

14th Floor - Centre Tower 3300 Bloor Street West Standards and Safety Authority Fax: 416.231.4903 Customer Service: 1.877.682.8772

#### Level 1 Risk and Safety Management Plan (RSMP) Technical Standards and Safety Act Propane Storage and Handling Regulation

This Level 1 RSMP applies to: • a facility with a total propane storage capacity of 5,000 USWG or less; or • a facility with a fixed propane storage capacity of exactly 5,000 USWG and no more than 500 USWG of portable propane storage capacity on site.

	Making	e to fully complete this form a false statement may resu under the <i>Technical Standa</i>	It in a fine or prosecution				
Licence Number 000076646385							
Check	applicable type of prop	pane operations.					
	✓ Cylinder	Motor Fill	Filling Plant Card/Keylocl				
Subm	it along with this comple	eted application a Facility Site Plant	an and a Map of the Surrounding Area.				
		SEC	TION A: GENERAL INF	ORMATION			
		plies to TSSA for a r	review for an RSMP under O	ntario's <i>Technical</i> 5	Standard	s and Safety Act,	
	Company Name				Ontario	Corporation No., if applicable	
A	Canadian Tire Corp						
	Operator Name (if diffe Sylvie Holowlenko	rent from above) tel: (705) 268-5310					
	Telephone No.	Fax No.	E-mail				
	(416) 544-7608	(416) 544-6163	john.lastoria@cantire.com				
В	Street No.	Street Name / 911 Number / A	ddress, il applicable			Sec. 1	
9	2180	Yonge Street, 17th Floor				D-1-10-1-	
	Town / City or Townsh Toronto	ip / County		Province Ontario		Postal Code M4P 2V8	
	21/2-1-2-1-2			Officiality			
	Street No.	Street Name / 911 Number / A				1	
	- 101 T 11	PO Box 770, Station K	(Account #34421)	Province		Postal Code	
	Town / City or Township Toronto	57 County		Ontario		M4P 3J5	
Inf		ainer Refill Centre or Fil	ling Plant	STOCKED STOCKED			
3	Location of facility						
D	Street No.	Street Name / 911 Number / A	ddress, if applicable	Nearest Major Intersectio		Ĩ	
	2207	Riverside Drive		Riverside Drive and Jag	guar Drive		
	Town / City or Township	o / County		Province		Postal Code	
	Timmins			Ontario		P4R 0A1	
- 3	Name of Licence Holder						
L		alf of Canadian Tire Corpora	The second secon				
i	Name of a Senior Management person as defined in the regulation holding the Record of Training (ROT).  ROT type						
L	Glenn Butt 100-08						
Ÿ	Municipality (or municipalities if the facility or its hazard distance touches multiple borders)						
	Timmins						
House of appration							
	Hours of operation.						

This document is valid until the next licence renewal date. You are required by law to notify TSSA of any change of information.

Printname	Signature	Date (dd-mm-yyyy)
Name of Licence Holder John Lastoria	467	12-09-2011
Name of Senior Management person as defined in the	The state of the s	
Regulation holding the Record of Training Glenn Butt		



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Indicate the year the facility was established.  Indicate the year of any significant modifications, as defined in s.1, O.Reg 211/01, since established.  None since open  PSIG  Serial Number  Tank1: 250 PSIG  Tank2:	SECTION A: GENERAL INFORMATION (cont'd)				
PSIG Serial Number  Tank1: 250 PSIG 515-05  Tank2:	any significant modifications, as defined in s.1, O.Reg 211/01, since establishn	The second secon	the facility was established.		
Tank1: 250 PSIG 515-05  Tank2:	age tank on site.	h fixed propan	ating and serial number for each	dentify the psig r	
Tank2:  Tank3:  Enter capacity of propane in USWG, fixed, portable, and mobile, and provide detailed inventory that includes the number of tank/vessel for each type (fixed, portable, and mobile) and the capacity of each tank/vessel, on a separate document.	ber				
Tank2: Tank3:  inter capacity of propane in USWG, fixed, portable, and mobile, and provide detailed inventory that includes the number of tank/vessel for ach type (fixed, portable, and mobile) and the capacity of each tank/vessel, on a separate document.		515-05	250 PSIG	Tank 1: _2	
inter capacity of propane in USWG, fixed, portable, and mobile, and provide detailed inventory that includes the number of tank/vessel for ach type (fixed, portable, and mobile) and the capacity of each tank/vessel, on a separate document.					
ach type (fixed, portable, and mobile) and the capacity of each tank/vessel, on a separate document.				Tank3:	
ach type (fixed, portable, and mobile) and the capacity of each tank/vessel, on a separate document.	provide detailed inventory that includes the number of tank/vessel for	able, and mobi	propane in USWG, fixed, port	nter capacity of	
Fixed: 2000 USWG Portable: 348 USWG Mobile: 0					
FIXed:	G Mabile: 0	Destable: 34	2000 USWG	Financia	
	IVIOUIC.	r Ortable.		rixeu.	

Name of person completing this form (please print)	Official Title	
John Lastoria	EH & S Specialist	
Signature	Telephone No.	Date (dd-mm-yyyy)
	416-544-7608	12-09-2011



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# Level 1 Risk and Safety Management Plan (RSMP) Technical Standards and Safety Act Propane Storage and Handling Regulation

		SECT		ERAL INFORMATION Information	ON (cont'd	1)
	~=>_					
Name of Propan	e Supplie	r(s)				
Superior Propane -	Ontario Re	egional Operations Cer	ntre			
Street No.	Street Na	me / 911 Number / Ad	dress, if applicable			
251	Woodlawn	Road West, Unit 217				
Town / City or To Guelph	ownship / (	Country			Province Ontario	Postal Code N1H 8J1
Telephone No.	i	Fax No.	Contact Na	ame		
1-877-873-7467		519-836-7766	Mike Mullins			
E-mail mullinsm@superior	rpropane.c	om				
Superior Propane - Street No.	Porcupine	rter. If same as abo me / 911 Number / Ad eet	10.00A	ох.		
Town / City or To Procupine	wnship / (	Country			Province Ontario	Postal Code PON 1C0
Telephone No. 705-471-9209		Fax No. N/A	Contact Na Lonnie Duqu	CHA		
E-mail DuquettL@superio	rpropane.c	om				
Off-site Cylinder None	and/or M	obile Storage		Capacity stored off-site,	, in USWG	For Office Use - Party No.
Street No.	Street Na	me / 911 Number / Add	dress, if applicable			
Town / City or To	wnship / 0	Country			Province	Postal Code

Note: Customer storage is not considered off-site storage.

Fax No.

Declaration: I am aware that it is an offence to give false information in this document and I hereby declare that the information I have given here is true and complete.

Contact Name

Name of person completing this form (please print)		Official Title	Official Title	
John Lastoria		EH&SSpecialist	E H & S Specialist	
Signature		Telephone No.	Date (dd-mm-yyyy)	
		416-544-7608	12-09-2011	

Telephone No.



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# Level 1 Risk and Safety Management Plan (RSMP) Technical Standards and Safety Act Propane Storage and Handling Regulation

# SECTION B: EMERGENCY AND PREPAREDNESS RESPONSE PLAN

 $The \ licence\ holder\ will\ complete\ Section\ B\ in\ consultation\ with\ the\ local\ Fire\ Services.$ 

Name of person completing this form (please print) John Lastoria	Official Title EH & S Specialist		
Signature	Telephone No. 416-544-7608	Date (dd-mm-yyyy) 12-09-2011	



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# Level 1 Risk and Safety Management Plan (RSMP) Technical Standards and Safety Act Propane Storage and Handling Regulation

# SECTION B: EMERGENCY AND PREPAREDNESS RESPONSE PLAN (cont'd)

1. Contacts for Emergency Response

1. Facility Contact Personnel - Key	Contact	5. Facility 24-Hour Contact Person		
Name Sylvie Holowienko	For Office Use - Party No.	Name Sylvie Holowienko	For Office Use - Party No.	
Official Title Store Operator/Agent		Official Title Store Operator/Agent		
Telephone No. (705) 268-5310	Fax No. (705) 268-5310	Cell No. Fax No. (705) 262-5616 (705) 268-5310		
E-mail 1033.Timmins_West@ctpagent.ca		E-mail 1033.Timmins_West@ctpagent.ca		
Role and responsibilities in emergency	/	Role and responsibilities in emergency		
Coordinate site response		Coordinate site response		
2. Facility Contact Personnel - Ali	ernate Contact	6. Name of Facility Manager		
Name Marc-Andre Stanford	For Office Use - Party No.	Name Sylvie Holowienko	For Office Use - Party No.	
Official Title Regional Business Manager		Official Title Store Operator/Agent		
Telephone No. (613) 850-8263	Fax No. (613) 691-1205	Telephone No. (705) 268-5310	Fax No. (705) 268-5310	
E-mail marc-andre.stanford@cantire.com		E-mail 1033.Timmins West@ctpagent.ca		
Role and responsibilities in emergency	/	Role and responsibilities in emergency		
Coordinate site response if agent unava	ilable.	Coordinate site response		
3. Local Fire Services - Key Contact	ot )	7. Propane Supplier Key Contact Po		
Name Mike Pintar	For Office Use - Party No.	Name Superior Propane Hotline	For Office Use - Party No.	
Official Title Fire Chief		Official Title		
Telephone No. (705) 360-2626	Fax No. (705) 360-2681	Telephone No. 1-877-873-7467	Fax No.	
E-mail Mike.Pintar@timmins.ca		E-mail		
Role and responsibilities in emergency	/	Role and responsibilities in emergency	-	
Coordinate/advise on Fire Service response	onse and liaise with police and CTC	Identify and dispatch Superior Propane and or LPERGC emergency response		
4. Local Fire Services - Alternate C	ontact	personnel as required.  8. Municipal Contact		
Name Dan Kaiser	For Office Use - Party No.	Name Janet Ronne	Season section (Control of Control of Contro	
Official Title Chief - Fire Prevention		Official Title Manager of Planning		
Telephone No. (705) 745-3284	Fax No. (705) 745-2460	Telephone No. (705) 360-2600 x3340 ext.3340	Fax No. N/A	
E-mail unknown		E-mail janet.ronne@timmins.ca		
Role and responsibilities in emergency	/	Municipality		
Alternate - Coordinate/advise on Fire Sepolice and CTC contact.		Timmins		

Name of person complete	ting this form (please print)	Official Title	
John Lastoria		EH & S Specialist	
Signature		Telephone No.	Date (dd-mm-yyyy)
		416-544-7608	12-09-2011



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# SECTION B: EMERGENCY AND PREPAREDNESS RESPONSE PLAN (cont'd)

2. Additional Safety Measures

Describe any other measures in place at the facility that exceed the minimum Code and Standards requirements.
Emergency Shut Off push button to shut down pump and close solenoid valve upstream of dispensing hoses.

Name of person co	ompleting this form (please print)	Official Title	Official Title		
John Lastoria		EH & S Specialist	EH & S Specialist		
Signature		Telephone No.	Date (dd-mm-yyyy)		
	177	416-544-7608	12-09-2011		



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## Level 1 Risk and Safety Management Plan (RSMP) Technical Standards and Safety Act Propane Storage and Handling Regulation

# SECTION B: EMERGENCY AND PREPAREDNESS RESPONSE PLAN (cont'd)

3. Record of Emergency Training Provided - For most recent 12-month period.

Training on Emergency Re	sponse Plan and Procedures provided to facility key contacts.	)
Training Date (dd-mm-yyyy)	Print Name of Training Provider: None	Please Note - the industry did not have a course
N/A	Print Name of Instructor:	in place last year. They are currently developing a
Training Date (dd-mm-yyyy)	Print Name of Training Provider:	a training course that is scheduled to be available
	Print Name of Instructor:	in the fourth quarter of this year
Training Date (dd-mm-yyyy)	Print Name of Training Provider:	
	Print Name of Instructor:	
Training on the facility's Em	nergency Management Procedures provided to staff.	
Training Date (dd-mm-yyyy)	Print Name of Training Provider: None	
	Print Name of Instructor:	
Training Date (dd-mm-yyyy)	Print Name of Training Provider:	
	Print Name of Instructor:	
Training Date (dd-mm-yyyy)	Print Name of Training Provider:	
	Print Name of Instructor:	
On-site specific training pro	ovided to certificate holders / persons with Records of Training.	
Training Date (dd-mm-yyyy)	Print Name of Training Provider: FSN Training	Please Note - a ROT is valid for 3 years
October 2010	Print Name of Instructor: unknown	
Training Date (dd-mm-yyyy)	Print Name of Training Provider:	
	Print Name of Instructor:	
Training Date (dd-mm-yyyy)	Print Name of Training Provider:	
	Print Name of Instructor:	

Name of person completing this form (please print)	Official Title	100 to
John Lastoria	EH & S Specialist	
Signature	Telephone No.	Date (dd-mm-yyyy)
	416-544-7608	12-09-2011



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# Level 1 Risk and Safety Management Plan (RSMP) Technical Standards and Safety Act Propane Storage and Handling Regulation

## SECTION B: EMERGENCY AND PREPAREDNESS RESPONSE PLAN (cont'd)

4. Emergency Training Plan for Coming Year

Training on Emergency Re	sponse Plan and Procedures provided to facility key contacts.	
Target Date (dd-mm-yyyy)	Print Name of Training Provider: Superior Propane or Alternate	Please Note - the course content is currently
Q4 2011	Print Name of Instructor: to be arranged	being developed and should be available for
Target Date (dd-mm-yyyy)	Print Name of Training Provider:	teaching in the fourth quarter of this year
	Print Name of Instructor:	
Target Date (dd-mm-yyyy)	Print Name of Training Provider:	
	Print Name of Instructor:	
Training on the facility's Em	nergency Management Procedures provided to staff.	
Target Date (dd-mm-yyyy)	Print Name of Training Provider: Key site contact to train staff	
Q4 2011	Print Name of Instructor: to be arranged	
Target Date (dd-mm-yyyy)	Print Name of Training Provider:	
	Print Name of Instructor:	
Target Date (dd-mm-yyyy)	Print Name of Training Provider:	
	Print Name of Instructor:	
On-site specific training pro	ovided to certificate holders / persons with Records of Training.	
Target Date (dd-mm-yyyy)	Print Name of Training Provider: Superior Propane/FSN/ or Alternate	Please Note - a ROT is valid for 3 years
As required	Print Name of Instructor: to be arranged as required	
Target Date (dd-mm-yyyy)	Print Name of Training Provider:	
	Print Name of Instructor:	
Target Date (dd-mm-yyyy)	Print Name of Training Provider:	
	Print Name of Instructor:	

Name of person completing this form (please print)	Official Title	
John Lastoria	EH & S Specialist	
Signature	Telephone No. 416-544-7608	Date (dd-mm-yyyy) 12-09-2011



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# Level 1 Risk and Safety Management Plan (RSMP) Technical Standards and Safety Act Propane Storage and Handling Regulation

# SECTION B: EMERGENCY AND PREPAREDNESS RESPONSE PLAN (cont'd)

The licence holder will complete Section B in consultation with the local Fire Services.

5. Emergency Response Communications Plan

Warnings	and A	ctions
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Describe who gives warnings to whom, and how and when the warning will be given (including public notification as appropriate). The owner/operator or alternate (both ROT staff) will contact emergency services by calling 911 and will provide warnings as outlined in the attached

Propane Emergency Response Procedures (to be posted at site and be part of employee training). If it is safe to do so, this could involve advising neighbors to evacuate. The owner/operator may also contact Superior Propane via the emergency number identified in the ERP.

Describe what action is to be taken and by whom when a warning is issued (including details of a meeting place in a safe identified area and activating the evacuation plan, if necessary).

The owner/operator or alternate should first follow the actions in the ERP's provided herein. Staged evacuation, if the release of propane cannot be stopped by cutting electrical power may be required. The muster location is across the road, by the fence near the fire hydrant, at least 100 ft. from the site and away from a dispersing propane cloud. Subsequent evacuation instructions potentially up to the Hazard Distance to be provided by municipal emergency responders. Residences and businesses beyond the site boundary to be notified by municipal emergency responders.

Communication with	Emergency	Response	<b>Authorities</b>
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Communication with Emergency response Authorities
Describe when and how the licence holder will give early warning to emergency response authorities (including a process to ensure that a call is
placed to 911). When the system is operational, site staff will be on duty and be in the propane tank area. The Key Contact or alternate will be implementing ER actions and
notifications, including notifying emergency responders. Calling 911 will occur immediately after any attempts to shut down the system.
When the system is not in operation, the ISC valve (main isolation valve) is closed, and the propane system is unattended, but is shutdown. Any
accidents involving the propane tank during such times will require the intervention of random, nearby individuals.
Describe provisions for fire department entry when there are no operations or staffing at the propane site.  The propane tank system is located in a wide open area that is easily accessible from Riverside Drive.
The access routes for fire trucks are identified in the attached site plan.
Describe how the licence holder will ensure continual flow of updated information to authorities.  The critical information required from the license holder is information on how to shut the system down and the fill level in the tank (if known). This will be
provided by Sylvie Holowienko, verbally if on-site, or by cell phone during off hours.
Fill level is relevant from a time-to-BLEVE perspective (a near empty tank will BLEVE sooner than a full tank if there is fire impingement on the tank).
How long will it take the facility liaison person to respond to the site.  It would take Sylvie Holowienko approximately 30 minutes to arrive on-site after having received the emergency call.

Name of person completing this form (please print)  John Lastoria	Official Title EH & S Specialist	
Signature	Telephone No. 416-544-7608	Date (dd-mm-yyyy) 12-09-2011



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## Level 1 Risk and Safety Management Plan (RSMP) Technical Standards and Safety Act Propane Storage and Handling Regulation

SECTION B: EMERGENCY AND PREPAREDNESS RESPONSE PLAN (cont'd) The licence holder will complete Section B in consultation with the local Fire Services. 6. Building and Site Security and Procedures Yes No Does the propane location have controlled access to limit unnecessary risk and entry (lock out procedures)? Is there adequate night lighting at the site? Are procedures in place that ensure access routes, aisles, storage area, filling areas 3. and the grounds are kept clear from unwanted materials? Are there procedures that capture and record the daily inspection of hoses and inspection requirements for filling systems and mechanical devices used in the transfer of propane? Does the facility have procedures that include a process to isolate and purge any overfilled propane cylinders? Are weighing systems validated for accuracy? 6. Are storage areas clearly marked with the vessels' capacity status (i.e., filled, empty, 7. purged and other hazardous materials)? Are quality assurance procedures in place to ensure that all valves are closed after the propane cylinders are filled?(e.g., QCC valves) Is the schedule of maintenance and testing activities retained on site? 9. 7. Water Supply The propane licence holder should work with the local fire department to determine water supply capabilities that are available based on the propane facility's location. Yes No Is a pressurized water system available at the propane facility site? 1. Can the municipal fire department pump 375 GPM (1420 LPM) of water at this 2. location? What is the unobstructed distance to the closest water supply that could be used for

> Declaration: I am aware that it is an offence to give false information in this document and I hereby declare that the information I have given here is true and complete.

53 m

N/A

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Signature	Telephone No. 416-544-7608	Date (dd-mm-yyyy) 12-09-2011

firefighting activities? (distance in metres only)

What is the unobstructed distance to the closest approved water supply with year

round access if there are no hydrants? (distance in metres only)

3.



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## Level 1 Risk and Safety Management Plan (RSMP) Technical Standards and Safety Act Propane Storage and Handling Regulation

# SECTION B: EMERGENCY AND PREPAREDNESS RESPONSE PLAN (cont'd)

The licence holder will complete Section B in consultation with the local Fire Services. 8 Licence holder and local Fire Services Review

Declaration: I am aware that it is an offence to give false Information in this document and I hereby declare that the information I have given here is true and complete.

Name of person completing this form (please print)  John Lastoria	Official Title E H & S Specialist	A Miles
Signature	Telephone No. 416-544-7608	Date (dd-mm-yyyy) 12-08-2011

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Level 1 Risk and Safety Management Plan (RSMP)

Technical Standards and Safety Act

Propane Storage and Handling Regulation

#### SECTION C: SUBMISSIONS

Applicant must include a Facility Site Plan and Map of Surrounding Area

#### Facility Site Plan.

The licence holder will submit a copy of the original facility site plan updated with the following information:

- 1. The storage location of fixed, portable, and mobile vessels.
- 2. The maximum volume, types and storage location of hazardous materials.
- 3. Location of permanent structures on site.
- 4. Access and egress points and location of barriers.
- 5. Location of fire and emergency equipment (e.g., sprinkler systems, extinguishers, suppression systems) on site and location of fire hydrant or water supply where available.
- 6. Location of emergency shut off/shut down switches/valves.

#### Map of Surrounding Area.

The licence holder will submit a scaled aerial map of the surrounding area showing the following information:

- 7. The capacity and placement of the single largest propane storage vessel, including its setback from the front, rear and side property lines.
- 8. GPS co-ordinates of the single largest vessel.
- 9. Visual indication of the single largest fixed vessel and a circle made using the distance in Table 1 as the radius from the single largest fixed vessel.
- 10. Clear indication of the municipality or municipalities present within the circle.
- 11. Visual indication of property line information.
- 12. The location and name of roads within or abutting the site.
- 13. Key note to the drawing indicating the facility's municipal address, municipal lot number(s) and concession lines as applicable, and the date the map was prepared.
- 14. Address and contact information for each municipality (municipal clerk or secretary-treasurers of planning board). (Refer to page 5.)
- 15. Complete "Required Mapping Information from Updated Site Plan" in table below .

### Required Mapping Information from Updated Site Plan

Date Map Prepared (dd-mm-yyyy) 12-09-2011		Capacity of single largest propane storagevessel (USWG) 2000 USWG	
Tank setback coordinates.	Indicate placement of 48 m North	on the map.  Right side property line:	178 m East
	177 m South	Left side property line:	19 m West

Name of person comp	leting this form (please print)	Official Title	
John Lastoria		EH & S Specialist	
Signature	JOR -	Telephone No. 416-544-7608	Date (dd-mm-yyyy) 12-09-2011

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# Level 1 Risk and Safety Management Plan (RSMP) Technical Standards and Safety Act

Propane Storage and Handling Regulation

# SECTION C: SUBMISSIONS (cont'd)

Applicant must include a Facility Site Plan and Map of Surrounding Area

Table 1: Distance Table

Water Capacity (litres)	Nominal Water Capacity (USWG)	Distance to 1 psi overpressure (m)
1,890	500	155
3,780	1,000	195
4,920	1,300	213
6,620	1,750	235
7,130	1,885	241
7,560	2,000	246
18,900	5,000	333

Formula:

 $D = 16.94 \times (1.524 \times C)^{1/3}$ 

D = Distance to overpressure of 1 psi (meters)

C= Tank Total Capacity in USWG

Parameters:

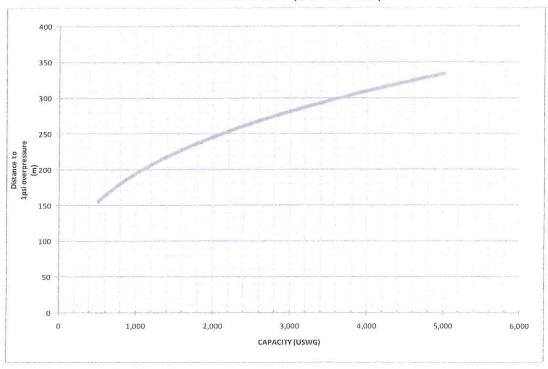
Density of Propane is 0.5033 kg per litre @ 15 C

Assume all vessels are 80% full

1 gallon [US, liquid] = 0.003785411784 cubic meter

1 cubic metre = 264.17 USWG

#### Hazard Distance Chart (EPA-TNT model)



Name of person completing this form (please print) Nothing completed on this page.	Official Title  Nothing completed on this page.	
Signature	Telephone No. Nothing completed on this page.	Date (dd-mm-yyyy)



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# Level 1 Risk and Safety Management Plan (RSMP) Technical Standards and Safety Act Propane Storage and Handling Regulation

# SECTION C: SUBMISSIONS (cont'd)

Applicant must include a Facility Site Plan and Map of Surrounding Area

As an accompaniment to the Map of Surrounding Area, provide the following information about buildings and features present within the circle in Table 2. Table 2: Buildings and Features

Buildings and Features Present within the Circle on the Map of the Surrounding Area AND Name and Address of Closest Building or Feature		* Number of Buildings and Features (mark with an "X") 0 1 2-10 11+			Distance from Tank to Closest Building or Feature
Industrial buildings or parks or golf courses  Name: None  Address: Province Postal Code	X				0m
Residential building units specifically permanent single family dwellings, condominiums, and apartments.  Name:  Address:  City:  Province  Postal Code	X				0 m
Commercial building units specifically retail, restaurants, entertainment, theatres, and sporting complexes.  Name: Marks Work Wearhouse (and Canadian Tire Retail Store)  Address: 2185 Riverside Drive  City: Province ON Postal Code P4R 0A1			х		<u>76</u> m
Commercial building units – continuous occupancy specifically hotels, campgrounds, and resorts.  Name: None  Address: Province Postal Code	X				0 m
Sensitive institutions specifically hospitals, schools and day cares, nursing and retirement homes, mental health institutions, and prisons.  Name: None Address:	×				m
Emergency responders specifically fire stations, ambulance stations, and police stations.  Name:  Address:  City:  Province  Postal Code	X				0m

Declaration: I am aware that it is an offence to give false information in this document and I hereby declare that the information I have given here is true and complete.

Name of person completing this form (please print)	Official Title	
John Lastoria	EH & S Specialist	
Signature	Telephone No.	Date (dd-mm-yyyy)
	416-544-7608	12-09-2011

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<sup>\*</sup> For multi-unit buildings, count each unit as "1".



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# Level 1 Risk and Safety Management Plan (RSMP) Technical Standards and Safety Act Propane Storage and Handling Regulation

# SECTION C: SUBMISSIONS (cont'd)

Applicant must include a Facility Site Plan and Map of Surrounding Area

## Portable Storage Additional Information Sheet

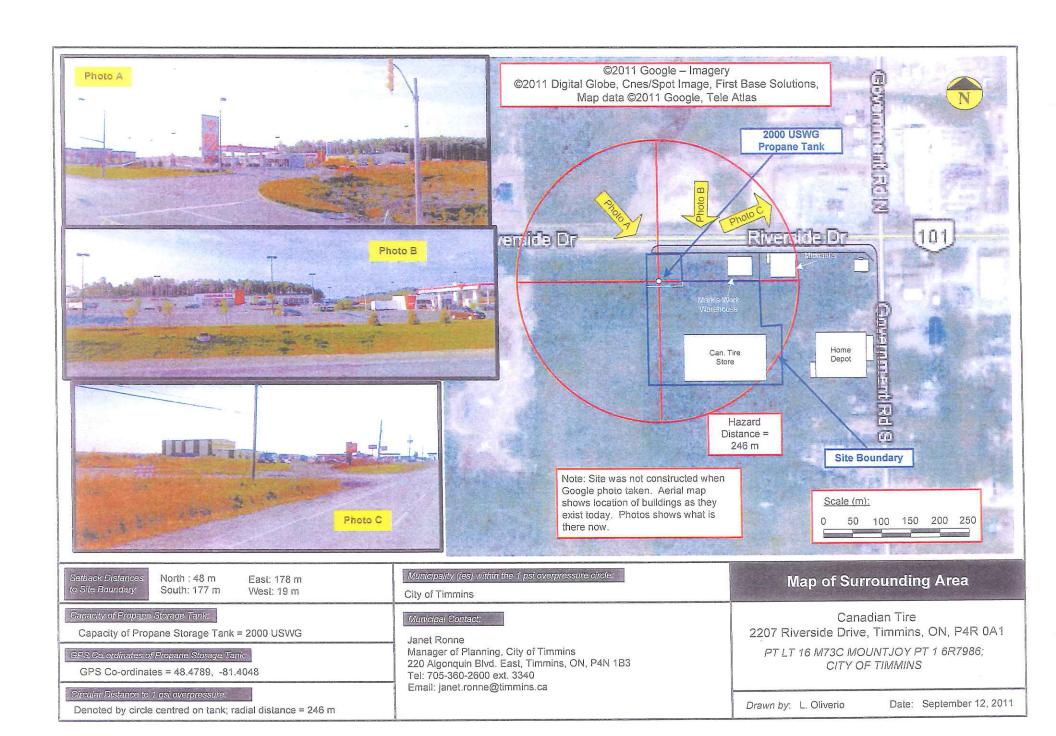
Cylinder Size	Capacity in USWG	Quantity	Total Volume in USWG
# 420	123.9		
# 100	29.5		
# 40	11.75		
# 33.3	9.62		
# 30	8.8		
# 20	5.8	60	348 USWG
# 10	2.9		
# 5	1.5		

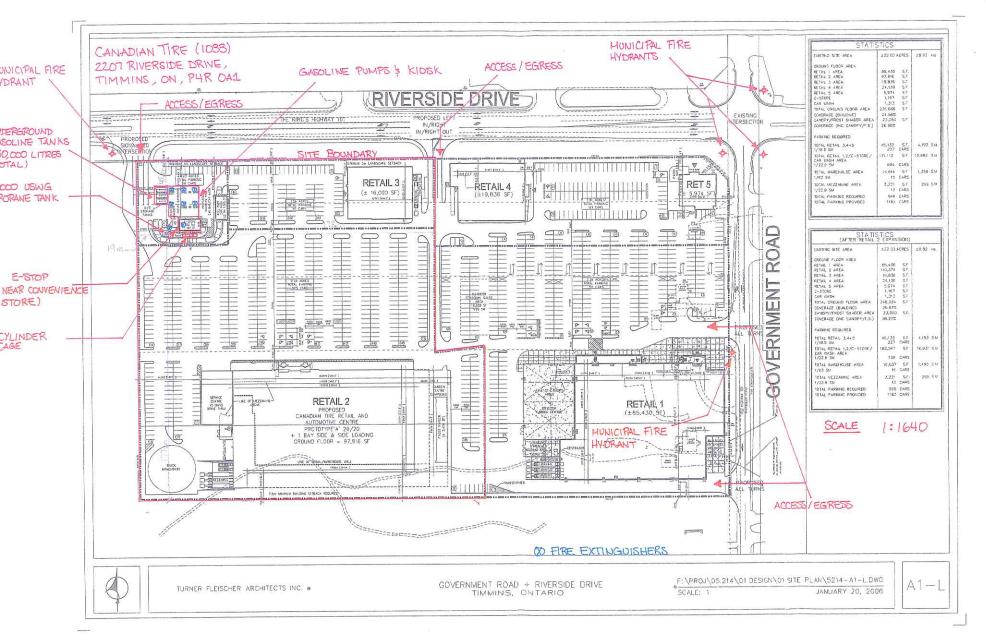
#### Tanks Stored On-site Not Connected for Use

Tank Size In USWG	Quantity	Total Volume in USWG
2000 USWG	1	2000 USWG
Total Tank Capacity		

Total Cylinder Capacity	348 USWG
Total Tank Capacity	2000 USWG
Total Portable Capacity	0 USWG

Name of person completing this form (please print) John Lastoria	Official Title EH & S Specialist	
Signature	Telephone No. 416-544-7608	Date (dd-mm-yyyy) 12-09-2011





# PROPANE EMERGENCY RESPONSE PROCEDURES

# **EMERGENCY CONTACT NUMBERS (OR CALL 911)**

est othe ette	
911	
1-877-873-7467	

Contact the Fire Department and the Police Department immediately if a propane emergency situation arises. Use a telephone outside the area affected by the leak.

# PROPANE LEAKAGE WITH FIRE

# FIRST CONTROL THE LEAK, THEN PUT OUT THE FIRE

- 1. Clear people from the area.
- 2. Clear people from the Canadian Tire store from rear of building.
- 3. Do not extinguish fire unless fuel feeding the fire can be shut off.
- 4. Close tank valve to stop flow of propane, if it is safe to do so.
- Apply water to tank and piping exposed to heat.
- 6. Apply water to the vapour space of the tank to keep the tank cool. If there is insufficient water to keep the tank cool, evacuate the area.

# PROPANE LEAKAGE WITHOUT FIRE

- 1. Clear people from the area.
- 2. Block off entry to underground parking lot from all points, if it is safe to do so.
- 3. Evacuate underground parking lot area via east exit.
- 4. Clear people from the Canadian Tire store from rear of building.
- 5. Stay upwind from the vapour (wind at your back).
- 6. Shut off power to dispensers and pump motor.
- 7. Remove sources of ignition.
- 8. Close tank valve to stop flow of propane, if it is safe to do so.
- 9. Disperse gas with water spray and stay behind water spray for protection in case of ignition.



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# Propane Dispenser Operating Procedures

Prepared by:

Ken Gillis

Safety and Technical Specialist (Ontario Region) Prepared by:

Marcello Oliverio Chief Engineer – Process

Safety Management

Reviewed by:

John McCormack

National Regulatory Specialist



This document contains generic operating procedures for propane dispensing facilities. It fulfills the requirements of the Level 1 RSMP.

Procedures for the activities identified below are contained in the appendices that follow:

(Appendix A)

Daily Start-up Procedure for Operating the Propane Transfer Facility.

(Appendix B)

Testing the Emergency Stop System

(Appendix C)

Filling Propane Cylinders by Weight

(Appendix D)

Transfer Facility (Dispenser) Procedure for Filling a Motor Fuel Tank

(Appendix E)

Handling of an Overfilled Cylinder

# Propane Dispenser Operating Procedures

# Appendix A

# Daily Start-up Procedure for Operating the Propane Transfer Facility

# Prerequisites:

- Review and be familiar with the PTI 100 01 Propane Pump Attendant Training Program.
- Have the necessary Record of Training (ROT).

# Stepwise Procedure:

(To be documented daily)

If you are not familiar with the terms or requirements of this procedure contact your supervisor.

Before opening the tank and cylinder cabinets:

- Check the area to ensue that the access routes and area surrounding the propane tank(s) are clear and that there are no unwanted materials.
- 2. Check that there are no ignition sources within 3 metres (10 feet) of the filling area.
- Dress properly for dispensing propane. Wear long sleeves, long pants, neoprene gloves, safety eyewear, and safety footwear. Do not wear nylon jackets or coats.
- 4. Walk around the area to visually identify potential hazards, to listen for audible leaks, and to detect the scent of propane odours. If a leak is suspected do not open the cabinet, contact your supervisor.
- 5. Ensure all operating and warning signs are clear and legible.
- Check the tank level for sufficient propane levels.
- Remove any garbage especially flammables/combustibles from the dispensing area.
- Open the tank cabinet and inspect for any indications of propane leaks. If a leak is suspected contact your supervisor. Do not operate the dispenser.

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# Propane Dispenser Operating Procedures

# Opening Primary Tank Valves:

- Slowly open the tank ISC liquid supply by using the handle or cable attachment.
   Open other manual valves necessary to operate the dispenser pump. Again
   watch and listen for leaks.
- Interlock the ISC control handle with the door. Ensure that the door cannot be closed while the ISC valve is open (code requirement). If the door is not interlocked as required, contact your supervisor.
- Your site may have an E-Stop system that shuts down the motor and electric solenoids in the event of an emergency. This system should be tested weekly.
- Visually check the hoses, nozzles and other mechanical devices. Do not operate the system if anything appears abnormal.
- Record daily start-up procedure and propane level in tank.
- 6. You are now ready to operate the dispenser facility.
- 7. Close door (and ISC valve) when the system is unattended.

# Propane Dispenser Operating Procedures

## Appendix B

# Testing the Emergency Stop System (Once per Week)

# Prerequisites:

- Review and be familiar with the PTI 100 01 Propane Pump Attendant Training Program.
- Have the necessary Record of Training (ROT).

## Stepwise Procedure:

(To be documented weekly)

If you are not familiar with the terms or requirements of this procedure contact your supervisor.

- 1. Open all valves in the tank cabinet.
- 2. Ensure that all fill nozzles are closed and secured.
- 3. Start the pump and leave it pumping for the test. Do not operate the pump longer than required to complete this test.
- 4. Immediately push the E-stop button.
- 5. Pump power and solenoids should close.
- 6. If all solenoids and the pump do not close, contact your supervisor. Do not operate the system.
- 7. Document the test once completed.

# Propane Dispenser Operating Procedures

## Appendix C

# Filling Propane Cylinders by Weight

# Prerequisites:

- Review and be familiar with the PTI 100 01 Propane Pump Attendant Training Program.
- Have the necessary Record of Training (ROT).

# **Stepwise Procedure:**

If you are not familiar with the terms or requirements of this procedure contact your supervisor.

Before filling any cylinder, the cylinder must receive a pre-fill visual examination or inspection.

- 1. Check the inspection date stamped on the cylinder shell or collar. Make sure it's within the last 10 years.
- Make sure the Dangerous Goods shoulder label is on the cylinder. If the cylinder is going to a workplace, it must also have a WHMIS label on the cylinder.
- Look for corrosion, especially on the bottom of the cylinder. Check that no area on the cylinder is badly corroded or deeply pitted.
- Look for dents. If they are large, deep, have sharp angles or include a weld, do not fill the cylinder.
- Look for cuts, gouges, or digs that can reduce the thickness of the cylinder walls and weaken them.
- Make sure the collar is protecting the cylinder service valve. Check that the welds securing the collar to the cylinder are not broken.
- Make sure the footring is not bent and that it supports the cylinder in an upright, stable position. Check that the welds securing the footring to the cylinder are not cracked or broken.
- 8. If a cylinder is bulged or deformed from contact with fire, or if the paint has been scorched, the cylinder must be taken out of service.

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# Propane Dispenser Operating Procedures

# Before starting to fill

- 16. Check that there are no ignition sources within 3 metres (10 feet) of the filling area.
- 17. Dress properly for dispensing propane. Wear long sleeves, long pants, neoprene gloves, safety eyewear and safety footwear. Do not wear nylon jackets or coats.

# To fill a propane cylinder by weight:

- Place the cylinder on the scale and weigh the cylinder before filling. If the weight of the cylinder exceeds the stamped tare weight on the cylinder, there may be some propane left in the cylinder.
- 2. Mark the weight down as Weight "in". Subtract the tare weight of the cylinder from the weight "in" to determine how much propane is left in the cylinder.
- 3. Inform the customer how much propane is in the cylinder, how much will be added, and what the cost will be.
- 4. Set the scale for the proper weight of the cylinder when filled. The filling weight is the:
  - Tare weight of the cylinder plus
  - the weight of the propane (42% of the stamped water capacity plus
  - the weight of the filling hose and nozzle.
- 5. Connect the filling nozzle to the cylinder service valve. Make sure the cylinder is placed on the centre of the scale platform.
- 6. Open the cylinder service valve, open the filling hose nozzle, and start the pump.
- 7. Check the cylinder service valve threads and valve stem for leaks using a commercial leak detection solution or a 50/50 mixture of soap and water. Expanding bubbles indicate a leak. If a leak is detected, stop the filling process until the leak is repaired.
- 8. Watch the scale beam closely. As soon as the beam starts to rise, close the filler hose nozzle. Turn off the pump.
- Close the cylinder valve. To bleed off the small amount of propane between the filler hose nozzle and the cylinder service valve, slowly unscrew the filler hose nozzle from the cylinder service valve. Disconnect the filling hose nozzle from the cylinder service valve.

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# Propane Dispenser Operating Procedures

10. Close all valves after cylinder is filled.

11. Move the scale beam indicator until the beam "floats". Read the finished weight from the scale beam and record this as the weight "out".

If the cylinder is overfilled, the excess propane liquid must be removed before the cylinder is returned to the customer. Follow company procedure to safely remove the excess propane liquid.

If the cylinder weighs less that it should, follow the cylinder filling procedure to add more propane, or invoice the Customer for the amount of propane you put into the cylinder.

Note: the OPD may prevent filling the cylinder to 42% of its water capacity

MEASUREM	ENT CANADA
LIMITO	F ERROR
ALLOWA	BLE: 0.5%
9.1kg cylinder = 45.5 grams	20lb cylinder = 1.6 ounces
13.6kg cylinder = 68.2 grams	30lb cylinder = 2.4 ounces
45.5kg cylinder = 227.3 grams	100lb cylinder = 8.0 ounces

Customers must be told how much propane was put into their cylinder. The amount of propane that you tell the Customer is in the cylinder must be within the 0.5% error limit set by Measurement Canada as shown in the above table.

To arrive at the amount of propane put into the cylinder, simply subtract the "IN" weight from the "OUT" weight you recorded. The difference is the amount of the propane put into the cylinder

Follow the Company's invoicing procedures to invoice the Customer for the amount of propane put in the cylinder

The invoice should indicate:

- The minimum charge, if applicable, or cost of propane; and
- The amount of propane delivered

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# Propane Dispenser Operating Procedures

# Appendix D

# Transfer Facility (Dispenser) Procedure for Filling a Motor Fuel Tank

# **Prerequisites**

Review and be familiar with the PTI - 100 - 01 Propane Pump Attendant Training Program.

Have necessary Record of Training (ROT).

Stepwise Procedure:

If you are not familiar with terms or requirements of this procedure contact your supervisor.

- 1. Before filling, make sure the vehicle has a provincially accepted decal in place. This label may be located on the front windshield, rear window or side window. A vehicle with no label, or an expired label, cannot be legally filled with propane.
- 2. The filling area is a restricted zone. Make sure there are no ignition sources within 3 meters (10 feet) of the filling connection. This means NO SMOKING, NO OPEN FLAMES, NO VEHICLES LEFT RUNNING, and NO PILOT LIGHTS LEFT ON, such as those in travel trailers, RV's, catering trucks and cargo vans.
- 3. Remove the dust cap from the liquid filler valve on the vehicle tank. Check that the "O" ring or gasket in the filler valve is in place and clean.
- 4. Remove the transfer hose and nozzle from the holder at the dispenser and connect the nozzle to the vehicle filler valve. Tighten firmly by hand. Check for leaks.
- 5. Open the fixed liquid level gauge (spit valve) to allow an audible hiss as the propane vapour is released.
- 6. Start the pump, which will automatically reset the meter to zero. Depending on the dispenser system, begin filling by either (a) squeezing the nozzle trigger, or (b) setting the nozzle trigger latch and pushing in the deadman switch. Keep the nozzle trigger or deadman switch engaged during the entire filling process.
- 7. When a white fog is flowing steadily from the fixed liquid level gauge (spit valve), the tank is considered full.
- 8. Release the nozzle trigger or deadman switch immediately. Do not be tempted to round up either the volume or dollar amount.

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# Propane Dispenser Operating Procedures

- Close the fixed liquid level gauge (spit valve) either with fingers or a spit valve wrench. Tighten enough to provide a positive seal. DO NOT OVER TIGHTEN.
- 10. Turn off the pump.
- 11. Disconnect the filler hose nozzle from the filler valve.
- 12. Return the filler nozzle to the dispenser holder.
- 13. Check the filler valve at the vehicle to ensure it's not leaking.
- 14. Replace the dust cap on the vehicle filler valve

Rev; 00

# Propane Dispenser Operating Procedures

# Appendix E

# Handling of an Overfilled Cylinder

# Prerequisites

Review and be familiar with the PTI – 100 – 01 Propane Pump Attendant Training Program.

Have necessary Record of Training (ROT).

# Stepwise Procedure:

If you are not familiar with terms or requirements of this procedure contact your supervisor.

If you suspect that a cylinder has been overfilled, do the following:

- 1. Tag the cylinder, identifying the time and date it was filled.
- 2. Carefully place the cylinder in the cylinder cage.
- 3. Call Superior Propane @ 1-877-873-7467 and report what has happened.

DO NOT RETURN THE FILLED CYLINDER TO THE CUSTOMER



# MATERIAL SAFETY DATA SHEET



## SECTION 1 - PRODUCT INFORMATION

Product Name:

Propane

Supplier

Superior Propane

Trade Name:

LPG (Liquefied Petroleum Gas), LP-Gas

1111 - 49th Avenue N.E. Business: (403) 730-7500

A Division of Superior Plus LP

Calgary, AB T2E 8V2

Chemical Formula:

C3HB

WHIMS Classification

Class A - Compressed Gas Class B, Division 1 - Flammable Gas

24-Hour

**Emergency Contact:** 

Canutec (613) 996-6666

Propane is commonly used as a fuel for heating, cooking, automobiles, forklift trucks, crop drying and welding Application and Use: and cutting operations. Propane is used in industry as a refrigerant, solvent and as a chemical feedstock

### SECTION 2 - HAZARDOUS INGREDIENTS

Propane

74-98-6

90% -99%

Not Applicable

Propylene

115-07-1 74-84-0

0% - 5% 012-5% Not Applicable

Ethane

106-97-8

0% - 2 5%

Not Applicable Not Applicable

Occupational Exposure Limit:

Butane and heavier hydro carbons

Based upon animal test data, the acute toxicity of this product is expected to be inhalation: 4 hour LC50 = 280,000 ppm (Rat)

Note: Composition is typical for HD-5 Propane per The Canadian General Standard Board CGSB 3.14 National Standard of Canada Exact composition will vary from shipment to shipment.

### SECTION 3 - CHEMICAL AND PHYSICAL DATA

Form:

Liquid and vapour while

stored under pressure

PH

Not available

-42°C @ 1 atm

Solubility in Water

Slight, 6.1% by volume @ 17.8°C

Boiling Point: Freezing Point:

-188°C

Specific Gravity. Appearance/Odour 0.51 (water = 1) Colourless liquid and vapour while stored

Evaporation Rate: Vapour Pressure

Rapid (Gas at normal ambient conditions)

1435 kPa (maximum) @ 37.8°C

under pressure. Colourless and odourless gas in natural state at any concentration Commercial propane has an odourant added, ethyl mercaptan, which has an

odour similar to boiling cabbage

Vapour Density

Coefficient of Water/ Oil Distribution

Not available

1.52 (Air = 1)

Odour Threshold

4800 ppm

With proper handling, transportation and storage, adding a chemical odourant such as ethyl mercaptan has proven to be a very effective warning device, but all odourants have certain limitations. The effectiveness of the odourant may be diminished by a person's sense of smell, by competing odours and by oxidation which may cause a potentially dangerous situation.

### SECTION 4 - FIRE OR EXPLOSION HAZARD

Flash Point: -103.4°C

Method: Closed cup

Flammable Limits: Lower 2.4%, Upper 9.5%

Auto Ignition T emperature: 432°C

Hazardous Combustion Products: Carbon monoxide can be produced when primary air and secondary air are deficient while

combustion is taking place.

Fire and Explosive Hazards

: Explosive air -vapour allowed

to leak to atmosphere

Sensitivity to Impact:

Sensitivity to Static Discharge:

Fire Extinguishing Precautions:

exposed cylinders or tanks. Do not extinguish fire unless the source of the escaping gas that is fueling the fire can be turned off. Fire can be extinguished with carbon dioxide and/or dry chemical (BC). Container metal shells require cooling with water to prevent flame impingement and the weakening of metal. If sufficient water is not available to protect the container shell from weakening, the area will be required to be evacuated If gas has not ignited, liquid or vapour may be dispersed by

water spray or flooding. Special Fire Fighting Equipment:

Protective clothing, hose monitors, fog nozzles, self-contained breathing apparatus

Deficient primary

Use water spray to cool

## **SECTION 5 - REACTIVITY DATA**

Stability: Stable

Conditions To Avoid: Keep separate from oxidizing agents. Gas explodes spontaneously when mixed with chloride dioxide.

Incompatibility: Remove sources of ignition and observe distance requirements for storage tanks from combustible material, drains and openings to building

MSDS-Propane-32003-2 (01/11)

Hazardous Decomposition Products: and secondary air can produce carbon monoxide

Hazardous Polymerization:

Will not occur.





# SECTION 6 - TOXICOLOGICAL PROPERTIES OF MATERIAL

Routes of Entry: Skin Contact, Eye Contact, Inhalation

Inhalation: Simple asphyxiant. No effect at concentrations of 10,000 ppm (peak exposures). Higher concentrations may cause central nervous system disorder and/or damage. Lack of oxygen may cause dizziness, loss of coordination, weakness, fatigue, exphoria, mental confusion, blurred vision, convulsions, breathing failure, coma and death. Breathing high vapour concentrations (saturated vapours) for a few minutes may be fatal. Saturated vapours may be encountered in confined spaces and/or under conditions of poor ventilation. Avoid breathing vapours or mist

Skin and Eye Contact: Exposure to vapourizing liquid may cause frostbite (cold burns) and permanent eye damage.

Ingestion: Not considered to be a hazard.

Acute Exposure: Contact with Liquefied Petroleum Gas may cause frostbite or cold burns. Propane acts as a simple asphyxiant as oxygen content in air is displaced by the propane. At increasing concentration levels, propane may cause dizziness, headaches, loss of coordination, fatigue, unconsciousness and death.

Chronic Exposure: No reported effects from long term low level exposure.

Sensitization to Product Not known to be a sensitizer.

Occupational Exposure Limits. American Conference of Governmental Industrial Hygienists (ACGIH) lists as a simple asphyxiant.

ACGIH TLV: 1000 ppm

Carcinogenicity, Reproductive Toxicity, Teratogenicity

Mutagenicity: No effects reported.

Other Toxicological Effects: None

## SECTION 7 - PREVENTATIVE MEASURES

Eyes: Safety glasses or chemical goggles are recommended when transferring product.

Skin: Insulated gloves required if contact with liquid or liquid cooled equipment is expected. Wear gloves and long

sleeves when transferring product.

Inhalation: Where concentration in air would reduce the oxygen level below 18% air or exceed occupational exposure limits

in section 6, self-contained breathing apparatus is required.

Ventilation: Use in well-ventilated areas. Use with explosion proof mechanical ventilation in confined spaces or poorly

ventilated areas.

## SECTION 8 - EMERGENCY AND FIRST AID PROCEDURES

Eyes: Should eye contact with liquid occur, flush eyes with lukewarm water for 15 minutes. Obtain immediate

medical care

Skin: In case of "Cold Burn" from contact with liquid, immediately place affected area in lukewarm water and keep

at this temperature until circulation returns. If fingers or hands are frostbitten, have the victim hold his hand next

to his body such as under the armpit. Obtain immediate medical care.

Ingestion: None considered necessary

Inhalation: Remove person to fresh air. If breathing is difficult or has stopped, administer artificial respiration.

Obtain immediate medical care.

Spill or Leak: Eliminate leak if possible. Eliminate source of ignition. Ensure cylinder is upright. Disperse vapours with hose

streams using fog nozzles. Monitor low areas as propane is heavier than air and can settle into low areas. Remain upwind of leak. Keep people away. Prevent vapour and/or liquid from entering into sewers, basements

or confined areas.

# SECTION 9 - TRANSPORTATION, HANDLING AND STORAGE

 Transport and store cylinders and tanks secured in an upright position in a ventilated space away from ignition sources (so the pressure relief valve is in contact with the vapour space of the cylinder or tank).

 Cylinders that are not in use must have the valves in the closed position and be equipped with a protective cap or guard. Do not store with oxidizing agents, oxygen, or chlorine cylinders.

Empty cylinders and tanks may contain product residue. Do not pressurize, cut, heat or weld empty containers.

 Transport, handle and store according to applicable federal and provincial codes and regulations.

TDG Shipping Name: Liquefied Petroleum Gas (Propane)

PIN Number: UN1075

## SECTION 10 - PREPARATION INFORMATION

Transportation of Dangerous Goods (TDG) TDG Classification: Flammable Gas 2.1

Prepared by: Superior Propane

Health Safety and Environment Team

Telephone: (403) 730-7500 Revision: January 17, 2011 Supersedes: March 1, 2008

The information contained herein is believed to be accurate. It is provided independently of any sale of the product. It is not intended to constitute performance information concerning the product. No express warranty, implied warranty of merchantability or fitness for a particular purpose is made with respect to the product information contained herein.



# Shell Canada Limited Material Safety Data Sheet

Effective Date: 2010-05-07 Supersedes: 2007-05-25





Class B2 Flammable Liquid

Class D2A Carcinogenicity

## 1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT:

**REGULAR UNLEADED GASOLINE** 

SYNONYMS:

Automotive Fuel

Petrol

PRODUCT USE:

Fuel

PRODUCT CODE: 211-001

SUPPLIER

TELEPHONE NUMBERS

Shell Canada Limited (SCL)

Shell Emergency Number

1-800-661-7378 1-613-996-6666

P.O. Box 100, Station M 400-4th Ave. S.W. **CANUTEC 24 HOUR EMERGENCY NUMBER** 

1-800-661-1600

Calgary, AB Canada

For general information:

www.shell.ca

T2P 2H5

This MSDS was prepared by the Toxicology and Product Stewardship Section of Shell Canada Limited.

\*An asterisk in the product name designates a trade-mark of Shell Brands International AG. Used under license.

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Component Name	CAS Number	% Range	WHMIS Controlled
Gasoline	86290-81-5	> 90	Yes
Benzene	71-43-2	< 1.5	Yes

See Section 8 for Occupational Exposure Guidelines.

### 3. HAZARDS IDENTIFICATION

Physical Description:

Volatile Liquid Colourless Typical Gasoline Odour

Routes of Exposure: Hazards:

Exposure will most likely occur through skin contact or inhalation.

Vapour concentrations above the recommended exposure level are irritating to the eyes and respiratory tract, may cause headaches and dizziness, are anesthetic and may have other central nervous system effects.

Flammable Liquid. Contains Benzene. May cause cancer.

Revision Number: 7

Ingestion may result in vomiting. Avoid aspiration of vomitus into lungs as small

quantities may result in aspiration pneumonitis.

May be absorbed by skin contact.

In rare cases may sensitize heart muscle causing heart arrythmia.

Handling:

Eliminate all ignition sources.

Wear suitable gloves and eye protection.

Bond and ground transfer containers and equipment to avoid static accumulation.

Avoid prolonged exposure to vapours.

Empty containers are hazardous, may contain flammable / explosive dusts, liquid

residue or vapours. Keep away from sparks and open flames.

For further information on health effects, see Section 11.

## 4. FIRST AID MEASURES

Eyes:

Flush eyes with water for at least 15 minutes while holding eyelids open. If irritation

occurs and persists, obtain medical attention.

Skin:

Wash contaminated skin with mild soap and water for at least 15 minutes. If irritation

occurs and persists, obtain medical attention.

Indestion:

DO NOT INDUCE VOMITINGI OBTAIN MEDICAL ATTENTION IMMEDIATELY.
Guard against aspiration into lungs by having the individual turn on to their left side.
If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Do not give anything by mouth to an unconscious person.

Inhalation:

Remove victim from further exposure and restore breathing, if required. Obtain

medical attention.

Notes to Physician:

The main hazard following accidental ingestion is aspiration of the liquid into the

lungs producing chemical pneumonitis.

#### **5. FIRE FIGHTING MEASURES**

**Extinguishing Media:** 

Dry Chemical
Carbon Dioxide

Foam

Firefighting Instructions:

Water Fog
Flammable. Clear area of unprotected personnel. Do not use a direct stream of
water as it may spread fire. Product will float and can be reignited on surface
of water. Vapour forms a flammable/explosive mixture with air between upper

of water. Vapour forms a flammable/explosive mixture with air between upper and lower flammable limits. Avoid breathing vapours. Use water to cool fire exposed containers. Vapours may travel along ground and flashback along vapour trail may occur. Do not enter confined fire space without adequate protective clothing and an approved positive pressure self-contained breathing apparatus. Delayed lung damage can be experienced after exposure to

combustion products, sometimes hours after the exposure.

Hazardous Combustion Products:

Carbon dioxide, carbon monoxide and unidentified organic compounds may

be formed upon combustion.

### 6. ACCIDENTAL RELEASE MEASURES

Issue warning "Flammable". Eliminate all ignition sources. Isolate hazard area and restrict access. Handling
Page 2 of 7

Revision Number: 7

equipment must be grounded. Work upwind of spill if it is safe to do so. Avoid direct contact with material. Wear appropriate breathing apparatus (if applicable) and protective clothing. Stop leak only if safe to do so. Dike and contain land spills; contain spills to water by booming. Use water fog to knock down vapours; contain runoff. Adsorb residue or small spills with adsorbent material and remove to non-leaking containers for disposal. Notify appropriate environmental agency(ies). After area has been cleaned up to the satisfaction of regulatory authorities, flush area with water to remove trace residue. Dispose of recovered material as noted under Disposal Considerations.

## 7. HANDLING AND STORAGE

Handling:

Flammable. Fixed equipment as well as transfer containers and equipment should be grounded to prevent accumulation of static charge. Avoid breathing vapours and prolonged or repeated contact with skin. Vapours may accumulate and travel to distant ignition sources and flashback. Empty containers are hazardous, may contain flammable/explosive dusts, residues or vapours. Do not pressurize drum containers to empty them. Do not cut, drill, grind, weld or perform similar operations on or near containers. Provide adequate ventilation. Launder contaminated clothing prior to reuse. Wash with soap and water prior to eating, drinking, smoking, applying cosmetics or using toilet facilities.

Storage:

Store in a cool, dry, well ventilated area, away from heat and ignition sources. Use explosion-

proof ventilation to prevent vapour accumulation.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

The following information, while appropriate for this product, is general in nature. The selection of personal protective equipment will vary depending on the conditions of use.

# OCCUPATIONAL EXPOSURE LIMITS (Current ACGIH TLY/TWA unless otherwise noted):

The exposure limits listed here are provided for guidance only. Consult local, provincial and territorial authorities for specific values.

Gasoline: 300 ppm (STEL: 500 ppm)
Benzene (skin): 0.5 ppm (STEL: 2.5 ppm)

Benzene: Shell internal standard is 0.5 ppm or 1.6 mg/m3 (8-12 hour time-weighted average limit), 2.5 ppm

or 8 mg/m3 (15-minute short term limit)

Skin Notation: Absorption through skin, eyes and mucous membranes may contribute significantly to the total exposure.

Mechanical Ventilation: Concentrations in air should be maintained below the occupational exposure limit if unprotected personnel are involved. Use explosion-proof ventilation as required to control vapour concentrations. Local ventilation recommended where general ventilation is ineffective in controlling airborne concentrations below the recommended occupational exposure limit. Make up air should always be supplied to balance air exhausted (either generally or locally). For personnel entry into confined spaces (i.e. bulk storage tanks) a proper confined space entry procedure must be followed including ventilation and testing of tank atmosphere.

## PERSONAL PROTECTIVE EQUIPMENT:

**Eye Protection:** 

Chemical safety goggles and/or full face shield to protect eyes and face, if product is handled such that it could be splashed into eyes. Provide an eyewash station in the area.

#### REGULAR UNLEADED GASOLINE

211-001

Revision Number: 7

Skin Protection:

Avoid contact with skin. Use protective clothing and gloves manufactured from nitrile.

Safety showers should be available for emergency use.

Respiratory
Protection:

Avoid breathing vapour or mists. If exposure has the potential to exceed occupational exposure limits, use an appropriate NIOSH-approved respirator. For high airborne concentrations, use a NIOSH-approved supplied-air respirator, either self-contained or

airline breathing apparatus, operated in positive pressure mode.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** 

Volatile Liquid Colourless

Appearance: Odour:

Typical Gasoline Odour

Odour Threshold:

< 0.25 ppm Not available

Freezing/Pour Point: Boiling Point:

35 - 220 °C

Density:

720 - 760 kg/m3 @ 15 °C

Vapour Density (Air = 1):

3.5

Vapour Pressure (absolute):

< 107 kPa @ 38 °C

Specific Gravity (Water = 1):

0.74

pH: Flash Point: Not applicable
TCC -30 °C

Lower Flammable Limit:

1.4 % (vol.) 7.6 % (vol.) 280 °C

Upper Flammable Limit: Autoignition Temperature:

< 1 mm2/s @ 38 °C

Viscosity: Evaporation Rate (n-BuAc = 1):

Not available

Partition Coefficient (log Kow):

2.3 Insoluble

Water Solubility: Other Solvents:

Hydrocarbon Solvents

Formula:

C4 - C11

### 10. STABILITY AND REACTIVITY

**Chemically Stable:** 

Yes

Hazardous Polymerization:

No

Sensitive to Mechanical Impact:

No Yes

Sensitive to Static Discharge: Incompatible Materials: Conditions of Reactivity:

Avoid contact with strong oxidizing agents and acids.

Avoid excessive heat, open flames and all ignition sources.

## 11. TOXICOLOGICAL INFORMATION

Ingredient (or Product if not specified)	Toxicological Data
Gasoline	LD50 Oral Rat > 18 mL/kg
	LD50 Dermal Rabbit > 5 ml/kg
Benzene	LD50 Oral Rat 690 - 3400 mg/kg
	LC50 Inhalation Rat 13700 ppm for 4 hours
	LD50 Dermal Rabbit > 8260 mg/kg

Routes of Exposure: Formulation:

Exposure will most likely occur through skin contact or inhalation.

No data is specifically available for this product and therefore this toxicological

information is based on testing completed with the ingredients.

Based on testing with similar materials, this product is not expected to be a primary

skin irritant after exposure of short duration, would not be a skin sensitizer and

would not be irritating to the eye.

**Acute Toxicity:** 

Irritancy:

Vapour concentrations above the recommended exposure level are irritating to the eyes and respiratory tract, may cause headaches and dizziness, are anesthetic and

may have other central nervous system effects.

**Chronic Effects:** 

Prolonged and repeated contact with skin can cause defatting and drying of the skin resulting in skin irritation and dermatitis. Prolonged exposure to high vapour concentration can cause headache, dizziness, nausea, blurred vision and central nervous system depression. Prolonged and repeated exposure may cause serious injury to blood forming organs, resulting in anemia and similar conditions. Myelodysplastic syndrome (MDS) has been observed in people exposed to very high levels (50 to 300 ppm) of benzene over a long period of time in the

workplace. The relevance of these results to lower levels of exposure is not known.

Carcinogenicity and Mutagenicity: According to the International Agency for Research on Cancer (IARC) this product is considered to be possibly carcinogenic to humans. This product contains benzene. Carcinogenic hazard. Repeated exposure to benzene concentrations greater than the recommended TLV/TWA may reduce the cellular components of peripheral blood and bone marrow. Epidemiological studies indicate that long term inhalation of benzene vapour can cause leukaemia in man. Benzene has also produced chromosomal aberrations in peripheral blood lymphocytes. May cause heritable genetic damage.

#### 12. ECOLOGICAL INFORMATION

Do not allow product or runoff from fire control to enter storm or sanitary sewers, lakes, rivers, streams, or public waterways. Block off drains and ditches.

Biodegradability:

Inherently biodegradable.

Rapid volatilization.

Bioaccumulation:

Potential for bioaccumulation.

Partition Coefficient (log Kow):

2.3

Aquatic Toxicity:

Product is expected to be toxic to aquatic organisms.

Ingredient:	Toxicological Data
Gasoline	LL50 (WAF method) Rainbow Trout (96hr) 1 - 10 mg/L.
	EL50 (WAF method) Daphnia Magna (48hr) 1 - 10 mg/L.
	EL50 - growth rate (WAF method) Algae (72hr) 1 - 10 mg/L.
Benzene	LL50 Rainbow Trout (96hr) 1 - 10 mg/L.
	EL50 Daphnia Magna (48hr) 10 - 100 mg/L.
	EL50 - growth rate Algae (72hr) 10 - 100 mg/L.

Definition(s):

LL and EL are the lethal loading concentration and effective loading concentration respectively. The concentration represents the amount of substance added to the system to obtain a toxic concentration. They replace the traditional LC and EC for low solubility substances.

WAF is the water accommodated fraction. A slightly soluble hydrocarbon is stirred

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into water and the insoluble portions are removed. The remaining solution is the water accommodated fraction.

#### 13. DISPOSAL CONSIDERATIONS

Waste management priorities (depending on volumes and concentration of waste) are: 1. recycle (reprocess), 2. energy recovery 3. incineration, 4. disposal at a licenced waste disposal facility. Do not attempt to combust waste on-site. Incinerate at a licenced waste disposal site with approval of environmental authority.

#### 14. TRANSPORT INFORMATION

Canadian Road and Rail Shipping Classification:

**UN Number** 

UN1203

Proper Shipping Name

GASOUNE

Hazard Class

Class 3 Flammable Liquids

Packing Group

PG II

Additional Information

Marine Pollutant

Shipping Description

GASOLINE Class 3 UN1203 PG II

Marine Pollutant

#### 15. REGULATORY INFORMATION

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 Class:

Class B2 Flammable Liquid

Class D2A Carcinogenicity

**DSL/NDSL Status:** 

This product, or all components, are listed on the Domestic Substances List, as

required under the Canadian Environmental Protection Act. This product

and/or all components are listed on the U.S. EPA TSCA Inventory.

Other Regulatory Status:

The regulatory information is not intended to be comprehensive. Other

regulations may apply to this material.

## 16. OTHER INFORMATION

**LABEL STATEMENTS** 

**Hazard Statement:** 

Flammable Liquid.

Contains Benzene.

May cause cancer.

**Handling Statement:** 

Eliminate all ignition sources.

Wear suitable gloves and eye protection.

Bond and ground transfer containers and equipment to avoid static accumulation.

Avoid prolonged exposure to vapours.

Empty containers are hazardous, may contain flammable / explosive dusts, liquid

residue or vapours. Keep away from sparks and open flames.

First Aid Statement:

Wash contaminated skin with soap and water.

Flush eyes with water.

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If overcome by vapours remove to fresh air. Do not induce vamiting.

Obtain medical attention.

**Revisions:** 

This MSDS has been reviewed and updated. Section 4 Section 5 Section 7 Section 8 Section 11 Section 15