinogen Status	Exposure Limits
Pseudocumene		Mexico: TWA= 125 mg/m ³
		Mexico: TWA= 25 ppm
		Mexico: STEL= 35 ppm
		Mexico: STEL= 170 mg/m ³
Nonane		Mexico: TWA= 1050 mg/m ³
		Mexico: TWA= 200 ppm
		Mexico: STEL= 1300 mg/m ³
		Mexico: STEL= 250 ppm
Octane		Mexico: TWA= 1450 mg/m ³
		Mexico: TWA= 300 ppm
		Mexico: STEL= 1800 mg/m ³
		Mexico: STEL= 375 ppm
1,3,5-Trimethylbenzene		Mexico: TWA= 25 ppm
		Mexico: TWA= 125 mg/m ³
		Mexico: STEL= 170 mg/m ³
		Mexico: STEL= 35 ppm
Ethyl benzene		Mexico: TWA= 435 mg/m ³

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class B3 Combustible liquid D2A Very toxic materials



Chemical Name	NPRI
Pseudocumene	Х
Ethyl benzene	Х

Legend

NPRI - National Pollutant Release Inventory

16. OTHER INFORMATION	
Issuing Date	04-Jun-2007
Revision Date	04-Jun-2007
Revision Note	No information available

Disclaimer

The information provided on this MSDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of MSDS