



Material Safety Data Sheet

Issuing Date 09-May-2011

Revision Date

Revision Number 0

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	NOVA-SCOTIA AND PEI REGULAR YELLOW WATERBORNE PAINT
Product Code(s)	T-44-5155
Recommended Use	Traffic paint
Product Technology	W/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

Harmful if swallowed, inhaled, or absorbed through skin

May adversely affect central nervous system, kidneys, blood and reproductive system.

Cancer hazard

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

WARNING! This product contains a chemical known in the State of California to cause cancer.

Appearance Yellow

Physical State Emulsion.

Odor Slight, Ammonia

Potential Health Effects

Acute Toxicity

Eyes

May cause slight irritation.

Skin

Harmful if absorbed through skin. May cause irritation.

Inhalation

Harmful by inhalation. May cause ulceration and perforation of the nasal septum.

Ingestion

Harmful if swallowed.

Chronic Effects

Lead compounds may be absorbed by ingestion, by inhalation and through the skin. Lead may damage kidney function, the blood forming system and the reproductive system. Inorganic lead compounds can cause developmental damage. Very slowly eliminated from the body, so poisoning can be cumulative. Crystalline silica (quartz) has been classified by the International Agency for Research on Cancer (IARC) as a known human carcinogen (Group 1). Titanium dioxide has been classified by the International Agency for Research on Cancer (IARC) as possibly carcinogenic to humans (Group 2B) by inhalation. Chromium and chromium compounds are currently classified by IARC and National Toxicology Program as known carcinogens.

Main Symptoms	Lead poisoning is characterized by a metallic taste in the mouth, loss of appetite indigestion, nausea, vomiting, constipation, sleep disturbances and overall weakness.
Aggravated Medical Conditions	Pre-existing eye disorders. Skin disorders. Respiratory disorders. Central nervous system. Blood disorders. Reproductive system.
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 %
Lead chromate	7758-97-6	7-13
Titanium dioxide	13463-67-7	5-10
Methyl alcohol	67-56-1	3-7
Toluene	108-88-3	3-7
Lead carboxylate	Proprietary	0.1-1
Ethyl benzene	100-41-4	<0.1
Benzene	71-43-2	<0.1

4. FIRST AID MEASURES

General Advice	Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.
Eye Contact	In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes. Call a physician immediately.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing before re-use. Consult a physician.
Inhalation	Move victim to fresh air. Apply artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult.
Ingestion	Call a physician or Poison Control Center immediately. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Drink plenty of water.
Notes to Physician	Treat symptomatically.
Protection of First-aiders	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

5. FIRE-FIGHTING MEASURES

Flammable Properties	Not flammable.
Flash Point	> 201°F / 93.8°C
Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Explosion Data	
Sensitivity to Mechanical Impact	None
Sensitivity to Static Discharge	None
Protective Equipment and Precautions for Firefighters	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA	Health Hazard 2	Flammability 1	Instability 0	Physical and Chemical Hazards -
HMIS	Health Hazard 2*	Flammability 1	Physical Hazard 0	Personal Protection -

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Use personal protective equipment. Avoid contact with skin, eyes and clothing.
Environmental Precautions	Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Should not be released into the environment.
Methods for Containment	Prevent further leakage or spillage if safe to do so. Dike far ahead of liquid spill for later disposal.
Methods for Cleaning Up	Use personal protective equipment. Soak up with inert absorbent material. Take up mechanically and collect in suitable container for disposal. Keep in suitable and closed containers for disposal.

7. HANDLING AND STORAGE

Handling	Ensure adequate ventilation. Avoid breathing vapors or mists. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Do not eat, drink or smoke when using this product.
Storage	Keep container tightly closed in a dry and well-ventilated place. Keep in properly labeled containers. Keep out of the reach of children.

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	TWA: 0.1 mg/m ³ (vacated)	IDLH: 50 mg/m ³ respirable dust TWA: 0.05 mg/m ³ respirable dust
Lead chromate 7758-97-6	TWA: 0.012 mg/m ³ Cr TWA: 0.05 mg/m ³ Pb	TWA: 5 µg/m ³ TWA: 50 µg/m ³ Pb Action Level: 2.5 µg/m ³ Cr Action Level: 30 µg/m ³ Pb Poison, See 29 CFR 1910.1025 (vacated) Ceiling: 0.1 mg/m ³ Ceiling: 0.1 mg/m ³ CrO ₃ applies to any operations or sectors for which the Hexavalent Chromium standard [29 CFR 1910.1026] is stayed or is otherwise not in effect	IDLH: 100 mg/m ³ Pb IDLH: 15 mg/m ³ Cr(VI) TWA: 0.050 mg/m ³ Pb TWA: 0.001 mg/m ³ Cr
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
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
Methyl alcohol 67-56-1	STEL = 250 ppm TWA: 200 ppm S*	TWA: 200 ppm TWA: 260 mg/m ³ (vacated) TWA: 200 ppm (vacated) TWA: 260 mg/m ³ (vacated) STEL: 250 ppm (vacated) STEL: 325 mg/m ³ (vacated) S*	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m ³ STEL: 325 mg/m ³ STEL: 250 ppm

Engineering Measures

Showers
Eyewash stations
Ventilation systems

Personal Protective Equipment**Eye/Face Protection**

No special protective equipment required.

Skin and Body Protection

No special protective equipment required.

Respiratory Protection

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

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Yellow.	Odor	Slight, Ammonia.
Odor Threshold	No information available	Physical State	Emulsion
pH	No information available.		
Flash Point	> 201°F / 93.8°C	Autoignition Temperature	No information available.
Decomposition Temperature	No information available.	Boiling Point/Boiling Range	No information available
Melting Point/Range	No information available		
Flammability Limits in Air	No information available.	Explosion Limits	No information available.
Solubility	No information available.	Evaporation Rate	No information available
Vapor Pressure	No data available	Vapor Density	No data available

10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage conditions.
Incompatible Products	None known based on information supplied.
Conditions to Avoid	None known based on information supplied.
Hazardous Decomposition Products	Carbon oxides. Nitrogen oxides (NOx).
Hazardous Polymerization	Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION**Acute Toxicity**

Product Information	Harmful by inhalation, in contact with skin and if swallowed.
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Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Quartz	500 mg/kg (Rat)		
Ethyl benzene	= 3500 mg/kg (Rat)	= 15354 mg/kg (Rabbit)	= 17.2 mg/L (Rat) 4 h
Toluene	= 636 mg/kg (Rat)	12124 mg/kg (Rat) 8390 mg/kg (Rabbit)	26700 ppm (Rat) 1 h
Benzene	1800 mg/kg (Rat)	-	13050 - 14380 ppm (Rat) 4 h
Titanium dioxide	> 10000 mg/kg (Rat)		> 6820 mg/m ³
Methyl alcohol	5628 mg/kg (Rat)	15800 mg/kg (Rabbit)	83.2 mg/L (Rat) 4 h 64000 ppm (Rat) 4 h

Chronic Toxicity**Chronic Toxicity**

Lead compounds may be absorbed by ingestion, by inhalation and through the skin. Lead may damage kidney function, the blood forming system and the reproductive system. Inorganic lead compounds can cause developmental damage. Very slowly eliminated from the body, so poisoning can be cumulative. Crystalline silica (quartz) has been classified by the International Agency for Research on Cancer (IARC) as a known human carcinogen (Group 1). Titanium dioxide has been classified by the International Agency for Research on Cancer (IARC) as possibly carcinogenic to humans (Group 2B) by inhalation. Chromium and chromium compounds are currently classified by IARC and National Toxicology Program as known carcinogens.

Chemical Name	ACGIH	IARC	NTP	OSHA
Lead chromate	A3 A2	Group 2A Group 1	Known	X
Titanium dioxide		Group 2B		X
Toluene		Group 3	-	-
Lead carboxylate		Group 3	Reasonably Anticipated	X
Ethyl benzene	A3	Group 2B		X
Benzene	A1	Group 1	Known	X

Target Organ Effects	Respiratory system. Central nervous system (CNS). Blood. Reproductive system.
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12. ECOLOGICAL INFORMATION**Ecotoxicity**

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Methyl alcohol	-	LC50 96 h: 13500 - 17600 mg/L flow-through (Lepomis macrochirus) LC50 96 h: 18 - 20 mL/L static (Oncorhynchus mykiss) LC50 96 h: 19500 - 20700 mg/L flow-through (Oncorhynchus mykiss) LC50 96 h: = 28200 mg/L flow-through (Pimephales promelas) LC50 96 h: > 100 mg/L static (Pimephales promelas)	EC50 = 39000 mg/L 25 min EC50 = 40000 mg/L 15 min EC50 = 43000 mg/L 5 min	-
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)
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)

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Benzene	EC50 72 h: = 29 mg/L (<i>Pseudokirchneriella subcapitata</i>)	LC50 96 h: 10.7-14.7 mg/L flow-through (<i>Pimephales promelas</i>) LC50 96 h: 22330-41160 µg/L static (<i>Pimephales promelas</i>) LC50 96 h: 70000-142000 µg/L static (<i>Lepomis macrochirus</i>) LC50 96 h: = 22.49 mg/L static (<i>Lepomis macrochirus</i>) LC50 96 h: = 28.6 mg/L static (<i>Poecilia reticulata</i>) LC50 96 h: = 5.3 mg/L flow-through (<i>Oncorhynchus mykiss</i>)		EC50 48 h: 8.76 - 15.6 mg/L Static (<i>Daphnia magna</i>) EC50 48 h: = 10 mg/L (<i>Daphnia magna</i>)

Chemical Name	Log Pow
Methyl alcohol	-0.77
Toluene	2.65
Ethyl benzene	3.118
Benzene	1.83

13. DISPOSAL CONSIDERATIONS**Waste Disposal Methods**

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated Packaging

Do not re-use empty containers.

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Methyl alcohol - 67-56-1		Included in waste stream: F039		U154
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.	

Chemical Name	California Hazardous Waste
Lead chromate	Toxic Corrosive Ignitable
Methyl alcohol	Toxic Ignitable
Toluene	Toxic Ignitable
Lead carboxylate	Toxic
Ethyl benzene	Toxic Ignitable
Benzene	Toxic Ignitable

14. TRANSPORT INFORMATION

<u>DOT</u>	Not regulated
<u>TDG</u>	Not regulated
<u>MEX</u>	Not regulated
<u>ICAO</u>	Not regulated
<u>IATA</u>	Not regulated
<u>IMDG/IMO</u>	Not regulated.

15. REGULATORY INFORMATION**International Inventories**

TSCA	All components are listed on the TSCA Inventory.
DSL	All components are listed either on the DSL or NDSL.

Legend

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

DSL/NDSL - 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 %
Lead chromate	7758-97-6	7-13	0.1
Methyl alcohol	67-56-1	5-10	1.0
Toluene	108-88-3	3-7	1.0
Lead carboxylate		0.1-1	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
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
Lead chromate		X		
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
Methyl alcohol	5000 lb		RQ= 2270 kg final RQ RQ= 5000 lb 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
Lead chromate	7758-97-6	Carcinogen Developmental Female Reproductive Male Reproductive
Ethyl benzene	100-41-4	Carcinogen
Toluene	108-88-3	Developmental
Benzene	71-43-2	Carcinogen Developmental Male Reproductive
Lead carboxylate		Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island
Quartz	X	X	X	-	X
Lead chromate	X	X	X	X	X
Methyl alcohol	X	X	X	X	X
Ethyl benzene	X	X	X	X	X
Toluene	X	X	X	X	X
Benzene	X	X	X	X	X
Titanium dioxide	X	X	X	-	X

International Regulations

Chemical Name	Carcinogen Status	Exposure Limits
Quartz		Mexico: TWA= 0.1 mg/m ³
Lead chromate	A1	Mexico: TWA= 0.01 mg/m ³ Mexico: TWA= 0.05 mg/m ³ Mexico: TWA= 0.15 mg/m ³ Mexico: TWA= 0.5 mg/m ³
Toluene		Mexico: TWA= 50 ppm Mexico: TWA= 188 mg/m ³
Titanium dioxide		Mexico: TWA= 10 mg/m ³ Mexico: STEL= 20 mg/m ³
Methyl alcohol		Mexico: TWA= 200 ppm Mexico: TWA= 260 mg/m ³ Mexico: STEL= 250 ppm Mexico: STEL= 310 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

D1B Toxic materials
D2A Very toxic materials
D2B Toxic materials



Chemical Name	NPRI
Lead chromate	X
Toluene	X
Methyl alcohol	X

Legend

NPRI - National Pollutant Release Inventory

16. OTHER INFORMATION

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

Issuing Date 09-May-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