



Material Safety Data Sheet

Issuing Date 01-Nov-2011

Revision Date

Revision Number 0

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Fluorescent Orange N/C Alkyd LF Paint (1100L)

Product Code(s) T-40-5165

UN-Number UN1263

Recommended Use Traffic paint

Product Technology S/B

Supplier Address

Ennis Paint Inc.
5910 North Central Expressway
Suite 1050
Dallas TX 75206
T: 800.331.8118
800.331.8118 (For Technical Inquiries)

Chemical Emergency Phone Number Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

DANGER!

Emergency Overview

Highly flammable liquid and vapor
Irritating to eyes and skin
Risk of serious damage to the lungs (by aspiration)
Causes central nervous system depression.
May adversely affect liver and kidney.
Cancer hazard

Contains a known or suspected reproductive toxin

WARNING! This product contains a chemical known in the State of California to cause cancer and birth defects or other reproductive harm.

Appearance Red

Physical State Liquid.

Odor Aromatic solvent/toluene

Potential Health Effects

Principle Routes of Exposure

Inhalation. Skin contact. Eye contact.

Acute Toxicity

Eyes

Moderately irritating to the eyes

Skin

Irritating to skin. Repeated exposure may cause skin dryness or cracking.

Inhalation

Inhalation in high concentration may cause irritation of respiratory system. May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination. Sanding and grinding dust may be harmful if inhaled.

Ingestion

Harmful if swallowed. Ingestion may cause irritation to mucous membranes. Aspiration may cause pulmonary edema and pneumonitis. May cause additional affects as listed under "Inhalation".

Chronic Effects	Contains toluene. Exposure to toluene in animals via inhalation and intentional overexposure to toluene in humans has caused adverse fetal development effects. May cause adverse liver and kidney effects. This product contains titanium dioxide in a non-respirable form. Inhalation of titanium dioxide is unlikely to occur from exposure to this product. Titanium dioxide has been classified by the International Agency for Research on Cancer (IARC) as possibly carcinogenic to humans (Group 2B) by inhalation. This product contains crystalline silica (quartz) in a non-respirable form. Inhalation of crystalline silica is unlikely to occur from exposure to this product. Crystalline silica (quartz) has been classified by the International Agency for Research on Cancer (IARC) as a known human carcinogen (Group 1).
Aggravated Medical Conditions	Pre-existing eye disorders. Liver disorders. Kidney disorders. Respiratory disorders. Central nervous system. Skin disorders.
Interactions with Other Chemicals	Use of alcoholic beverages may enhance toxic effects.
Environmental Hazard	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. See Section 12 for additional Ecological Information.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Toluene	108-88-3	15-40
Naphtha, petroleum, hydrotreated light	64742-49-0	7-13
Titanium dioxide	13463-67-7	1-5
Hexane	110-54-3	1-5
Ethyl benzene	100-41-4	0.1-1
Quartz	14808-60-7	0.1-1
Benzene	71-43-2	<0.1

4. FIRST AID MEASURES

General Advice	If swallowed, get medical help or contact a Poison Control Center right away. Show this safety data sheet to the doctor in attendance.
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately.
Skin Contact	Wash skin with soap and water. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.
Inhalation	Move victim to fresh air. If symptoms persist, call a physician.
Ingestion	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Drink plenty of water. Call a physician or Poison Control Center immediately.
Notes to Physician	Treat symptomatically.
Protection of First-aiders	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. FIRE-FIGHTING MEASURES

Flammable Properties	Highly flammable.
Flash Point	-14°F / -10°C
Suitable Extinguishing Media	Dry chemical, CO ₂ , water spray or regular foam.

Unsuitable Extinguishing Media	CAUTION: All these products have a very low flash point. Use of water spray when fighting fire may be inefficient.
Hazardous Combustion Products	Carbon oxides. Carbon monoxide. Hydrocarbons.
Explosion Data	
Sensitivity to Mechanical Impact	None
Sensitivity to Static Discharge	Yes.
Specific Hazards Arising from the Chemical	Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks).
Protective Equipment and Precautions for Firefighters	Move containers from fire area if you can do it without risk.

NFPA	Health Hazard 2	Flammability 3	Instability 0	Physical and Chemical Hazards -
HMIS	Health Hazard 2*	Flammability 3	Physical Hazard 0	Personal Protection X

*Indicates a chronic health hazard.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material.
Environmental Precautions	Prevent entry into waterways, sewers, basements or confined areas.
Methods for Containment	A vapor suppressing foam may be used to reduce vapors. Dike far ahead of liquid spill for later disposal.
Methods for Cleaning Up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Use personal protective equipment. Use clean non-sparking tools to collect absorbed material. Pick up and transfer to properly labeled containers.
Other Information	Water spray may reduce vapor; but may not prevent ignition in closed spaces.

7. HANDLING AND STORAGE

Handling	Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists.
Storage	Keep containers tightly closed in a cool, well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Quartz 14808-60-7	TWA: 0.025 mg/m ³ respirable fraction	30/(%SiO ₂ +2) mg/m ³ TWA, Total Dust;250/(%SiO ₂ +5) mppcf TWA, respirable fraction; 10/(%SiO ₂ +2) mg/m ³ TWA, respirable TWA: 0.1 mg/m ³ (vacated)	IDLH: 50 mg/m ³ respirable dust TWA: 0.05 mg/m ³ respirable dust
Titanium dioxide 13463-67-7	TWA: 10 mg/m ³	TWA: 15 mg/m ³ total dust (vacated) TWA: 10 mg/m ³ total dust	IDLH: 5000 mg/m ³
Toluene 108-88-3	TWA: 20 ppm	TWA: 200 ppm (vacated) TWA: 100 ppm (vacated) TWA: 375 mg/m ³ (vacated) STEL: 150 ppm (vacated) STEL: 560 mg/m ³ Ceiling: 300 ppm	IDLH: 500 ppm TWA: 100 ppm TWA: 375 mg/m ³ STEL: 150 ppm STEL: 560 mg/m ³
Hexane 110-54-3	STEL: 1000 ppm other than n-Hexane TWA: 50 ppm S*	TWA: 500 ppm TWA: 1800 mg/m ³ (vacated) TWA: 50 ppm (vacated) TWA: 180 mg/m ³ (vacated) STEL: 1000 ppm (vacated) STEL: 3600 mg/m ³	IDLH: 1100 ppm Ceiling: 510 ppm 15 min Ceiling: 1800 mg/m ³ 15 min TWA: 50 ppm TWA: 180 mg/m ³

OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Engineering Measures

Showers. Eyewash stations. Explosion proof ventilation systems.

Personal Protective Equipment

Eye/Face Protection
Skin and Body Protection
Respiratory Protection

Tightly fitting safety goggles.

Wear protective gloves/clothing.

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures

When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Red.	Odor	Aromatic solvent/toluene.
Odor Threshold	No information available	Physical State	Liquid
pH	No information available.	Autoignition Temperature	No information available.
Flash Point	-14°F / -10°C	Boiling Point/Boiling Range	>35°C / >95°F
Decomposition Temperature	No information available.	Explosion Limits	No information available.
Melting Point/Range	No information available	Evaporation Rate	No information available
Flammability Limits in Air	(Toluene)	Vapor Density	No data available.
Upper	7.1%		
Lower	1.1%		
Solubility	Insoluble		
Vapor Pressure	No data available.		
VOC Content (%)	24.5835		

10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage conditions.
Incompatible Products	Strong oxidizing agents. Strong acids.
Conditions to Avoid	Heat, flames and sparks.
Hazardous Decomposition Products	Carbon oxides. Carbon dioxide (CO ₂). Hydrocarbons.
Hazardous Polymerization	Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information

No acute toxicity information is available for this product.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Quartz	500 mg/kg (Rat)		
Naphtha (petroleum), hydrotreated heavy	> 5000 mg/kg (Rat)	> 3160 mg/kg (Rabbit)	
Toluene	>5580 mg/kg (Rat)	12124 mg/kg (Rat) 8390 mg/kg (Rabbit)	26700 ppm (Rat) 1 h
Hexane	= 25 g/kg (Rat)	= 3000 mg/kg (Rabbit)	= 48000 ppm (Rat) 4 h
Naphtha, petroleum, hydrotreated light	> 5000 mg/kg (Rat)	> 3160 mg/kg (Rabbit)	= 73680 ppm (Rat) 4 h

Chronic Toxicity

Chronic Toxicity

Contains toluene. Exposure to toluene in animals via inhalation and intentional overexposure to toluene in humans has caused adverse fetal development effects. May cause adverse liver and kidney effects. This product contains titanium dioxide in a non-respirable form. Inhalation of titanium dioxide is unlikely to occur from exposure to this product. Titanium dioxide has been classified by the International Agency for Research on Cancer (IARC) as possibly carcinogenic to humans (Group 2B) by inhalation. This product contains crystalline silica (quartz) in a non-respirable form. Inhalation of crystalline silica is unlikely to occur from exposure to this product. Crystalline silica (quartz) has been classified by the International Agency for Research on Cancer (IARC) as a known human carcinogen (Group 1).

Carcinogenicity

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

Chemical Name	ACGIH	IARC	NTP	OSHA
Toluene		Group 3	-	-
Titanium dioxide		Group 2B		X
Ethyl benzene	A3	Group 2B		X
Quartz	A2	Group 1	Known	X
Benzene	A1	Group 1	Known	X

ACGIH: (American Conference of Governmental Industrial Hygienists)

A1 - Known Human Carcinogen

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

IARC: (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

Group 3: Not Classifiable as to its Carcinogenicity to Humans

NTP: (National Toxicity Program)

Known - Known Carcinogen

OSHA: (Occupational Safety & Health Administration)

X - Present

Reproductive Toxicity

Product is or contains a chemical which is a known or suspected reproductive hazard.

Target Organ Effects

Central nervous system (CNS). Liver. Respiratory system.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Toluene	EC50: >433 mg/L Pseudokirchneriella subcapitata 96 h EC50: 12.5 mg/L Pseudokirchneriella subcapitata 72 h static	LC50: 15.22-19.05 mg/L Pimephales promelas 96 h flow-through LC50: 12.6 mg/L Pimephales promelas 96 h static LC50: 5.89-7.81 mg/L Oncorhynchus mykiss 96 h flow-through LC50: 14.1-17.16 mg/L Oncorhynchus mykiss 96 h static LC50: 5.8 mg/L Oncorhynchus mykiss 96 h semi-static LC50: 11.0-15.0 mg/L Lepomis macrochirus 96 h static LC50: 54 mg/L Oryzias latipes 96 h static LC50: 28.2 mg/L Poecilia reticulata 96 h semi-static LC50: 50.87-70.34 mg/L Poecilia reticulata 96 h static	EC50 = 19.7 mg/L 30 min	EC50 48 h: 5.46 - 9.83 mg/L Static (Daphnia magna) EC50 48 h: = 11.5 mg/L (Daphnia magna)
Naphtha, petroleum, hydrotreated light				LC50 96 h: = 2.6 mg/L (Chaetogammarus marinus)
Hexane		LC50 96 h: 2.1-2.98 mg/L flow-through (Pimephales promelas)		EC50 24 h: > 1000 mg/L (Daphnia magna)
Ethyl benzene	EC50 96 h: 1.7 - 7.6 mg/L static (Pseudokirchneriella subcapitata) EC50 72 h: 2.6 - 11.3 mg/L static (Pseudokirchneriella subcapitata) EC50 72 h: = 4.6 mg/L (Pseudokirchneriella subcapitata) EC50 96 h: > 438 mg/L (Pseudokirchneriella subcapitata)	LC50 96 h: 11.0-18.0 mg/L static (Oncorhynchus mykiss) LC50 96 h: 7.55-11 mg/L flow-through (Pimephales promelas) LC50 96 h: 9.1-15.6 mg/L static (Pimephales promelas) LC50 96 h: = 32 mg/L static (Lepomis macrochirus) LC50 96 h: = 4.2 mg/L semi-static (Oncorhynchus mykiss) LC50 96 h: = 9.6 mg/L static (Poecilia reticulata)	EC50 = 9.68 mg/L 30 min EC50 = 96 mg/L 24 h	EC50 48 h: 1.8 - 2.4 mg/L (Daphnia magna)
Benzene	EC50 72 h: = 29 mg/L (Pseudokirchneriella subcapitata)	LC50 96 h: 10.7-14.7 mg/L flow-through (Pimephales promelas) LC50 96 h: 22330-41160 µg/L static (Pimephales promelas) LC50 96 h: 70000-142000 µg/L static (Lepomis macrochirus) LC50 96 h: = 22.49 mg/L static (Lepomis macrochirus) LC50 96 h: = 28.6 mg/L static (Poecilia reticulata) LC50 96 h: = 5.3 mg/L flow-through (Oncorhynchus mykiss)		EC50 48 h: 8.76 - 15.6 mg/L Static (Daphnia magna) EC50 48 h: = 10 mg/L (Daphnia magna)

Chemical Name	Log Pow
Toluene	2.65
Ethyl benzene	3.118
Benzene	1.83

13. DISPOSAL CONSIDERATIONS

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

Contaminated Packaging Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers. Do not re-use empty containers.

US EPA Waste Number D018
D001

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Toluene - 108-88-3	U220	Included in waste streams: F005, F024, F025, F039, K015, K036, K037, K149, K151		U220
Ethyl benzene - 100-41-4		Included in waste stream: F039		
Benzene - 71-43-2	waste number U019	Included in waste streams: F005, F024, F025, F037, F038, F039, K085, K104, K105, K141, K142, K143, K144, K145, K147, K151, K159, K169, K171, K172	= 0.5 mg/L regulatory level	U019

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Toluene - 108-88-3			Toxic waste waste number F025 Waste description: Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.	

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

Chemical Name	California Hazardous Waste
Toluene	Toxic Ignitable
Hexane	Toxic Ignitable
Ethyl benzene	Toxic Ignitable
Benzene	Toxic Ignitable

14. TRANSPORT INFORMATION**DOT**

UN-Number	UN1263
Proper shipping name	Paint
Hazard Class	3
Subsidiary Class	None
Packing Group	II
Description	UN1263,Paint,3,PG II
Emergency Response Guide Number	128

TDG

UN-Number	UN1263
Proper Shipping Name	Paint
Hazard Class	3
Packing Group	II
Description	UN1263,PAINT,3,PG II

MEX

UN-Number	UN1263
Proper Shipping Name	Paint
Hazard Class	3
Packing Group	II
Description	UN1263 Paint,3,II

ICAO

UN-Number	UN1263
Proper shipping name	Paint
Hazard Class	3
Packing Group	II
Description	UN1263,Paint,3,PG II

IATA

UN-Number	UN1263
Proper Shipping Name	Paint
Hazard Class	3
Packing Group	II
ERG Code	3L
Description	UN1263,Paint,3,PG II

IMDG/IMO

UN-Number	UN1263
Proper Shipping Name	Paint
Hazard Class	3
Packing Group	II
EmS No.	F-E, S-E
Description	UN1263, Paint,3,PG II, FP -10C

RID

UN-Number	UN1263
Proper Shipping Name	Paint
Hazard Class	3
Packing Group	II
Classification Code	F1
Description	UN1263 Paint,3,II

ADR

UN-Number UN1263
Proper Shipping Name Paint
Hazard Class 3
Packing Group II
Classification Code F1
Description UN1263 Paint,3,II

ADN

UN-No UN1263
Proper Shipping Name Paint
Hazard Class 3
Packing Group II
Classification Code F1
Special Provisions 163, 640C, 650
Description UN1263 Paint,3,II
Hazard Labels 3
Limited Quantity LQ6
Ventilation VE01

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL Complies

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

U.S. Federal Regulations

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 %
Toluene	108-88-3	21.8365	1.0
Ethyl benzene	100-41-4	0.1394	0.1
Hexane	110-54-3	1.765	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard Yes
Chronic Health Hazard Yes
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
Toluene	1000 lb	X	X	X

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	RQ
Toluene	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ
Hexane	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical Name	CAS-No	California Prop. 65
Quartz	14808-60-7	Carcinogen
2-Ethylhexanoic acid	149-57-5	Developmental
Titanium dioxide	13463-67-7	Carcinogen
Toluene	108-88-3	Developmental
Ethyl benzene	100-41-4	Carcinogen
Benzene	71-43-2	Carcinogen Developmental Male Reproductive

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island
Quartz	X	X	X	-	X
Titanium dioxide	X	X	X	-	X
Toluene	X	X	X	X	X
Ethyl benzene	X	X	X	X	X
Hexane	X	X	X	X	X

International Regulations

Chemical Name	Carcinogen Status	Exposure Limits
Quartz		Mexico: TWA= 0.1 mg/m ³
Titanium dioxide		Mexico: TWA= 10 mg/m ³ Mexico: STEL= 20 mg/m ³
Toluene		Mexico: TWA= 50 ppm Mexico: TWA= 188 mg/m ³
Hexane		Mexico: TWA 50 ppm Mexico: TWA 176 mg/m ³ Mexico: STEL 1000 ppm Mexico: STEL 3500 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

B2 Flammable liquid
D2A Very toxic materials
D2B Toxic materials



Canadian National Pollutant Release Inventory (NPRI)

Chemical Name	NPRI
Toluene	X
Hexane	X

Legend

X - Listed

16. OTHER INFORMATION

Prepared By Product Stewardship
23 British American Blvd.
Latham, NY 12110
1-800-572-6501

Issuing Date 01-Nov-2011

Revision Date

Revision Note Initial Release.

General Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication and it does not purport to be all inclusive and shall be used only as a guide. We urge each customer or recipient of this MSDS to study it carefully to become aware of and understand the potential hazards associated with the product. 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 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. Any use of the product not in conformance with this MSDS or in combination with any other product or process is the responsibility of the user. Customary precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work. Remove all soiled and contaminated clothing immediately.

End of Safety Data Sheet