Safety Data Sheet

Section 01 - Identification

Product Identifier	Road marking paint (yellow, oil based)
Other Means of Identification	None
Product Use and Restrictions on Use	Traffic lines on roads, paved surfaces for outside use.
Initial Supplier Identifier	ClearTech Industries Inc. 1500 Quebec Avenue Saskatoon, SK. Canada S7K 1V7
Prepared By	ClearTech Industries Inc. Technical Writer Phone: 1 (800) 387-7503
24-Hour Emergency Phone	Phone: 1 (306) 664 – 2522

Section 02 - Hazard Identification

GHS-Classification

Aspiration Hazard	Category 1
Skin Corrosion/Irritation	Category 2
STOT-Single Exposure	Category 3
STOT-Repeated Exposure	Category 2
Reproductive Toxicity	Category 1A
Carcinogenicity	Category 1B

Physical Hazards

Flammable Liquid	Category 2

Danger

Hazards Statements

H304 – May be fatal if swallowed and enters airways.
H315 – Causes skin irritation.
H336 – May cause drowsiness or dizziness.
H373 – May cause damage to the central nervous system through prolonged or repeated exposure via inhalation.
H360 – May damage fertility or the unborn child.
H225 – Highly flammable liquid and vapour.
H350 – May cause cancer.

Pictograms

Precautionary Statements

P201 – Obtain special instructions before use.
P202 – Do not handle until all safety precautions have been read and understood.
P403 + P235 – Store in a well-ventilated place. Keep cool.
P405 – Store locked up.
P210 – Keep away from heat, sparks, open flames, and hot surfaces. — No smoking.
P233 – Keep container tightly closed.
P240 – Ground/bond container and receiving equipment.
P241 – Use explosion-proof electrical, ventilating, lighting, and equipment.
P242 – Use only non-sparking tools.
P243 – Take precautionary measures against static discharge.
P370 + P378 – In case of fire: Use foam or dry chemical to extinguish flames.
P261 – Avoid breathing mist, vapours or spray.
P271 – Use only outdoors or in a well-ventilated area.
P304 + P340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P308 + P313 – IF exposed or concerned: Get medical advice/attention.
P280 – Wear protective gloves, protective clothing, eye protection, and face protection.
P303 + P361 + P353 – IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin.
P332 + P313 – If skin irritation occurs: Get medical advice/attention.
P362 – Take off contaminated clothing and wash before reuse.
P501 – Dispose of contents/container in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.

Section 03 - Composition / Information on Ingredients

Chemical Name	CAS Number	Weight %	Unique Identifiers
Toluene	108-88-3	15-25%	
VM & P Naphtha	64742-48-9	5-15%	
Lead Chromate	7758-97-6	5-15%	

Section 04 - First Aid Measures

Inhalation
Remove victim to fresh air. Give artificial respiration only if breathing has stopped. If breathing is difficult, give oxygen. Seek immediate medical attention.

Skin Contact / Absorption
Remove contaminated clothing. Wash affected area with soap and water. Seek medical attention if irritation occurs or persists.

Eye Contact
Contact lenses should never be worn when working with this product. Flush immediately with water for at least 30 minutes. Forcibly hold eyelids apart to ensure complete irrigation of eye tissue. Seek medical attention. Avoid rubbing eyes.

Ingestion
Do not induce vomiting if swallowed. Get prompt medical attention.

Additional Information
NOTE: This product contains an ingredient that may cause cancer and may cause damage fertility and an unborn child. Take proper precautions to ensure your own safety before assisting others.

Section 05 - Fire Fighting Measures

Suitable Extinguishing Media
Use water spray to cool fire-exposed surfaces, and on spills. Fire can be left to burn out or extinguished with foam or dry chemical.

Unsuitable Extinguishing Media
Not Available

Specific Hazards Arising From the Chemical
Carbon monoxide, oxides of lead and chromium.

Special Protective Equipment and Precautions for Fire-Fighters
Wear NIOSH-approved self-contained breathing apparatus and protective clothing.

Further Information	Not Available

Section 06 - Accidental Release Measures

Personal Precautions / Protective Equipment / Emergency Procedures	Wear appropriate personal protective equipment. Ventilate area. Only enter area with PPE. Stop or reduce leak if safe to do so. Do not use combustible material to absorb product.
Environmental Precautions	Prevent material from entering sewers.
Methods and Materials for Containment and Cleaning Up	SMALL SPILLS: Soak up spill with absorbent material which does not react with spilled chemical. Put material in suitable, covered, labelled containers. Flush area with water. LARGE SPILLS: Contact fire and emergency services and supplier for advice.

Section 07 - Handling and Storage

Precautions for Safe Handling	This material is a FLAMMABLE LIQUID, POSSIBLE TERATOGEN/EMBRYOTOXIN, CARCINOGEN, and a SKIN IRRITANT. Use proper equipment for lifting and transporting all containers. Use sensible industrial hygiene and housekeeping practices. Wash thoroughly after handling. Avoid all situations that could lead to harmful exposure.
Conditions for Safe Storage	Keep containers covered when not in use. Store containers in a cool, well-ventilated area. Keep away open flames, sparks or heat. Do not allow product to freeze.
Incompatibilities	Nitric acid, sulfuric acid, potassium chlorate, strong oxidizing agents, nitrogen tetroxide, tetranitromethane, silver perchlorate, sulfur dichloride, sulfuric acid, uranium hexafluoride.

Section 08 - Exposure Controls and Personal Protection

Exposure Limit(s)

Component	Regulation	Type of Listing	Value
Toluene	ACGIH	TLV-TWA	20ppm
	OSHA	PEL-TWA	100ppm
Lead Chromate	ACGIH	TLV-TWA	0.05mg/m^3

Engineering Control(s)

Ventilation Requirements	Mechanical ventilation (dilution or local exhaust), process or personnel enclosure and control of process conditions must be provided in accordance with all fire codes and regulatory requirements. Supply sufficient replacement air to make up for air removed by exhaust systems.
Other	Emergency shower and eyewash must be available and tested in accordance with regulations and be in close proximity.

Protective Equipment

Eyes/Face	Chemical goggles, full-face shield, or a full-face respirator is to be worn at all times when product is handled. Contact lenses should not be worn; they may contribute to severe eye injury.
Hand Protection	Impervious gloves of chemically resistant material (rubber or PVC) should be worn at all times. Wash contaminated clothing and dry thoroughly before reuse.
Skin and Body Protection	Body suite, aprons, and/or coveralls of chemical resistant material should be worn at all times. Wash contaminated clothing and dry thoroughly before reuse. Impervious boots of chemically resistant material should be worn at all times. No special footwear is required other than what is mandated at place of work.

Respiratory Protection	If engineering controls and work practices are not effective in controlling exposure to this material, then wear suitable personal protective equipment including approved respiratory protection.
Thermal Hazards	Not Available

Section 09 - Physical and Chemical Properties

Appearance

Physical State	Liquid
Colour	Viscous
Odour	Petroleum like odour
Odour Threshold	Not Available

Property

pH	Not Available
Melting Point/Freezing Point	Not Available, will gradually thicken when it cools.
Initial Boiling Point and Boiling Range	60-140°C
Flash Point	< -10°C
Evaporation Rate	> 3
Flammability	Flammable liquid will ignite when exposed to flame or spark. Product could flash if spilled over hot engines or hot exhaust pipes.
Upper Flammable Limit	Not Available
Lower Flammable Limit	1.5%
Vapour Pressure (mm Hg, 20^{o}C)	> 150mmHg at 38°C
Vapour Density (Air=1)	> 1
Relative Density	Not Available
Solubility(ies)	Not Available
Partition Coefficient: n-octanol/water	Not Available
Auto-ignition Temperature	260°C
Decomposition Temperature	Not Available
Viscosity	Not Available
Explosive Properties	Closed containers may explode if exposed to very high temperatures.
Specific Gravity (Water=1)	1.36-1.56
% Volatiles by Volume	Not Available

Formula	Not Available
Molecular Weight	Not Available

Section 10 - Stability and Reactivity

Reactivity	Not Available
Stability	Considered stable.
Possibility of Hazardous Reactions	Not Available
Conditions to Avoid	Oxidizing agents and fire.
Incompatible Materials	Nitric acid, sulfuric acid, potassium chlorate, strong oxidizing agents, nitrogen tetroxide, tetranitromethane, silver perchlorate, sulfur dichloride, sulfuric acid, uranium hexafluoride.
Hazardous Decomposition Products	Carbon monoxide.

Section 11 - Toxicological Information

Acute Toxicity Estimate

Component	Oral LD_{50}	Dermal LD_{50}	Inhalation LC_{50}
Marking Paint (oil based) – Yellow	7.8 g/kg	33.9 g/kg	19.8 g/kg

This product has been classified in accordance with the Hazardous Products Regulations using ATE formula documented in the GHS standard.

Chronic Toxicity – Carcinogenicity

Component	IARC
Lead Chromium	Group 1: Carcinogenic to humans.

Skin Corrosion/Irritation	Moderately irritating.
Ingestion	May cause severe health effects (bronchial pneumonia or pulmonary edema) if swallowed and gets into lungs.
Inhalation	Irritating to eyes, nose, throat and lungs. May cause headaches, dizziness, effects of drunkenness or other central nervous system effects.
Serious Eye Damage/Irritation	Mild eye irritant.
Respiratory or Skin Sensitization	A good number of studies provide evidence that inhaled hexavalent chromium compounds, like lead chromate, can cause asthma, and there are positive findings from several well-conducted bronchial challenge tests. The mechanism by which chromium causes asthma is not well-defined, but there is currently little evidence of immunological effects. It can take some time for sensitization to develop (e.g. months or years). Once sensitized, the person will experience symptoms of asthma such as wheezing, difficult breathing, sneezing and runny or blocked nose following exposure to airborne concentrations that have no effect on unsensitized people. Symptoms can develop immediately following exposure or hours later.
Germ Cell Mutagenicity	There is insufficient information available to conclude that toluene is mutagenic.
Reproductive Toxicity	Toluene does cause developmental effects in animals, based on fetotoxicity (reduced fetal weight), behavioural effects (effects on learning and memory) and hearing loss (in males) observed in the offspring of rats exposed by inhalation to 1200 or 1800 ppm. These effects were observed in the absence of maternal toxicity.

STOT-Single Exposure	May be irritating to respiratory tract. Inhalation of toluene vapour can affect the central nervous system.
STOT-Repeated Exposure	May cause effects of chronic lead toxicity upon repeated ingestion. Prolonged and repeated exposure of male rats to inhalation of light hydrocarbon vapors produced kidney disorders and/or damage. These effects were not observed in similar studies with female rats and male or female mice and in limited studies with other animal species and are believed to be unique to the male rat. A number of human studies have not shown clinical evidence of an association between light hydrocarbon exposure and disease. It is highly unlikely that the kidney effects observed in male rats have significant implications for humans exposed at or below the occupational exposure limits. Lead chromate may have effects on the blood, bone marrow, central nervous system, peripheral nervous system, kidneys and lungs. This may result in anaemia, peripheral nerve disease, abdominal cramps and kidney impairment.
Aspiration Hazard	Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema
Synergistic Materials	Combined exposure to toluene and noise, toluene and n-hexane, toluene and aspirin or toluene, ethylbenzene and noise has caused a synergistic loss of hearing in animal studies. Increased hearing loss has also been observed in workers in some studies following long-term exposure to toluene and noise.

Section 12 – Ecological Information

Ecotoxicity

Component	Toxicity to Algae	Toxicity to Fish	Toxicity to Daphnia and Other Aquatic Invertebrates
Toluene	EC_{50}(Green algae, 72hr): 12.5mg/L	LC_{50}(Fathead minnow, 96hr): 34.27mg/L	LC_{50}(Daphnia magna, 48hr): 313mg/L

Biodegradability	Expected to biodegrade.
Bioaccumulation	Bioaccumulation of lead chromate may occur along the food chain.
Mobility	Not Available
Other Adverse Effects	Not Available

Section 13 – Disposal Considerations

Waste From Residues/Unused Products	Dispose in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.
Contaminated Packaging	Dispose in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.

Section 14 – Transport Information

UN Number	UN1263
UN Proper Shipping Name	PAINT
Transport Hazard Class(es)	3
Packaging Group	II
Environmental Hazards	Not listed as a marine pollutant under Canadian TDG Regulations, schedule III.
Special Precautions	Not Available
Transport in Bulk	Not Available

Additional Information

Packing Group	Limited Quantity Index
I	0.5 L
II	5 L
III	5 L

TDG

Other Secure containers (full and/or empty) with suitable hold down devises during shipment and ensure all caps, valves, or closures are secured in the closed position.

TDG PRODUCT CLASSIFICATION: This product has been classified on the preparation date specified at section 14 of this MSDS / SDS, for transportation in accordance with the requirements of part 2 of the Transportation of Dangerous Goods Regulations. If applicable, testing and/or published test data regarding the classification of this product are listed in the references at section 16 of this MSDS / SDS.

Section 15 – Regulatory Information

NOTE: THE PRODUCT LISTED ON THIS SDS HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CANADIAN CONTROLLED PRODUCTS REGULATIONS. THIS SDS CONTAINS ALL INFORMATION REQUIRED BY THOSE REGULATIONS.

Section 16 – Other Information

Preparation Date August 26, 2015

Note: The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations.

Attention: Receiver of the chemical goods / SDS coordinator

As part of our commitment to the Canadian Association of Chemical Distributors (CACD) Responsible Distribution® initiative, ClearTech Industries Inc. and its associated companies require, as a condition of sale, that you forward the attached Safety Data Sheet(s) to all affected employees, customers, and end-users. ClearTech will send any available supplementary handling, health, and safety information to you at your request.

If you have any questions or concerns please call our customer service center.

References:

1) CHEMINFO
2) eChemPortal
3) TOXNET
4) Transportation of Dangerous Goods Canada
5) HSDB
6) ECHA

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