TREE & LOG MARKING PAINT

Preparation Date: September 12, 2007

MATERIAL SAFETY DATA SHEET

SECTION 1 — PRODUCT AND COMPANY IDENTIFICATION

Product identifier: TREE & LOG MARKING PAINT

Chemical family: Aerosolized mixture.

Product use: Industrial forestry marking in pressurized spray containers.

Product Numbers: C3242 Blue, C3244A Red, C3145 Green, C3246 Black, C3247 White, C3141LF Yellow, C3143LF

Orange, C6242 Dark Blue, C6245 Dark Green, C6249 Gray, C3142FL Blue-Glo, C3144FL Orange-

Supplier's name and address:

Nelson Paint Company

Glo, C3145FL Green-Glo, C3148FL Pink-Glo, C3149FL Red-Glo.

Manufacturer's name and address: Nelson Paint Company of Canada

48 Industrial Park Crescent

Sault Ste. Marie, ON, Canada P6B 5P2

24 Hour Emergency Tel. #: 1-800-255-3924 (CHEMTEL – 24 Hours)

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	<u>CAS #</u>	% (weight)	OSHA PEL	ACGIH TLV			
Petroleum solvent	64742-88-7	15 – 40	*500 ppm	*100 ppm			
Methanol	67-56-1	7 – 10	200 ppm	200 ppm (skin)			
Propane (propellant)	74-98-6	10 - 20	1000 ppm	*1000 ppm			
C3246 Black and C6249 Gray also contain:							
Carbon black	1333-86-4	0.1 – 1	3.5 mg/m ³	3.5 mg/m^3			

^{*}Note: The OSHA PEL and ACGIH TLV listed above for Petroleum solvent is for "Stoddard Solvent". The ACGIH TLV listed above for Propane is for "Aliphatic hydrocarbon gases".

This material is classified as hazardous under OSHA regulations (29CFR 1910.1200).

SECTION 3 — HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Liquid aerosol, various colors. Solvent odor.

Danger! Flammable aerosol. Contents under pressure. May be harmful if inhaled, swallowed or absorbed through the skin in large amounts. May cause blindness if swallowed. Causes eye irritation.

POTENTIAL HEALTH EFFECTS

Target organs: Skin, eyes, respiratory system, digestive system, central nervous system (CNS)

Routes of exposure: Skin contact, skin absorption, eye contact, inhalation, ingestion.

Signs and symptoms of short-term (acute) exposure:

Inhalation: Inhalation of mists or vapors may cause irritation to the nose, throat and upper respiratory tract. Additional symptoms may include headache, nausea, vomiting, dizziness, loss of co-ordination and other central nervous system (CNS) effects. In high concentrations, affected person may experience a latent period, which could then be followed by visual effects including sensitivity to light and blurred vision. Product could potentially act as an asphyxiant and cause increased breathing and pulse rates, fatigue, nausea and vomiting.

Skin: Liquid concentrate may be irritating to the skin. Product may be absorbed if left on the skin, causing symptoms similar to those listed for inhalation. Spraying product directly onto skin could cause symptoms of frostbite including numbness, prickling and itching.

Eyes: Liquid concentrate causes moderate irritation to the eyes. Spraying product directly into eyes could cause freezing of the eye.

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SECTION 3 — HAZARDS IDENTIFICATION Continued

Ingestion: Liquid concentrate is poisonous if swallowed. Causes severe irritation to mouth, throat, and stomach. Severe stomach pains, vomiting and diarrhea may follow. Ingestion of extremely large amounts could cause the product to be absorbed. Absorption could cause additional symptoms similar to those listed for inhalation. Blindness or death may occur.

Chronic effects: Prolonged skin contact may cause drying and cracking of the skin (dermatitis). Continual and prolonged overexposure to solvents has been shown to cause permanent CNS effects.

Conditions aggravated by exposure: May aggravate pre-existing skin, respiratory, digestive, and central nervous system problems.

Carcinogenic status: See TOXICOLOGICAL INFORMATION, Section 11.

Additional health hazards: See TOXICOLOGICAL INFORMATION, Section 11. Potential environmental effects: See ECOLOGICAL INFORMATION, Section 12.

SECTION 4 — FIRST AID MEASURES

Inhalation: Immediately remove to fresh air. Obtain medical attention.

Skin contact: Remove contaminated clothing and wash skin with plenty of soap and water. Obtain medical attention if irritation persists.

Eye contact: Flush immediately with water for at least 15 minutes. Obtain medical attention.

Ingestion: Contact a physician immediately. Inducing vomiting should only be performed under the direct supervision of medical personnel. If the person is conscious, have victim rinse mouth with water. Give one to two glasses of water to drink to dilute material in the stomach. Never give anything by mouth to an unconscious person.

SECTION 5 — FIRE FIGHTING MEASURES

Fire hazards/conditions of flammability: Extremely flammable aerosol. Cans are pressurized to 60 - 80 psi (414 – 552 kPa) at 70°F (21°C) and can explode if heated above 120°F (49°C). Vapors are heavier than air and may collect in confined and low-lying areas. The vapors can travel considerable distances and flashback to a source of ignition.

Flammability classification (OSHA 29 CFR 1910.1200): Flammable Aerosol

Flash point (Method): 75°F (24°C) (TCC) (estimated)

Auto-ignition temperature: Not available Lower flammable limit (% by vol.): 1.9 Upper flammable limit (% by vol.): 9.5

Explosion data: Sensitivity to mechanical impact / static discharge: Not expected to be highly sensitive.

Oxidizing properties: None known.

Suitable extinguishing media: Carbon dioxide, dry chemical, water fog.

Special fire-fighting procedures/equipment: Self Contained Breathing Apparatus (SCBA) & protective clothing must be worn by fire fighting personnel. Move containers from fire area if it can be done without risk. Use water spray to cool fire exposed equipment and containers. Avoid spreading burning liquid with water spray used for cooling purposes.

Hazardous combustion products: Carbon oxides, formaldehyde gas and other irritating fumes. Nitrogen oxides and sulfur oxides may also be released during a fire.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Personal precautions: Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only. All persons dealing with clean-up should wear the appropriate protective equipment including self-contained breathing apparatus. Keep all other personnel upwind and away from the spill/release.

Environmental precautions: Ensure spilled product does not enter drains, sewers, waterways, or confined spaces. For large spills, dike far ahead of the spill for later recovery or disposal.

Spill response/Cleanup: Avoid breathing vapors or mists. Increase ventilation in area of release to prevent the build-up of a flammable / explosive atmosphere. Eliminate all sources of ignition and heat. Stop leak if you can do so without risk. Contain any spilled liquid concentrate and absorb with inert, non-combustible absorbent material, then place absorbent material into a container for later disposal (see Section 13). Contaminated absorbent material may pose the same hazards as the spilled product. Notify the appropriate authorities as required.

Prohibited materials: None known.

Special spill response procedures: If a spill/release in excess of EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8002).

DOT/CERCLA Reportable quantity (RQ): Methanol (RQ 5000 lbs.)

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SECTION 7 — HANDLING AND STORAGE

Safe handling procedures: Wear appropriate protective equipment. Use in a well ventilated area. Avoid inhalation of vapors or mists. Avoid prolonged or repeated contact with skin and clothing. Avoid contact with eyes. Do not use near sparks, heat or open flame. Keep cans out of direct sunlight. Turn cans upside down, empty the tube, and replace cap when through using. Do not puncture or incinerate. Wash thoroughly after handling.

Storage requirements: Store indoors at temperatures of 39 to 89°F (4 to 32°C), and away from incompatibles. Do not store near furnaces or other sources of heat. Cans are hazardous when emptied; all labeled precautions must be observed. Inspect periodically for damage or leaks. No smoking in the area.

Special packaging materials: Always keep in containers made of the same materials as the supply container.

SECTION 8 — EXPOSURE CONTROLS AND PERSONAL PROTECTION

Ventilation and engineering controls: Must be adequate to control vapors and mists below TLV levels. Product normally used outdoors.

Respiratory protection: Use of NIOSH-approved respirators or face masks advisable in windy conditions. Advice should be sought from respiratory protection specialists.

Eye / face protection: Use safety splash goggles when transferring paint or solvent, or during spraying applications.

Skin protection and other protective equipment: Protective gloves impervious to the material should be worn during use. Advice should be sought from glove suppliers. Additional protective clothing, such as long sleeve shirts and/or coveralls, is recommended. Eyewash bottles should be readily available at all times. Other protective equipment may be required as prescribed by workplace standards.

General hygiene considerations: Avoid inhalation of vapors or mists. Avoid contact with eyes, skin and clothing. Do not eat, drink or smoke when working. Upon completion of work, wash hands before eating, drinking, smoking or use of toilet facilities. Immediately remove soiled clothing and wash it thoroughly before reuse.

Permissible exposure levels: For individual ingredient exposure levels, see Section 2.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Physical state, odor and appearance: Liquid aerosol. Solvent odor. Color is dependant on the product number being used.

Specific gravity: 0.98 – 1.10 @ 77°F (25°C)

Solubility in water: Insoluble **Volatiles (% by weight):** 50.3 – 64.0

Vapor pressure (mmHg): 60 – 70 psig (414 – 483 kPa) @ 68°F (20°C)

Vapor density (Air = 1): >1

Boiling point: $302 - 401^{\circ}F(150 - 205^{\circ}C)$

Melting point: N/Av

Evaporation rate (ether = 1): Slower than ether

pH: N/Av

SECTION 10 — REACTIVITY AND STABILITY DATA

Stability and reactivity: Stable under the recommended storage and handling conditions prescribed.

Hazardous polymerization: Will not occur.

Conditions to avoid: Avoid heat, sparks, open flame and direct sunlight. Avoid contact with incompatibles.

Materials to avoid (incompatibles): Oxidizing agents (e.g. Chlorine, Peroxides, etc.), strong acids (e.g. Sulfuric acid),

strong bases (e.g. Sodium hydroxide).

Hazardous decomposition products: None known. Refer to Section 5 for 'Hazardous combustion products'.

SECTION 11 — TOXICOLOGICAL INFORMATION

Carcinogenicity: Product numbers C3246 and C6249 contain Carbon black. Carbon black is classified by IARC as possibly carcinogenic to humans, based on animal evidence (Group 2B).

Reproductive effects, Teratogenicity, Mutagenicity: These products contain Methanol. Methanol may cause fetotoxic and teratogenic effects, based on animal data.

Sensitization to material: No skin or respiratory sensitization effects are known.

Synergistic materials: Not available. **Other important hazards:** None known.

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SECTION 11 — TOXICOLOGICAL INFORMATION Continued

Toxicological data: There is no available data for the product itself, only for the ingredients. See below for individual ingredient acute toxicity data.

T., 3! 4	LC ₅₀ (rat, inh) LD ₅₀ (mg/kg)		(mg/kg)		
<u>Ingredients</u>	<u>(4hr)</u>	Rat, oral	Rabbit, dermal		
Petroleum solvent	$> 5500 \text{ mg/m}^3$	> 5000	> 2000		
Methanol	64,000 ppm	5628	15,800		
Propane (propellant)	N/Av	N/Ap	N/Ap		
C3246 Black and C6249 Gray also contain:					
Carbon black	6750 mg/m ³	> 15,400	> 3000		

SECTION 12 — ECOLOGICAL INFORMATION

Ecotoxicological information: The ecological characteristics of this product have not been fully investigated. The product should not be allowed to enter drains or water courses or be deposited where it can affect ground or surface waters. Do not discharge product unmonitored into the environment.

Chemical fate information: There is no data available on the product itself.

SECTION 13 — DISPOSAL CONSIDERATIONS

Handling for disposal: Handle according to recommendations listed in Section 7.

Methods of disposal: Dispose in accordance with all applicable federal, state and local regulations. Contact your local, state or federal environmental agency for specific rules.

RCRA: If this product, as supplied, becomes a waste, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

SECTION 14 — TRANSPORTATION INFORMATION

US 49 CFR information: This product, as supplied, can be shipped under the Limited Quantity or Consumer Commodity exceptions within the United States. Under 49 CFR, refer to Section 173.306 for additional exception requirements.

Proper Shipping Name: Aerosols
UN No.: UN1950
Primary Class: 2.1
Subsidiary Class: None
Packing Group: None

SECTION 15 — REGULATORY INFORMATION

US Information:

TSCA information: All ingredients are listed on the TSCA inventory.

EPA / CERCLA (40 CFR 302.4) information: This product contains the following chemical with an established reportable quantity and which is designated as hazardous under CERCLA (40 CFR 302.4):

Chemical NameCAS #% (weight)CERCLA Reportable Quantity (RQ)Methanol67-56-17 - 105000 lbs.

SARA TITLE III: Sec. 313, Toxic Chemicals Notification, 40 CFR 372: This product will not be subject to the TSCA notification requirements, since it does not contain any Toxic Chemical constituents above the *de minimus* concentration.

New Jersey Labeling Requirements: This product contains the following substances required to be disclosed on product labeling:

Chemical Name	CAS#	% (weight)	New Jersey Hazardous Substance			
Petroleum Solvent	64742-88-7	15 - 40	No			
Propane	74-98-6	10 - 20	Yes			
Methanol	67-56-1	7 - 10	Yes			
C3246 Black and C6249 Gray also contain:						
Carbon Black	1333-86-4	0.1 - 1	Yes			

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SECTION 15 — REGULATORY INFORMATION Continued

California Proposition 65: Product numbers C3246 and C6249 contain Carbon black, which is known to the state of California to cause cancer.

International Information:

Canadian CEPA information: All ingredients listed are present on the DSL.

Canadian WHMIS Classification: Class A (Compressed Gas), Class B5 (Flammable Aerosol), Class D2A (Materials Causing Other Toxic Effects, Very Toxic Material), Class D2B (Materials Causing Other Toxic Effects, Toxic Material).

SECTION 16 — OTHER INFORMATION

HMI-ES Rating:

0 - Insignificant 1 - Slight 2 - Moderate 3 - High 4 - Extreme * - Chronic Hazard

Health: *2 Flammability: 3 Reactivity: 0

References:

- 1. ACGIH, Threshold Limit Values and Biological Exposure Indices for 2006.
- 2. International Agency for Research on Cancer Monographs, searched 2007.
- 3. Canadian Centre for Occupational Health and Safety, CCInfoWeb databases, 2007 (Chempendium and RTECs).
- 4. US EPA Title III List of Lists January 27, 2005 version.
- 5. California Proposition 65 List December 8, 2006 version.

Legend: ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstract Services

CEPA: Canadian Environmental Protection Act

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980

CFR: Code of Federal Regulations DOT: Department of Transportation DSL: Domestic Substances List EPA: Environmental Protection Agency

EST: Eastern Standard Time

HSDB: Hazardous Substances Data Bank

IARC: International Agency for Research on Cancer IATA: International Air Transport Association ICAO: International Civil Aviation Organization

N/Ap: not applicable N/Av: not available

NIOSH: National Institute of Occupational Safety and Health

NTP: National Toxicology Program

OSHA: Occupational Safety and Health Administration

PEL: Permissible Exposure Limit

RCRA: Resource Conservation and Recovery Act SARA: Superfund Amendments & Reauthorization Act

TLV: Threshold Limit Values TSCA: Toxic Substance Control Act

WHMIS: Workplace Hazardous Materials Information System

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