

# MATERIAL SAFETY DATA SHEET

This Material Safety Data Sheet complies with the Canadian Controlled Products Regulations

Abbreviations used on this Material Safety Data Sheet:

N/av. = Not available, N/Ap. = Not applicable, ppm = parts per million, TLV = Threshold Limit Value.

NFPA Hazard Rating: 4 - Extreme, 3 - High, 2 - Moderate, 1 - Slight, 0 - None, X - Blank

WHMIS CLASS: D-2B

NFPA HAZARD RATING:

HEALTH - 1 FLAMMABILITY - 0, REACTIVITY - 0

## SECTION 1 - PRODUCT IDENTIFICATION AND USE

PRODUCT IDENTIFIER:	<b>CITROSOLV</b>
PRODUCT USE:	Water-based cleaner and solvent
SUPPLIER:	Toro Sales Inc. 239 Sixth Street, New Westminster, British Columbia, Canada, V3L 3A5
TELEPHONE:	(604) 521-6677, general calls 24-HOUR EMERGENCY: CONTACT CANUTEC AT (613) 996-6666

## SECTION 2 - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS	% (w/w)	CAS NUMBER	LETHAL DOSE (50%) (SPECIES AND ROUTE)	LETHAL CONCENTRATION (50%) (SPECIES AND ROUTE)
d-Limonene	1-5	5989-27-5	4400 mg/kg (rat,oral)	N/av.
Sodium myritheth sulphate	1-5	25446-80-4	N/av.	N/av.
Monoxyinol	7-13	9016-45-9	N/av.	N/av.

## SECTION 3 - PHYSICAL DATA

PHYSICAL STATE:	Liquid	ODOUR AND APPEARANCE:	Thin opaque liquid with strong citrus odour.		ODOUR THRESHOLD:	N/av.			
VAPOUR PRESSURE:	N/av.	VAPOUR DENSITY: (Air = 1)	> 1	EVAPORATION RATE: (n-butyl acetate = 1)	< 1	BOILING POINT:	78 °C	FREEZING POINT:	10 °C
pH:	11.5	SPECIFIC GRAVITY:	0.98	COEFFICIENT OF WATER/OIL DISTRIBUTION:	Completely miscible in water.				

## SECTION 4 - FIRE AND EXPLOSION DATA

FLAMMABILITY:	YES NO X				
MEANS OF EXTINCTION:	Carbon dioxide, dry chemical powder, alcohol foam.				
SPECIAL PROCEDURES:	Use water spray to cool containers below flash point. Fire fighters must wear self-contained breathing apparatus.				
FLASHPOINT:	> 100 °C (closed cup)	UPPER FLAMMABILITY LIMIT:	N/av.	LOWER FLAMMABILITY LIMIT:	N/av.
AUTOIGNITION TEMPERATURE:	237 °C	HAZARDOUS COMBUSTION PRODUCTS:	Oxides of carbon.		
EXPLOSION DATA: SENSITIVITY TO IMPACT	No	SENSITIVITY TO STATIC DISCHARGE:	No		

## SECTION 5 - REACTIVITY DATA

CHEMICAL STABILITY:	YES X NO Normal stable but may oxidize under prolonged exposure to air. Hazardous polymerization does not occur.
INCOMPATIBILITY WITH OTHER SUBSTANCES:	YES X NO Avoid strong oxidizing agents due to increased risk of fire or explosion
REACTIVITY:	Not reactive under normal conditions.
HAZARDOUS DECOMPOSITION PRODUCTS:	None reported.

PRODUCT IDENTIFIER: <b>CITROSOLV</b>			
<b>SECTION 6 – TOXICOLOGICAL PROPERTIES</b>			
ROUTES OF ENTRY			
Inhalation: major	Eye: minor	Skin: major	Ingestion: minor
EFFECTS OF ACCUTE EXPOSURE:			
Irritation can result from skin, eye, or respiratory tract contact with liquid or vapour. Absorption through skin or inhalation of vapour at normal temperatures poses minimal hazard. Only slightly toxic by ingestion, but ingestion of large amounts will cause diarrhea. Aspiration can damage lungs and cause death.			
EFFECTS OF CHRONIC EXPOSURE:			
Prolonged or repeated exposure can defat skin and lead to dermatitis. Can also cause allergic skin response in some person. Intense long-term exposure may cause kidney problems.			
EXPOSURE LIMITS:	IRRITANCY:	SENSITIZATION:	CARCINOGENICITY:
ACGIH TLV-TWA is not established.	As above	d-Limonene is a sensitizer.	Not reported.
TERATOGENICITY:	REPRODUCTIVE TOXICITY:	MUTAGENICITY:	SYNERGISTIC PRODUCTS:
Not reported	Not reported	Not reported	None reported
<b>SECTION 7 – PREVENTIVE MEASURES</b>			
GLOVES:	RESPIRATOR:	EYE:	
Neoprene, Nitrile, Butyl rubber, or Polyvinyl alcohol.	No respiratory protection is required under normal use conditions. Consider the use of respiratory protection in confined spaces and at elevated temperatures.	Chemical safety goggles. A face shield may be needed if splashing is possible.	
FOOTWEAR:	CLOTHING:	OTHER:	
Impervious boots using same materials as gloves.	Coveralls or other suitable protective clothing.	Emergency eye-wash and shower should be available.	
ENGINEERING CONTROLS:			
Mechanical ventilation, both dilution and exhaust may be utilized to limit exposure. Extra ventilation should be provided in enclosed spaces and in hot weather.			
LEAK AND SPILL PROCEDURE:			
Soak up small spills with absorbent materials. Prevent run-off from reaching storm or sewage drains.			
WASTE DISPOSAL:			
Dispose of according to federal, provincial and municipal regulations.			
HANDLING PROCEDURES AND EQUIPMENT:			
Avoid generating mist. Keep containers closed when not in use. Do not freeze.			
STORAGE REQUIREMENTS:			
Empty containers may contain hazardous residue. Store in cool, dry, well ventilated area away from incompatible materials and all sources of ignition.			
SPECIAL SHIPPING INFORMATION:			
Not regulated under the Canadian Transportation of Dangerous Goods Regulations.			
<b>SECTION 8 – FIRST AID MEASURES</b>			
INHALATION:	Remove victim to fresh air. If breathing has stopped, a trained person should perform artificial respiration.		
INGESTION:	Do not induce vomiting. If conscious, give victim two glasses of cold water. Never give anything by mouth to an unconscious person. Seek medical attention.		
EYE CONTACT:	Flush eye for 15 minutes, by the clock, with water while retracting eyelids. Seek medical attention.		
SKIN CONTACT:	Remove contaminated clothing. Wash affected area with soap and water. Launder clothing before reuse. Seek medical attention if irritation persists.		
<b>SECTION 9 – PREPARATION DATE OF MSDS</b>			
PREPARED BY:	PHONE NUMBER:	DATE:	
Kel-Ex Agencies Ltd. With information supplied by Toro Sales Inc.	Kel-Ex Agencies Ltd. (604) 986-4617	Revised: June 01, 2007	