Spills Preparedness and Response Plan
5545 Albion Rd.
Ottawa, Ontario

Prepared By:

W.O. Stinson & Son Ltd.

Last Revised on:
December 2025

<u>This plan must be kept on site at all times and all required staff must be adequately trained.</u>

Contents

1.0 Summary 4
1.1 Purpose 4
1.2 Inspections and Prevention 4
1.3 Spills 4
1.4 Distribution and Location 5
1.5 Scope and Limitations 5
2.0 Introduction 5
2.1 Location 5
2.2 Type of Operation 6
3.0 Spill Prevention and Control 6
3.1 General Information – Emergency Roles and Their Respective Responsibilities 6
3.1.1 W.O. Stinson Personnel Contact Information 7
3.1.2 Facility Neighbour Notification List 7
3.2 Potential Spill Prediction and Control 7
3.3 Electronic Tank Monitoring System 8
3.5 Inspection and Records 8
3.6 Emergency Spill Action Plan 8
4.0 Proposed Works – Environmental: 10
5.0 Fire Prevention 12
6.0 Training and Education 12
7.0 Risk Mitigation 12
7.1.1 Site Topography 12
7.1.2 Site Specific Observations – Risks to Environment and Human Health 13
7.2 Staff Training Requirements 13
7.3 Emergency Response Equipment 14
8.0 External Emergency Contacts 14
9.0 Appendix 16
9.1.1 – Example 3200L Oil Water Separator 16
9.1.2 – 100,000L Double Wall Underground Fuel Storage Tank 17
9.1.3 – 25,000L Double Wall Underground Fuel Storage Tank 18
9.1.4 – 20,000L Double Wall Underground Urea DEF Storage Tank 19
9.1.5 – Sample Spill Kit for Site 20
9.2 Site Plan Drawing 21

9.2.1 – TSSA Approved Drawings 21
9.2.2 – TSSA Approval Letter 22
9.3 Safe Operating Procedure Document – Fuel Spill Response 24
9.4 – Safety Data Sheets 26
9.4.1 – Gasoline 26
9.4.2 – Diesel 38
9.4.3 – Diesel Exhaust Fluid 50

1.0 Summary

The health and safety of its employees, the public, and protection of the environment are integral to W.O. Stinson & Son Ltd, to protect these interests this this plan has been developed to put in place proper handling measures aimed at preventing fuel spills from occurring on the property.

This plan also ensures compliance with all applicable requirements of the Technical Standards and Safety Authority (TSSA) including those under the Liquid Fuels Handling Code, which sets out mandatory protocols for fuel storage, transfer, spill prevention, and emergency response.

In addition, this plan reflects W.O. Stinson & Son Ltd.'s commitment to meeting and exceeding the recommendations outlined in the Wellhead Protection Report, this site is located within Wellhead Protection Areas (WHPAs). Enhanced spill prevention and containment measures have been incorporated to protect municipal drinking water sources and reduce risk to vulnerable groundwater zones.

In the event of a spill or release, the plan establishes clear response and mitigation procedures to ensure prompt containment, cleanup, and proper reporting in accordance with TSSA guidelines and environmental regulations.

1.1 Purpose

The Spills Response and Preparedness Plan (SPRP) outlines the facility's procedures for controlling and cleaning up any released materials, as well as the steps to ensure the safety of all individuals potentially affected by such an incident. This site is located within a Wellhead Protection Area, and any contamination of the underlying groundwater could impact the drinking water supply for the private communal wells serving the Albion Sun Vista subdivision. It is important to note that the Technical Standards and Safety Authority (TSSA) requirements for this facility exceed the measures outlined in the WHP report, providing an additional layer of environmental protection.

1.2 Inspections and Prevention

In order to maintain and assess the integrity of the tanks and storage containers, inspections will be carried out and documented by qualified personnel. Monitoring Programs will be implemented to ensure any underground storage tank is not leaking. Tanks with interstitial monitoring with electronic sensors.

1.3 Spills

At gas stations, the most common types of spills include minor releases caused by consumers during self-serve refueling (e.g., overfilling or nozzle drips), as well as spills that may occur during the transfer of fuel from delivery trucks to underground storage tanks. While these incidents vary in severity, each requires prompt and appropriate action to protect people, property, and the environment.

In the event of a spill, responding personnel must immediately assess whether the release has entered the environment. If so, appropriate regulatory authorities—including the Ministry of the Environment, Conservation and Parks (MECP) and the Technical Standards and Safety Authority (TSSA)—will be notified, as outlined in this plan.

To limit the spread of hazardous materials such as fuel, affected equipment or systems will be shut down and isolated as required. If there is any risk of fire, explosion, or immediate threat to life or property, the fire department will be contacted without delay.

Spill-prone areas—such as refueling zones and product transfer points—are located on concrete pads to help contain spills and allow for efficient cleanup. For small spills (e.g., nozzle drips at the pump), trained staff will use appropriate absorbent materials from on-site spill kits and dispose of waste according to applicable regulations. In the case of large spills—particularly those involving fuel transfer operations or where product has entered storm drains, soil, or surface water—an approved environmental contractor will be engaged to perform full remediation and manage waste disposal.

Safety Data Sheets (SDS) for all fuels and hazardous materials stored on-site are readily accessible to provide essential hazard and emergency response information. All W.O. Stinson & Son Ltd. employees and contractors working at the facility will maintain up-to-date Workplace Hazardous Materials Information System (WHMIS) training to ensure competent, compliant response during any spill event.

1.4 Distribution and Location

This Plan will be stored at the site 5545 Albion Rd. and a copy is kept in the W.O. Stinson & Son Ltd. Head Office located at 4728 Bank St. Ottawa ON.

1.5 Scope and Limitations

This SPRP has been developed for any potential release of materials on site (Petroleum, oils, greases, DNAPLs, Organic Solvents, etc.). This document is designed to address emergencies including a spill. Although this SPRP has been developed for spills, it provides no guarantee for the successful mitigation of all spills or other emergencies on site.

2.0 Introduction

2.1 Location

W.O. Stinson will have underground storage tanks at this site containing Gasoline, diesel and diesel exhaust fluid. All lubricants (i.e. motor oil, brake fluid, etc.) will be held in packaging (ranging for 1L – 20L packages) direct from the manufacturer.

W.O. Stinson & Son Ltd. has the following fixed storage tanks that will be located at this location.

Tank	Product Stored	Tank Size	Method of Monitoring
Underground	Regular Unleaded Gasoline	100,000 L	Electronic
Underground	ULS Clear Diesel	100,000 L	Electronic
Underground	ULS Dyed Diesel	25,000L	Electronic
Underground	Premium Unleaded Gasoline	25,000L	Electronic
Underground	Diesel Exhaust Fluid	20,000L	Electronic

2.2 Type of Operation

The use of underground storage tanks on site are for fuel storage related to the operation of the gas station. Packaged products are for purchase for use by customer.

All underground tanks containing gasoline or diesel products at W.O. Stinson & Son Ltd. are equipped with interstitial monitoring systems in accordance with TSSA guidelines. These systems provide continuous or periodic monitoring of the space between the tank's double walls to detect any leaks early, preventing product loss and environmental contamination.

Additionally, leak detection systems are installed on both the tanks and their associated piping, as required by the TSSA Liquid Fuels Handling Code. These systems may include sensors, automatic shutoff valves, or electronic monitoring devices designed to promptly identify and alert personnel to any releases.

The use of interstitial monitoring and leak detection aligns with TSSA's strict regulatory framework, which aims to minimize the risk of underground storage tank failures and spills. These measures not only enhance site safety but also ensure compliance with provincial environmental protection standards and help protect sensitive groundwater and soil resources.

Regular inspection, testing, and maintenance of these monitoring systems are mandatory under TSSA regulations to ensure their reliability

3.0 Spill Prevention and Control

3.1 General Information – Emergency Roles and Their Respective Responsibilities

Position	Preparedness	Response
Company Spokesperson	Know company policy & mandate	Report to Company Management
Technical Director	Be competent with this ERPP	- Direct the Technical Advisor Travel to the location Serve as a liaison between emergency service and company management
Technical Advisor	Be competent with this ERPP Provide technical support	Report to the Technical Director Follow instructions of the Technical Director
Operations Lead	Be competent with this ERPP Be aware of emergency equipment on-site	Direct mitigation actions of the company operations team. Assist company operations team Request permission from company management to obtain additional resources that require additional funding

Company Operations Team	Be competent with this ERPP Be aware of emergency equipment on-site	Follow instructions of Operations Lead Preform mitigation actions as instructed.
Program Coordinator	Develop and maintain this ERPP Ensure all employees and personnel in ERPP are familiar with the plan and their expected roles	Report to Company Management

3.1.1 W.O. Stinson Personnel Contact Information

Designated personnel accountable for oil spill prevention at this facility:

Name	Position	Contact Number	Role
24 Hour Contact Number	Office	1-800-267-9714	
Chris Eades	Operations Manager	613-822-7400	Company Spokesperson
Scott Stinson	Manager – Health and Safety	613-851-3702 613-822-7400	Program Coordinator/Technical Director
Todd McNeely	PM1 - OBT1 Technician	613-863-4078	Technical Advisor/Operations Lead
TBD***	On Site Staff	613-822-7400	Company Operations Team

3.1.2 Facility Neighbour Notification List

Name	Address	Contact Number
List to be compiled		

In the event of an emergency, the designated Company Spokesperson (See Section 3.1.1) at W.O. Stinson & Son Ltd. will facilitate initial and subsequent communications with the affected Neighbours as well as this list will be provided to Emergency Services if required. Neighbours affected by the emergency will be notified of the end of an emergency by the means of telephone.

3.2 Potential Spill Prediction and Control

The following outlines the potential sources of spills at the facility, along with typical failure points that could result in the unintentional release of product into the environment. Each source presents a unique risk and requires appropriate control measures to mitigate the potential impact.

i. Potential Sources of Spills:

1. **Fuel Transfer During Refueling Activities:**
   Spills can occur during the transfer of fuel from delivery trucks to underground storage tanks or during vehicle refueling at the pump. Common causes include hose disconnections, equipment malfunction, or operator error. These are typically minor in volume and are quickly contained due to the concrete pad surfaces at transfer and fueling areas.

2. **Underground Storage Tanks (USTs), Piping, and Dispensers:**
   The facility's underground storage tanks, associated piping, and fuel dispensing systems are constructed and installed in accordance with strict Technical Standards and Safety Authority (TSSA) requirements. These systems incorporate double-walled tanks and piping, continuous leak detection monitoring, and corrosion protection, making the risk of product leaks extremely low. Additionally, regular inspections and testing are conducted to ensure system integrity.

   While the site is located within a Wellhead Protection Area and the City has expressed concern about the potential for contamination of the underlying aquifer, it is important to note that modern fueling systems are highly engineered to prevent leaks. The combination of design standards, regulatory oversight, and proactive monitoring makes any release from buried components highly unlikely.

3.3 Electronic Tank Monitoring System

All in ground fuel storage tanks are monitored using an electronic tank monitoring system at the site. The electronic monitoring system monitors the following:

- Inventory Control;
- In-tank leak detection and interstitial leak censoring;
- Line leak detection;
- Water detection;
- Interstitial space vacuum leak detection;
- Maintenance history logs
- Maintenance tracking and control

Alarms may sound for reasons such as low on product, tank overfills, leak detected etc. All alarms must be reported to a supervisor, manager or site operator immediately by the site attendant. A silence button is located on all electronic tank monitoring systems which will silence the alarm for a period of time. No alarms, warnings or notifications are to be cancelled from the electronic tank monitoring system by any employee unless the issue has been resolved.

3.5 Inspection and Records

Inspection Procedures:

- In addition to daily inspections by personnel operating the site, the on-site staff will visually inspect the containment on a daily basis. If any deficiencies are identified during inspections or monitoring, appropriate corrective actions will be undertaken promptly to address and resolve the issues within a reasonable timeframe, ensuring ongoing compliance with TSSA requirements and maintaining the integrity of the fuel storage system. In addition to routine maintenance schedule (monthly) Pump Mechanic (PM) preforms a safety inspection of the equipment at the site. **NOTE:** in the event a major spill is detected, the Emergency Spill Action Plan will be triggered immediately to contain and clean up the spill.

3.6 Emergency Spill Action Plan

Response procedures in the event of a fuel spill:

Priority 1 – Identify the spill source and assess the hazard:

1. Ensure the safety of all persons in the vicinity
2. Asses the source, type and extent of the spill
3. Assess hazards of the spill
4. Check for fire and explosion risk:
   - **a)** Extinguish all ignition sources in the area
   - **b)** Move machinery only if safe to do so or shut down if necessary
   - **c)** Isolate all live equipment to prevent sparks and enforce no smoking by site personnel
5. Raise alarm and close off affected area

Priority 2 – Stop the flow of the spill

6. Ensure that any necessary safety equipment is worn
7. Stop the flow at the source of the spill – use ready mixed sealing compounds to seal holes or fractures in containers and drums
8. Attempt to limit immediate spread of spill. Prevent off site migrations by surface runoff; place absorbent materials around leaking item(s). If necessary, use absorbent material to form a runoff barrier
9. Priority should be given to protecting any adjacent watercourse and underlying aquifers
10. If the spill occurs on ice, attempts should be made to stop it from reaching ice free ground

Priority 3 – Notification

11. Notification MUST be completed as soon as possible after ensuring the immediate safety of all personnel and attempting to stop flow and limit spread.

Priority 4 – Spill Containment

12. For all spills deploy absorbents to contain and soak up fuel
13. Prevent spread of fuel by using absorbent booms
14. It may be possible to hold the chemical in depressions by using absorbent material, or by building small dams
15. Response operation should not commence in the affected area until deemed safe.

Priority 5 – Spill Recovery and Clean-up

16. If a spill has been successfully contained on-site, commence spill clean-up operations
17. Designated person having responsibility is to monitor spill and co-ordinate clean-up operations.
18. The objective of the recovery and clean-up is to:

a) Recover as much liquid fuel or other chemical as possible

b) If possible, use pumps to remove the fuel or other chemical from the ground straight into drums

c) Absorbent pads should be spread on any remaining fuel or other chemical that cannot be pumped or manually removed

d) Fuel or other chemical-soaked absorbent must be retrieved and placed in plastic bags or empty drums

e) Contaminated snow can be stored in drums which have had their tops removed. Allow the snow to melt and decant off the fuel.

f) Drums containing recovered fuel or water, fuel-soaked absorbents and contaminated clothing must be sent for disposal with the approved Hazardous Waste Contractor/method

Spill Response Classification

a) Major Spill – greater than 100 liters (difficult to contain and requires professional external response team)

b) Medium Spill – greater than 10 liters but less than 100 liters (contained – may require a spill response team)

c) Minor Spill – less than 10 liters (easily contained)

Notes:

d) Any large-scale environmental remediation will be performed in consultation with Environmental Engineers

e) The health and safety of personnel is paramount in the case of a fuel spill

f) Personnel should ensure that they are aware of the location and content of spill kits

4.0 Proposed Works – Environmental:

To support spill prevention and environmental protection, the site is equipped with a stormwater management system that includes an oil-water separator, oil and grit separator, and a stormwater flow control system. These components work together to contain and treat runoff in the event of a hydrocarbon spill and under normal operating conditions.

1. Oil-Water Separator (OWS)

A multi-chamber oil-water separator is located downstream of the catch basins collecting runoff from areas where petroleum handling or dispensing occurs. This separator is designed to provide primary spill control by capturing hydrocarbons before they can enter the broader stormwater system. In the event of a spill, the OWS serves as the first containment point and will be immediately cleaned out as part of the emergency spill response procedure. The unit is

sized to provide adequate hydrocarbon storage capacity and maintain separation efficiency during typical flow conditions.

2. Surface Runoff Conveyance

Runoff from paved and impervious areas is collected in catch basins and conveyed through a system of underground storm sewers. These sewers are designed to direct flow toward treatment units while accommodating a range of storm intensities. The conveyance system plays a critical role in transporting both routine runoff and any spilled material toward containment and treatment infrastructure.

3. Oil and Grit Separator (OGS)

Downstream of the OWS, an oil and grit separator provides secondary treatment by removing additional hydrocarbons and sediments from stormwater during smaller storm events. The system includes internal bypass features to manage larger flows without overwhelming the treatment process. The OGS is equipped with dedicated storage compartments for collected oil and sediment and is maintained regularly to ensure continued effectiveness.

4. Flow Control and Discharge Management

A control manhole is used to regulate the discharge of stormwater from the site. This structure limits the rate of flow leaving the site during large storm events, helping to prevent downstream flooding. In high-flow situations, excess water is diverted to an underground stormwater storage system.

5. Underground Stormwater Storage

The underground storage system provides temporary detention for stormwater that exceeds the capacity of the outlet control structure. This ensures that flows are released at a controlled rate following heavy rain events. The system helps protect natural receiving environments by reducing peak discharge and giving spill response teams time to intervene, if needed, before any contaminants can leave the site.

6. Emergency Response Procedures

In the event of a spill:

- All drainage structures (e.g., catch basins, oil-water separator) will be inspected immediately.
- Spill kits and absorbent materials will be deployed to isolate and contain the release.
- The oil-water separator and oil/grit separator will be emptied and cleaned as needed.
- Contaminated materials will be disposed of in accordance with regulatory requirements.
- Follow-up inspections will ensure that all impacted components of the stormwater system are fully restored to operational condition.

5.0 Fire Prevention

Aside from spills, fire represents the second most likely and dangerous hazard associated with fuel storage at this location. Effective coordination of personnel and implementation of incident command procedures are essential to leverage existing safety systems, minimize property loss, and eliminate injury or illness risks to human life.

This plan aligns with established fire prevention and emergency response standards, including:

- National Fire Protection Association (NFPA) 30 – Flammable and Combustible Liquids Code, which outlines requirements for safe storage and handling of flammable fuels to reduce fire risks.
- NFPA 704 – Standard System for the Identification of the Hazards of Materials for Emergency Response, which supports hazard communication for first responders.
- Incident Command System (ICS) protocols, as recommended by Ontario Fire Marshal's Office and emergency services, to establish clear leadership, communication, and coordination during fire or spill emergencies.
- Compliance with Technical Standards and Safety Authority (TSSA) regulations requiring emergency shutdown systems, fire suppression equipment, and employee training in fire safety.

Integration of these procedures ensures a structured, effective response to fire incidents, prioritizing human safety and environmental protection.

6.0 Training and Education

All staff will receive training and education commensurate with the duties they are expected to perform.

7.0 Risk Mitigation

7.1.1 Site Topography

The property at 5545 Albion Rd lies on relatively flat terrain, with a slight northerly grade that gently slopes away from Albion Road toward the rear of the site. Ground elevation across the site varies by no more than approximately 0.5 m (1-2 ft), providing effective surface water drainage away from the facility.

Key topographic features include:

- **Overall Gradient**: A gentle slope of roughly 1–2% north-to-south, promoting sheet-flow drainage into the municipal storm system without creating erosion hazards.
- **Concrete Operational Areas**: All fueling and transfer zones are installed on level, reinforced concrete pads, minimizing uneven settlement and facilitating spill containment and clean-up.

- **Vegetation Buffers & Berms**: Surrounding landscaped areas and low-grade earth berms/or swales help intercept incidental runoff, further protecting subsurface soils and groundwater.
- **Site Boundaries**: Perimeter grading is designed to divert rainwater off-site, preventing ponding near tanks, dispensers, and other critical infrastructure.

7.1.2 Site Specific Observations – Risks to Environment and Human Health

Observations	Yes	No	N/A	Mitigation Actions
Fuel Trucks Unloading to Underground Storage Tanks	x			1) Product all contained in Transport Canada approved tank (B620) preformed on an annal basis 2) Spill kit kept on unit with truck and additional spill kit on site 3) Trained Personal performing duties
Does Oil Water Separator pose any environmental risk?	x			1) Monitoring program will be put in place. 2) Ensure staff trained on procedures
Do underground fuel tanks pose any environmental risk?	x			1) equipped with interstitial monitoring and tanks and associated piping will have leak detection systems in place
Will third party contractors required to preform duties at the yard be trained on site specific spill and emergency procedures	x			1) SRPP will be added to Contractors Site Specific Training

7.2 Staff Training Requirements

All W.O. Stinson & Son staff at the Albion facility will have the following training initially during new employee onboarding and after that at a minimum every three years:

- Transportation of Dangerous Goods training that trains driver not to overfill tanks (Any employee that is transporting or delivering fuel)
- Spills Prevention Training
- Spills and Leak Management Training
- Trained to look at Product Transfer Area at the site and be sure to follow proper procedures that are listed.
- WHMIS Training

There will be annual training provided to all staff to reinforce awareness of the nearby Wellhead Protection Area (WHPA) and to emphasize the critical importance of maintaining good environmental practices. This training will remind employees of their role in protecting the WHPA by adhering to safe handling procedures and preventing any activities that could threaten the quality of the protected groundwater source.

7.3 Emergency Response Equipment

Spill Kit:

- Located outside the kiosk. There is also fuel absorbent rocks located in containers under the canopy and at the card lock beside the pumps.

Quantity (Minimum)	Description of Resource	Location
20	Absorbent Pads (min 18”x18” x 3/16”)	Shop
5	Plastic Disposable Bags	Shop
1	20 Liter Metal Pail	Shop
1	Manhole Cover	Shop
1	Shovel (Aluminum)	Shop
5	Boom Sock	Shop
10	Bag of Absorb All	Shop

Emergency Stop Button:

- The emergency stop button for the fuel dispensers under the canopy is mounted at the kiosk directly beside the cash register.
- The emergency stop button for the fuel dispensers at the card lock is mounted on the side of the pedestal the fuel control system is mounted on the cardlock.

Fire Extinguishers:

- Multiple fire extinguishers are located throughout the site on the exterior of building and attached to the pillars under the canopy and at the cardlock.

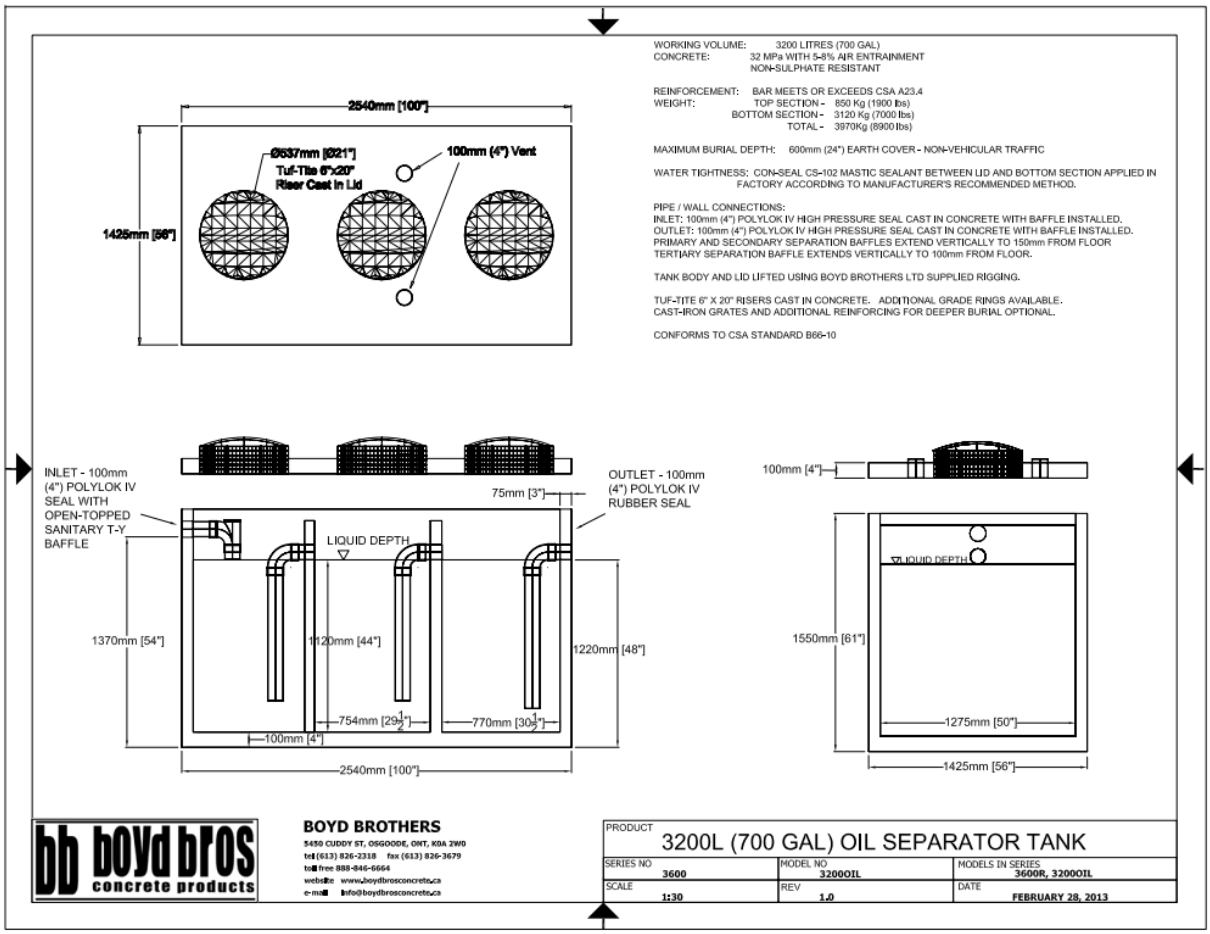
8.0 External Emergency Contacts

Organization	Description of Resource	Contact Information
Fire, Medical, Police	Emergency Services	911
TSSA	Regulatory Body – Fuel Safety	1 (800) 682-8772

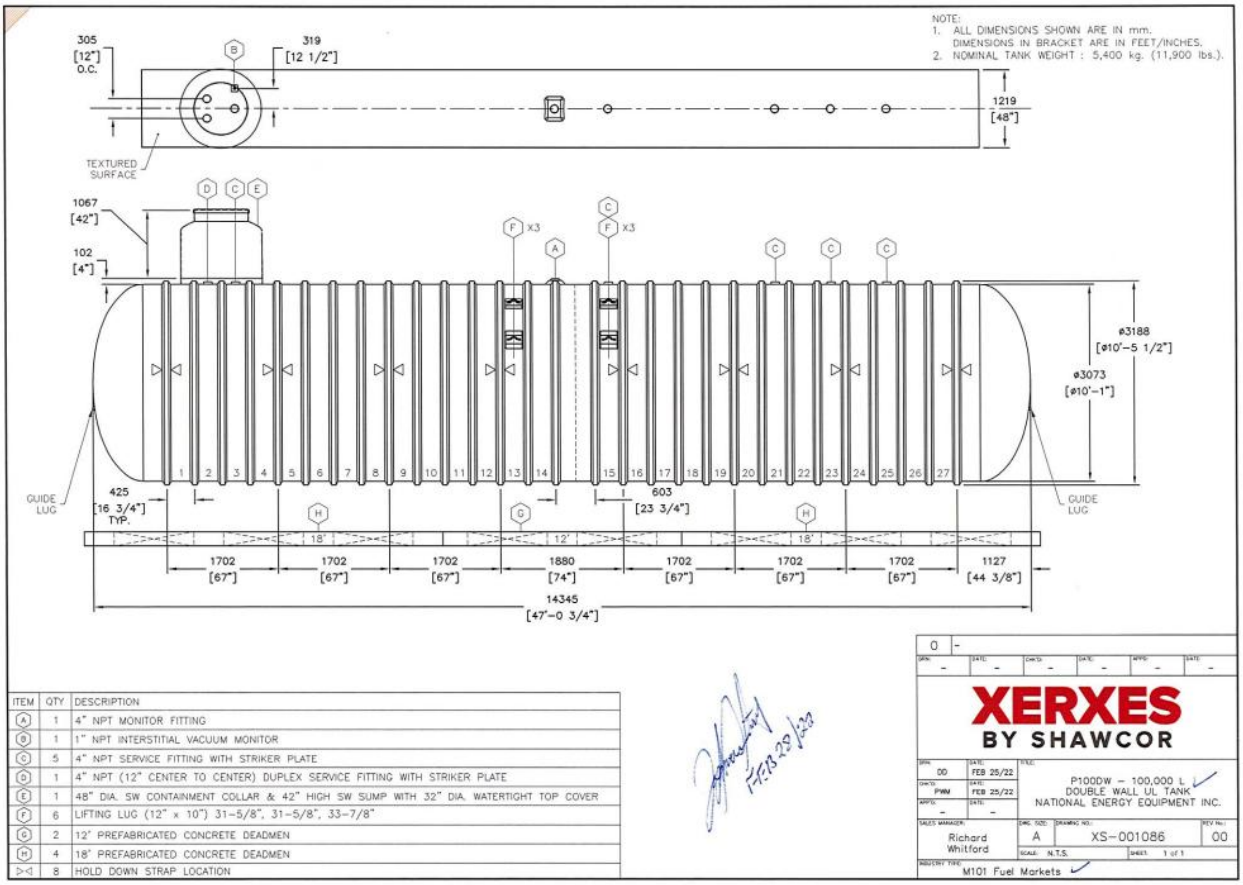
Spills Action Centre	Ont. Ministry of Environment	1 (800) 268-6060
Ministry of Labour	Health and Safety	1 (877) 202-0008

9.0 Appendix

9.1.1 – Example 3200L Oil Water Separator



9.1.2 – 100,000L Double Wall Underground Fuel Storage Tank



ITEM	QTY	DESCRIPTION
A	1	4" NPT MONITOR FITTING
B	1	1" NPT INTERSTITIAL VACUUM MONITOR
C	5	4" NPT SERVICE FITTING WITH STRIKER PLATE
D	1	4" NPT (12" CENTER TO CENTER) DUPLEX SERVICE FITTING WITH STRIKER PLATE
E	1	48" DIA. SW CONTAINMENT COLLAR & 42" HIGH SW SUMP WITH 32" DIA. WATERTIGHT TOP COVER
F	6	LIFTING LUG (12" x 10") 31-5/8", 31-5/8", 33-7/8"
G	2	12' PREFABRICATED CONCRETE DEADMEN
H	4	18' PREFABRICATED CONCRETE DEADMEN
▷◁	8	HOLD DOWN STRAP LOCATION

XERXES BY SHAWCOR

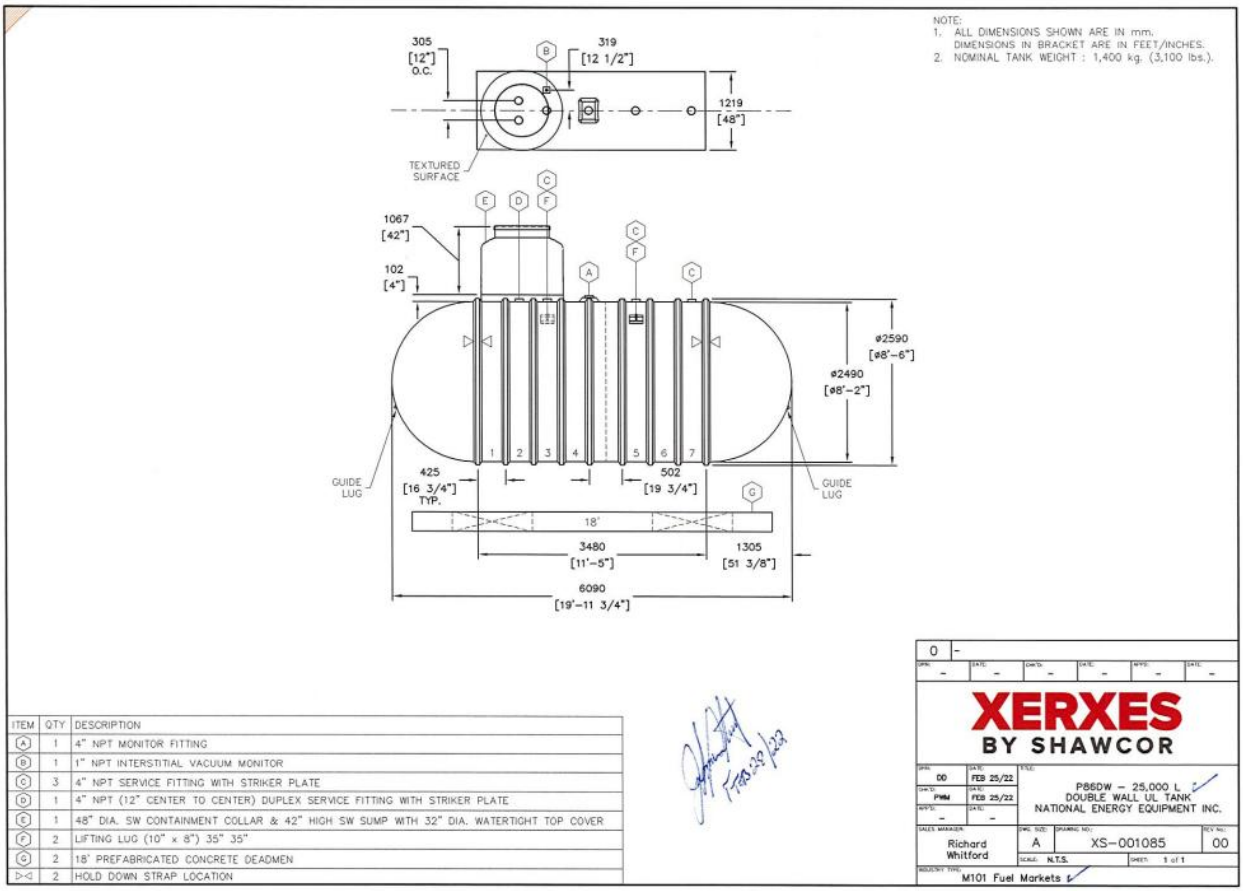
P100DW – 100,000 L DOUBLE WALL UL TANK
NATIONAL ENERGY EQUIPMENT INC.

Richard Whitford

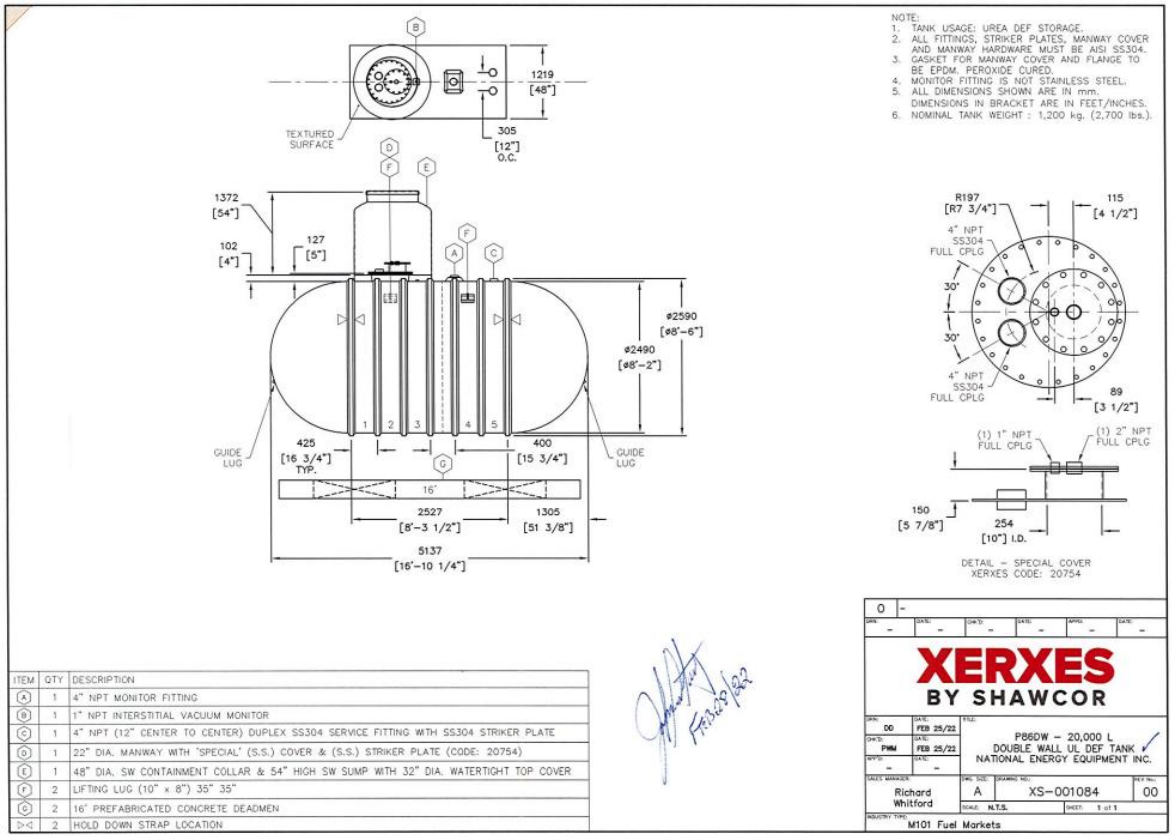
XS-001086

M101 Fuel Markets

9.1.3 – 25,000L Double Wall Underground Fuel Storage Tank



9.1.4 – 20,000L Double Wall Underground Urea DEF Storage Tank



9.1.5 – Sample Spill Kit for Site

UNIVERSAL 95 GALLON MOBILE CAN WITH WHEELS SPILL KIT

Fast response for emergency oil, chemical and water-based liquid spills

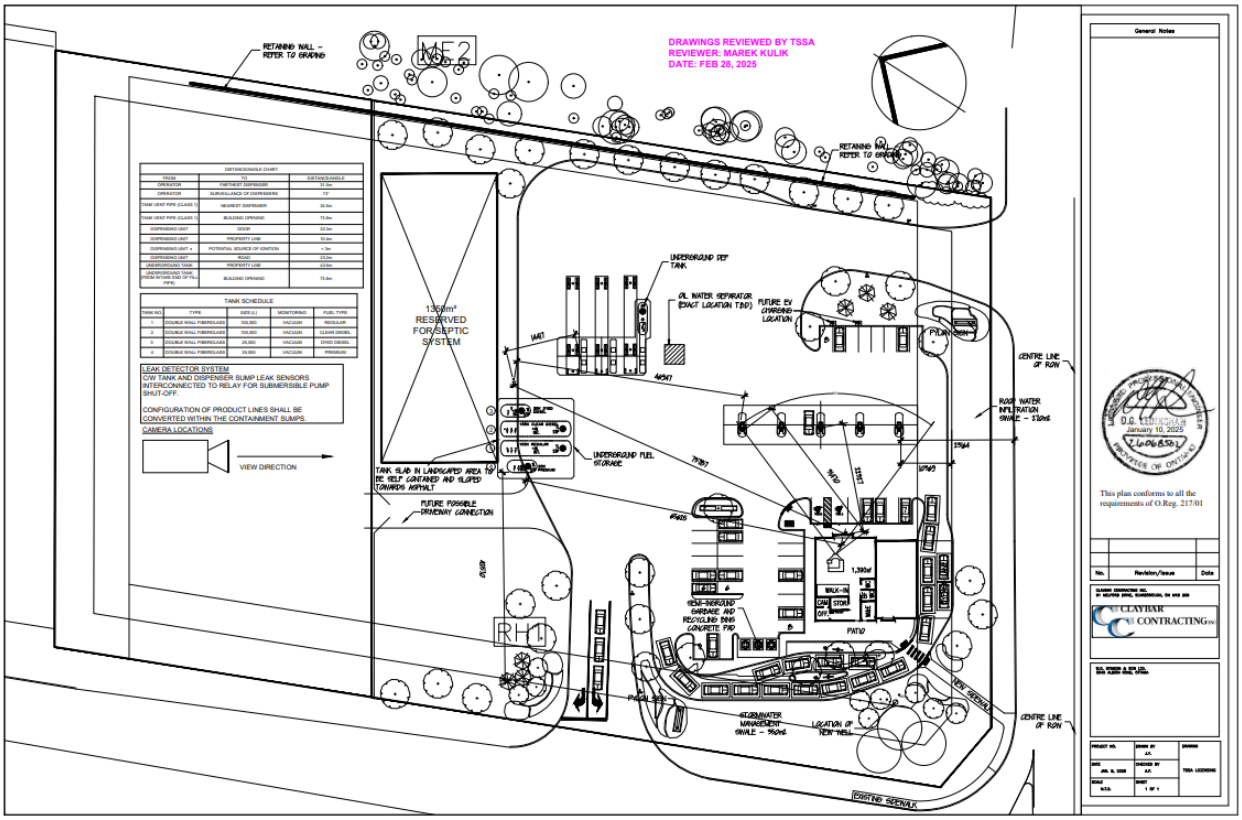
- For large spills in factories and recycling plants.
- Rolls easily on 10" plastic wheels.

Includes:

- (110) 15 x 19" Pads
- (12) 3" x 4' Sorbent Socks
- (8) 3" x 12' Sorbent Socks
- (8) 18 x 18" Pillows
- (1) pair Nitrile Gloves
- (1) Emergency Handbook
- (1) pair Goggles
- (10) Disposal Bags

9.2 Site Plan Drawing

9.2.1 – TSSA Approved Drawings



9.2.2 – TSSA Approval Letter

345 Carlingview Drive
Toronto, Ontario M9W 6N9
Tel: 416.734.3300
Fax: 416.231.1626
Toll Free: 1.877.682.8772

www.tssa.org

February 28, 2025

KEITH B. OSTER
W.O. STINSON & SON LIMITED
4728 BANK ST,
GLOUCESTER ON K1T 3W7
CANADA
koster@wostinson.com

Work Order Type: FS New - LF Station
Work Order No.: 14593988

Located at: 5545 ALBION RD S, OTTAWA, ON, J4Y 0B5

Dear KEITH B. OSTER,

Technical Standards and Safety Authority (TSSA) has received your application dated January 12, 2025, for a FS Gasoline Station – Cardlock & Self Serve. A copy of the approved drawing(s) is enclosed.

This site will be inspected. Please fill out the FS Customer Inspection Request Form found on our website and submit to fuelsinspection@tssa.org to schedule your inspection. Also, please ensure that the Electrical Safety Authority Certificate of Inspection, if applicable, and the engineer approved drawing(s) are presented to the TSSA inspector during the visit.

Newly built facilities or modified facilities with newly installed underground equipment will require two inspections: the first prior to the tanks and piping being backfilled and the second after the site has been commissioned.

Prior to the tanks and piping being backfilled, the TSSA inspection may include, but is not limited to the following:

1. Name and TSSA registration number of contractor responsible for the installation;
2. Name and TSSA certificate number of petroleum mechanic responsible for the installation;
3. Installation coincides with approved drawings;
4. Pressure testing of the all piping (as per manufacturer's instructions and the code);
5. Hydrostatic testing of sumps;
6. Confirmation that the double-wall tanks are holding vacuum or pressure;
7. Review copies of tank deflection measurements for fiberglass tanks; and
8. Verification of certification of the tank and components.

Once the site has been commissioned, the TSSA inspection may include, but is not limited to the following:

1. Verify that the sensors are installed and working and ensure that the sensors are correctly wired to the panel, if applicable;
2. Verify that underground piping test boots are loosened, if applicable;
3. Verify that dispenser stabilizer bars are securely bolted and that shear valves are in the correct position, if applicable;
4. Check that all applicable signage is in place;
5. For Self-Serve facilities, activate the intercom and verify that the video monitoring system complies with the Liquid Fuels Handling Code; and
6. Test the E-stop.

If the facility is currently licensed and this application is for a modification, the facility may continue to operate under its existing licence until the modification has been authorized.

Should you have any questions or require further assistance, I will be happy to assist you. For general enquiries, please contact a Customer Service Advisor at 1.877.682.TSSA (8772) or e-mail customerservices@tssa.org. When contacting TSSA regarding this file, please refer to the Work Order number provided above.

Yours truly,

Marek Kulik
Engineer, Fuels
416-734-3465
mkulik@tssa.org

9.3 Safe Operating Procedure Document – Fuel Spill Response

Safe Operating Procedure

Chemical – Spill Response (General)

Appropriate measures should be taken to prevent the occurrence of a spill. Assigned Site Personnel are responsible for conducting regular inspections of the preventive measures implemented on-Site. All Site Personnel and contractors are responsible for following training, operating procedures and work instructions set out and required by W.O. Stinson & Son Ltd.

Spill kits are located in high-risk areas and regular documented inspections are conducted to ensure the spill kits are fully stocked. Up to date Safety Data Sheets ("SDS") are maintained on-site for all applicable materials.

Spill Response Procedure

The primary steps to take in the event of a spill are as follows:

a) Assess the spill. Protect the health and safety of Site personnel and the public (in the event of immediate public safety or health risk, i.e. explosion or fire contact 9-1-1 immediately).
b) Notify the Spill Response Coordinator of the spill. All Site personnel shall immediately notify the Spill Response Coordinator or in their absence, the Alternate Spill Response Coordinator, or on-Site Supervisor, of any spill situation. The Spill Response Coordinator, or Alternate, will direct all aspects of any spill incident
c) Identify the material. Wear appropriate personal protective equipment (refer to the appropriate SDS) before proceeding with spill response activities.
d) Evaluate the size of the response to be initiated. Determine if the spill response and clean-up can be handled by Site personnel or whether the assistance of a spill response contractor is required
e) Decide whether or not Site personnel need to be evacuated from the area. If evacuation is required, the Spill Response Coordinator, or Alternate, is responsible for ensuring that all Site personnel are safely evacuated from the building / area. Should the Spill Response Coordinator, or Alternate, not be available, an on-Site Supervisor may take the lead on evacuation, if required.
f) Stop / contain the spill, only if safe to do so. Stop and contain the spill if possible and only if it is safe to do so in order to prevent further release. If possible, plug the leak from the drum, tank, or pipe with plugging compound. Deploy sorbent socks around the spill then dike the spill to prevent it from spreading. Turn off engines and other sources of ignition (i.e. cigarettes), if applicable.
g) Prevent the spill from entering nearby watercourses. Use all available materials to contain the spill to prevent it from reaching the low-lying area on-Site and away from any watercourse. Cover / block all drains, ditches, etc. with drain covers, booms or diking materials.
h) Protect the affected area. Protect the spill area as necessary, including the equipment and materials exposed to the spill. (Do not drive equipment through the spill and around the Site, this just increases the area requiring clean-up).
i) Report the spill as soon as possible. Only the Spill Response Coordinator, or Alternate, will notify the appropriate internal and external parties. The MOECC / SAC must be notified as soon as possible.
j) Clean up the spill. When the spill is contained, place sorbent on the ground at the outer edge of the spill. Then work your way with the sorbents towards the center of the spill.
k) Have back-up absorbent available. In the event that the spill is larger than the available sorbent

capacity within the spill kit, obtain back up absorbents from other spill kits.

l) If directed complete the Spill Response Form. Attach pictures when possible. This is normally completed by Spill Response Coordinator or Alternate unless otherwise advised.

m) Dispose of all spilled material and spent absorbent. Collect spilled material / spent absorbent / impacted soil in drums or in a lugger bin, if applicable, properly label the contents and date of the drum / lugger bin, and place it in a secure storage area. All waste is to be handled and disposed of in accordance to the MOECC requirements.

n) Replenish spill kits. Take an inventory of all on-Site spill kits and replace all used sorbents.

EMERGENCY & SPILL NOTIFICATION AND CONTROL

Every Employee who has a spill or is aware of a leak will:

- Stop the flow of product and prevent it from entering public sewers, drains or waterways if safe to do so.
- Contain the spill or leak with absorbent, sand, or dirt.
- Eliminate all sources of ignition.
- Warn those at immediate risk.

Call the Following:

- **STINSON 24 Hour Emergency 613-822-7400 or 1 800 267-9714**

If the spill is a public hazard, notify the Police, Fire department.

Organization	Description of Resource	Contact Information
Fire, Medical, Police	Emergency Services	911
TSSA	Regulatory Body – Fuel Safety	1 (800) 682-8772
Spills Action Centre	Ont. Ministry of Environment	1 (800) 268-6060
Ministry of Labour	Health and Safety	1 (877) 202-0008
Tomlinson Environmental	Environmental Spill - 24hr Emergency Response	1-800-263-5048

9.4 – Safety Data Sheets

9.4.1 – Gasoline

SAFETY DATA SHEET

GASOLINE, UNLEADED

SDS Number: 000003000644

Version: 5.0 Revision Date: 2025/02/05 Print Date: 2025/02/13

Aspiration hazard	:	Category 1
GHS label elements		
Hazard pictograms	:	
Signal Word	:	Danger
Hazard Statements	:	H224 Extremely flammable liquid and vapor. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H336 May cause drowsiness or dizziness. H340 May cause genetic defects. H350 May cause cancer. H361 Suspected of damaging fertility or the unborn child. H372 Causes damage to organs (hematopoietic system) through prolonged or repeated exposure if inhaled.
Precautionary Statements	:	**Prevention:** P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 Keep container tightly closed. P240 Ground and bond container and receiving equipment. P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment. P242 Use non-sparking tools. P243 Take action to prevent static discharges. P260 Do not breathe mist or vapors. P264 Wash skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection. **Response:** P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell. P308 + P313 IF exposed or concerned: Get medical advice/ attention. P331 Do NOT induce vomiting.

P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	Common Name/Synonym	CAS-No.	Concentration (% w/w)
Gasoline; Low boiling point naphtha - unspecified	Gasoline; Low boiling point naphtha - unspecified	86290-81-5	80 - 100
toluene	toluene	108-88-3	<= 40
benzene	benzene	71-43-2	0.006 - 1.5
ethanol	ethanol	64-17-5	<= 0.3
methanol	methanol	67-56-1	<= 0.08

SECTION 4. FIRST AID MEASURES

If inhaled : Move to fresh air.
Artificial respiration and/or oxygen may be necessary.
Seek medical advice.

In case of skin contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Wash skin thoroughly with soap and water or use recognized skin cleanser.
Wash clothing before reuse.
Seek medical advice.

In case of eye contact : Remove contact lenses.
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Obtain medical attention.

If swallowed	:	Rinse mouth with water. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Seek medical advice.
Most important symptoms and effects, both acute and delayed	:	Respiratory, skin and eye irritation; nausea; cancer. Inhalation may cause central nervous system effects. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Chronic exposure to benzene may result in increased risk of leukemia and other blood disorders.
An indication of immediate medical attention and special treatment needed, if necessary	:	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Dry chemical Carbon dioxide (CO2) Water fog. Foam
Unsuitable extinguishing media	:	Do NOT use water jet.
Specific hazards during fire fighting	:	Cool closed containers exposed to fire with water spray.
Hazardous combustion products	:	Carbon oxides (CO, CO2), nitrogen oxides (NOx), polynuclear aromatic hydrocarbons, phenols, aldehydes, ketones, smoke and irritating vapours as products of incomplete combustion.
Further information	:	Prevent fire extinguishing water from contaminating surface water or the ground water system.
Special protective equipment for fire-fighters	:	Wear self-contained breathing apparatus and full protective wear. Wear a positive-pressure supplied-air respirator with full facepiece.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	For personal protection see section 8. Ensure adequate ventilation. Evacuate personnel to safe areas. Material can create slippery conditions. Mark the contaminated area with signs and prevent access to unauthorized personnel. Only qualified personnel equipped with suitable protective equipment may intervene.

Environmental precautions	:	If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	:	Prevent further leakage or spillage if safe to do so. Remove all sources of ignition. Soak up with inert absorbent material. Non-sparking tools should be used. Ensure adequate ventilation. Contact the proper local authorities.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	:	For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Use only with adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Avoid contact with skin, eyes and clothing. Do not ingest. Keep away from heat and sources of ignition. Keep container closed when not in use.
Conditions for safe storage	:	Store in original container. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep in a dry, cool and well-ventilated place. Keep in properly labeled containers. To maintain product quality, do not store in heat or direct sunlight.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Gasoline; Low boiling point naphtha -unspecified	86290-81-5	TWA	300 ppm	CA AB OEL
		STEL	500 ppm	CA AB OEL
		TWA	300 ppm	CA BC OEL
		STEL	500 ppm	CA BC OEL
		TWA	300 ppm	ACGIH
		STEL	500 ppm	ACGIH
toluene	108-88-3	TWA	20 ppm	CA BC OEL
		TWAEV	20 ppm	CA QC OEL
		TWA	50 ppm	CA AB OEL
		TWA	20 ppm	ACGIH

benzene	71-43-2	TWA	0.5 ppm	CA BC OEL
		STEL	2.5 ppm	CA BC OEL
		TWA	0.5 ppm	CA ON OEL
		STEL	2.5 ppm	CA ON OEL
		TWAEV	0.5 ppm	CA QC OEL
		STEV	2.5 ppm	CA QC OEL
		TWA	0.5 ppm	CA AB OEL
		STEL	2.5 ppm	CA AB OEL
		TWA	0.02 ppm	ACGIH
		STEL	0.1 ppm	ACGIH
ethanol	64-17-5	STEL	1,000 ppm	CA BC OEL
		STEV	1,000 ppm	CA QC OEL
		TWA	300 ppm	CA AB OEL
		STEL	500 ppm	CA AB OEL
		STEL	1,000 ppm	ACGIH
methanol	67-56-1	TWA	200 ppm	CA BC OEL
		STEL	250 ppm	CA BC OEL
		TWA	200 ppm	CA AB OEL
		STEL	250 ppm	CA AB OEL
		TWA	200 ppm	ACGIH
		STEL	250 ppm	ACGIH

Engineering measures : Adequate ventilation to ensure that Occupational Exposure Limits are not exceeded.
Use only in well-ventilated areas.
Ensure that eyewash station and safety shower are proximal to the work-station location.

Personal protective equipment

Respiratory protection : Concentration in air determines protection needed.
Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Filter type : A NIOSH-approved air-purifying respirator with an organic vapour cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air-purifying respirators is limited. Use a positive-pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstances where air-purifying respirators may not provide adequate protection.

Hand protection

Material : polyvinyl alcohol (PVA), Viton(R). Consult your PPE provider for breakthrough times and the specific glove that is best for you based on your use patterns. It should be realized that eventually any material regardless of their imperviousness, will get permeated by chemicals. Therefore, protective gloves should be regularly checked for wear and tear. At the first

signs of hardening and cracks, they should be changed.

Remarks	:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Eye protection	:	Wear face-shield and protective suit for abnormal processing problems.
Skin and body protection	:	Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.
Protective measures	:	Wash contaminated clothing before re-use.
Hygiene measures	:	Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash face, hands and any exposed skin thoroughly after handling.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	:	Clear liquid.
Color	:	Clear to slightly yellow or green, undyed liquid. May be dyed red for taxation purposes.
Odor	:	Gasoline
pH	:	No data available
Melting point and freezing point	:	No data available
Boiling point, or initial boiling point and boiling range	:	25 - 225 °C
Flash point	:	-50 - -38 °C Method: Tagliabue.
Flammability	:	Extremely flammable in presence of open flames and sparks. May accumulate static electrical charge. Vapours are heavier than air and may travel considerable distance to sources of ignition and flash back.
Upper explosion limit / Upper flammability limit	:	7.6 %(V)
Lower explosion limit / Lower flammability limit	:	1.3 %(V)
Vapor pressure	:	< 802.5 mmHg (20 °C)
Relative vapor density	:	3

Relative density	:	0.685 - 0.8
Density	:	No data available
Solubility(ies)		
Water solubility	:	insoluble
Partition coefficient: n-octanol/water	:	No data available
Autoignition temperature	:	257 °C
Decomposition temperature	:	No data available
Viscosity		
Viscosity, kinematic	:	No data available
Particle characteristics		
Particle size	:	Not applicable

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No dangerous reaction known under conditions of normal use.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	Hazardous polymerization does not occur.
Conditions to avoid	:	Extremes of temperature and direct sunlight.
Incompatible materials	:	Reactive with oxidising agents, acids and interhalogens.
Hazardous decomposition products	:	May release COx, NOx, phenols, polycyclic aromatic hydrocarbons, aldehydes, ketones, smoke and irritating vapours when heated to decomposition.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Eye contact
Ingestion
Inhalation
Skin contact

Acute toxicity

Based on available data, the classification criteria are not met.

Product:

Acute oral toxicity	:	Acute toxicity estimate: > 2,000 mg/kg Method: Calculation method
Acute inhalation toxicity	:	Acute toxicity estimate: > 20 mg/L Exposure time: 4 h Test atmosphere: vapor Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: > 2,000 mg/kg
Method: Calculation method

Components:

Gasoline; Low boiling point naphtha -unspecified:

Acute oral toxicity : LD50 (Rat): 13,600 mg/kg

Acute dermal toxicity : LD50 (Rabbit): > 3,750 mg/kg

toluene:

Acute oral toxicity : LD50 (Rat): 5,580 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 20 mg/l
Exposure time: 4 h
Test atmosphere: vapor

Acute dermal toxicity : LD50 (Rabbit): 12,125 mg/kg

benzene:

Acute oral toxicity : LD50 (Rat): 2,990 mg/kg

Acute inhalation toxicity : LC50 (Rat): 13700 ppm
Exposure time: 4 h
Test atmosphere: vapor

Acute dermal toxicity : LD50 (Rabbit): > 8,240 mg/kg

ethanol:

Acute oral toxicity : LD50 (Rat): 7,060 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 32380 ppm
Exposure time: 4 h
Test atmosphere: vapor

methanol:

Acute oral toxicity : LD50 (Rat): 5,600 mg/kg

Acute dermal toxicity : LD50 (Rabbit): 15,800 mg/kg

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Based on available data, the classification criteria are not met.

Respiratory or skin sensitization

Skin sensitization
Based on available data, the classification criteria are not met.

Respiratory sensitization
Based on available data, the classification criteria are not met.

Germ cell mutagenicity
May cause genetic defects.
May cause cancer.

Reproductive toxicity
Suspected of damaging fertility or the unborn child.

STOT-single exposure
May cause drowsiness or dizziness.

STOT-repeated exposure
Causes damage to organs (hematopoietic system) through prolonged or repeated exposure if inhaled.

Aspiration toxicity
May be fatal if swallowed and enters airways.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish	:	Remarks: No data available
Toxicity to daphnia and other aquatic invertebrates	:	Remarks: No data available
Toxicity to algae/aquatic plants	:	Remarks: No data available
Toxicity to microorganisms	:	Remarks: No data available

Persistence and degradability

Product:

Biodegradability	:	Remarks: No data available

Bioaccumulative potential
No data available

Mobility in soil
No data available

Other adverse effects
No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues	:	The product should not be allowed to enter drains, water courses or the soil. Offer surplus and non-recyclable solutions to a licensed disposal company. Waste must be classified and labeled prior to recycling or disposal. Send to a licensed waste management company. Dispose of as hazardous waste in compliance with local and national regulations. Dispose of product residue in accordance with the instructions of the person responsible for waste disposal.
Contaminated packaging	:	Contact local or business unit authorities for guidance on disposal of product.

SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA-DGR

UN/ID No.	:	UN 1203
Proper shipping name	:	Gasoline
Class	:	3
Packing group	:	II
Labels	:	Flammable Liquids
Packing instruction (cargo aircraft)	:	364

IMDG-Code

UN number	:	UN 1203
Proper shipping name	:	GASOLINE
Class	:	3
Packing group	:	II
Labels	:	3
EmS Code	:	F-E, S-E
Marine pollutant	:	yes

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation

TDG

UN number	:	UN 1203
Proper shipping name	:	GASOLINE
Class	:	3
Packing group	:	II
Labels	:	3
ERG Code	:	128
Marine pollutant	:	yes

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

NPRI Components : toluene
benzene
ethanol
methanol
xylene
Naphtha (petroleum), hydrotreated heavy; Low boiling point hydrogen treated naphtha
ethylbenzene
Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified
naphthalene
1,2,4-trimethylbenzene

The ingredients of this product are reported in the following inventories:

DSL : All components of this product are on the Canadian DSL

Canadian lists

No substances are subject to a Significant New Activity Notification.

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
CA AB OEL : Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
CA BC OEL : Canada. British Columbia OEL
CA ON OEL : Ontario Table of Occupational Exposure Limits made under the Occupational Health and Safety Act.
CA QC OEL : Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
ACGIH / TWA : 8-hour, time-weighted average
ACGIH / STEL : Short-term exposure limit
CA AB OEL / STEL : Short term exposure limit
CA AB OEL / TWA : Time weighted average
CA AB OEL / TWA : 8-hour Occupational exposure limit
: 15-minute occupational exposure limit
: 8-hour time weighted average

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

NPRI Components : toluene
benzene
ethanol
methanol
xylene
Naphtha (petroleum), hydrotreated heavy; Low boiling point hydrogen treated naphtha
ethylbenzene
Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified
naphthalene
1,2,4-trimethylbenzene

The ingredients of this product are reported in the following inventories:

DSL : All components of this product are on the Canadian DSL

Canadian lists

No substances are subject to a Significant New Activity Notification.

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
CA AB OEL	:	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
CA BC OEL	:	Canada. British Columbia OEL
CA ON OEL	:	Ontario Table of Occupational Exposure Limits made under the Occupational Health and Safety Act.
CA QC OEL	:	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
ACGIH / TWA	:	8-hour, time-weighted average
ACGIH / STEL	:	Short-term exposure limit
CA AB OEL / STEL	:	Short term exposure limit
CA AB OEL / TWA	:	Time weighted average
CA AB OEL / TWA	:	8-hour Occupational exposure limit
CA AB OEL / STEL	:	15-minute occupational exposure limit
CA BC OEL / TWA	:	8-hour time weighted average
CA BC OEL / STEL	:	short-term exposure limit
CA ON OEL / TWA	:	Time-Weighted Average Limit (TWA)
CA ON OEL / STEL	:	Short-Term Exposure Limit (STEL)
CA QC OEL / TWAEV	:	Time-weighted average exposure value

9.4.2 – Diesel

SAFETY DATA SHEET

DIESEL FUEL

SDS Number: 000003000395

Version: 8.1 Revision Date: 2025/03/13 Print Date: 2025/03/14

SECTION 1. IDENTIFICATION

Product name	:	DIESEL FUEL
Product code	:	12163, 12162, 12161, 12160, 10582, 11803, 11802, 11798, 12016, 11958, 11796, 11771, 11770, 11769, 11768, 11767, 11766, 11612, 11560, 11558, 11555, 11437, 11302, 10979, 10978, 10977, 10976, 10975, 10974, 10973, 10972, 10971, 10970, 10969, 10968, 10966, 10965, 10964, 10786, 10785, 10784, 10783, 10690, 10689, 10687, 10636, 10635, 10626, 10621, 10616, 10610, 10601, 10600, 10598, 10595, 10427, 10041
Other means of identification	:	Seasonal Diesel, #2 Diesel, #1 Diesel, #2 Heating Oil, #1 Heating Oil, OSX, D50, Arctic Diesel, Farm Diesel, Marine Diesel, Low Sulphur Diesel, LSD, Ultra Low Sulphur Diesel, ULSD, Mining Diesel, Naval Distillate, Dyed Diesel, Marked Diesel, Coloured Diesel, Furnace special, Biodiesel blend (BX where X is representative of volume %), Renewable Diesel blend (RX where X is represent ative of volume %), Diesel Low Cloud (LC), Marine Gas Oil, Marine Gas Oil Dyed,Type A Diesel, Type B Diesel.

Manufacturer or supplier's details

Company name of supplier	:	Petro-Canada
Address	:	P.O. Box 2844, 150 - 6th Avenue South-West Calgary, Alberta T2P 3E3 Canada, Telephone: 1-866-786-2671
Emergency telephone	:	CHEMTREC: 1-800-424-9300 (toll free) or +1 703-527-3887; Suncor Energy: +1 403-296-3000

Recommended use of the chemical and restrictions on use

Recommended use	:	Diesel fuels are distillate fuels suitable for use in high and medium speed internal combustion engines of the compression ignition type. Mining diesels, marine diesels, marine diesel oil, marine gas oil and naval distillates may have a higher flash point requirement.

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the Hazardous Products Regulations

Flammable liquids	:	Category 3
Acute toxicity (Inhalation)	:	Category 4

Skin irritation	:	Category 2
Eye irritation	:	Category 2B
Carcinogenicity	:	Category 2
Specific target organ toxicity - repeated exposure	:	Category 2 (Liver, thymus, Bone)
Aspiration hazard	:	Category 1

GHS label elements

Hazard pictograms :

Signal Word	:	Danger
Hazard Statements	:	H226 Flammable liquid and vapor. H304 May be fatal if swallowed and enters airways. H315 + H320 Causes skin and eye irritation. H332 Harmful if inhaled. H351 Suspected of causing cancer. H373 May cause damage to organs (Liver, thymus, Bone) through prolonged or repeated exposure.
Precautionary Statements	:	Prevention: P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 Keep container tightly closed. P240 Ground and bond container and receiving equipment. P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment. P242 Use non-sparking tools. P243 Take action to prevent static discharges. P260 Do not breathe mist or vapors. P264 Wash skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection. Response: P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P304 + P340 + P312 IF INHALED: Remove person to fresh air

and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P331 Do NOT induce vomiting.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	Common Name/Synonym	CAS-No.	Concentration (% w/w)
Fuels, diesel; Gasoil — unspecified	Fuels, diesel; Gasoil — unspecified	68334-30-5	25 - 100
Alkanes, C10-20-branched and linear	Alkanes, C10-20-branched and linear	928771-01-1	<= 75
Fatty acids, C14-18 and C14-18-unsatd., Me esters	Fatty acids, C14-18 and C14-18-unsatd., Me esters	129756-24-7	<= 20
Fuel oil No. 2	Fuel oil No. 2	68476-30-2	<= 0.2

SECTION 4. FIRST AID MEASURES

If inhaled : Move to fresh air.
Artificial respiration and/or oxygen may be necessary.
Seek medical advice.

In case of skin contact	:	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Wash clothing before reuse. Seek medical advice.
In case of eye contact	:	Remove contact lenses. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.
If swallowed	:	Rinse mouth with water. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Seek medical advice.
Most important symptoms and effects, both acute and delayed	:	Harmful if inhaled. Respiratory, skin and eye irritation; nausea; cancer.
An indication of immediate medical attention and special treatment needed, if necessary	:	Treat symptomatically. For specialist advice physicians should contact the Poisons Information Service.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Dry chemical Carbon dioxide (CO2) Water fog. Foam
Unsuitable extinguishing media	:	Do NOT use water jet.
Specific hazards during fire fighting	:	Cool closed containers exposed to fire with water spray.
Hazardous combustion products	:	Carbon oxides (CO, CO2), nitrogen oxides (NOx), sulphur oxides (SOx), smoke and irritating vapours as products of incomplete combustion.
Further information	:	Prevent fire extinguishing water from contaminating surface water or the ground water system.
Special protective equipment for fire-fighters	:	Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	For personal protection see section 8. Ensure adequate ventilation. Evacuate personnel to safe areas.

Material can create slippery conditions.
Mark the contaminated area with signs and prevent access to unauthorized personnel.
Only qualified personnel equipped with suitable protective equipment may intervene.

Environmental precautions : If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up : Prevent further leakage or spillage if safe to do so.
Remove all sources of ignition.
Soak up with inert absorbent material.
Non-sparking tools should be used.
Ensure adequate ventilation.
Contact the proper local authorities.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Use only with adequate ventilation.
In case of insufficient ventilation, wear suitable respiratory equipment.
Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity.
Avoid contact with skin, eyes and clothing.
Do not ingest.
Keep away from heat and sources of ignition.
Keep container closed when not in use.

Conditions for safe storage : Store in original container.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Keep in a dry, cool and well-ventilated place.
Keep in properly labeled containers.
To maintain product quality, do not store in heat or direct sunlight.
Ensure the storage containers are grounded/bonded.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Fuels, diesel; Gasoil — unspecified	68334-30-5	TWA	100 mg/m³ (total hydrocarbons)	CA AB OEL
		TWA (inhal-	100 mg/m³	CA BC OEL

		able fraction and vapour)	(total hydrocarbons)	
		TWAEV (inhalable fraction and vapour)	100 mg/m³ (total hydrocarbons)	CA QC OEL
		TWA (Inhalable fraction and vapor)	100 mg/m³ (total hydrocarbons)	ACGIH
Fuel oil No. 2	68476-30-2	TWA (Inhalable fraction and vapor)	100 mg/m³ (total hydrocarbons)	CA AB OEL
		TWA (Inhalable fraction and vapor)	100 mg/m³ (total hydrocarbons)	CA BC OEL
		TWAEV (Inhalable fraction and vapor)	100 mg/m³ (total hydrocarbons)	CA QC OEL
		TWA (Inhalable fraction and vapor)	100 mg/m³ (total hydrocarbons)	CA ON OEL
		TWA (Inhalable fraction and vapor)	100 mg/m³ (total hydrocarbons)	ACGIH

Engineering measures : Adequate ventilation to ensure that Occupational Exposure Limits are not exceeded.
Use only in well-ventilated areas.
Ensure that eyewash station and safety shower are proximal to the work-station location.

Personal protective equipment

Respiratory protection : Concentration in air determines protection needed.
Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Filter type : organic vapour cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air-purifying respirators is limited. Use a positive-pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstances where air-purifying respirators may not provide adequate protection.

Hand protection

Material : neoprene, nitrile, polyvinyl alcohol (PVA), Viton(R). Consult your PPE provider for breakthrough times and the specific glove that is best for you based on your use patterns. It should be realized that eventually any material regardless of

		their imperviousness, will get permeated by chemicals. Therefore, protective gloves should be regularly checked for wear and tear. At the first signs of hardening and cracks, they should be changed.
Remarks	:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Eye protection	:	Wear safety glasses with side shields or goggles. Wear face-shield if splashing hazard is likely. Chemical splash goggles and a full-face shield should be worn when handling this material.
Skin and body protection	:	Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.
Protective measures	:	Wash contaminated clothing before re-use.
Hygiene measures	:	Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash face, hands and any exposed skin thoroughly after handling.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	:	Bright oily liquid.
Color	:	Clear to yellow (This product may be dyed red for taxation purposes)
Odor	:	Mild petroleum oil like.
pH	:	No data available
Melting point and freezing point	:	No data available
Boiling point, or initial boiling point and boiling range	:	150 - 371 °C
Flash point	:	> 40 °C Method: closed cup Marine Gas Oil/Naval Distillate: 60°C min Mining Diesel: 52°C min All other Diesel fuels: 40°C min
Flammability	:	Flammable liquid
Upper explosion limit / Upper flammability limit	:	6 %(V)

Lower explosion limit / Lower flammability limit	:	0.7 %(V)
Vapor pressure	:	7.5 mmHg (20 °C)
Relative vapor density	:	4.5
Relative density	:	0.8 - 0.88
Density	:	No data available
Solubility(ies)		
Water solubility	:	insoluble
Partition coefficient: n-octanol/water	:	No data available
Autoignition temperature	:	204 °C
Decomposition temperature	:	No data available
Viscosity		
Viscosity, kinematic	:	1.3 - 4.1 cSt (40 °C)
Particle characteristics		
Particle size	:	Not applicable

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	Stable at normal ambient temperature and pressure.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	Hazardous polymerization does not occur.
Conditions to avoid	:	Extremes of temperature and direct sunlight.
Incompatible materials	:	Reactive with oxidising agents and acids.
Hazardous decomposition products	:	May release COx, NOx, SOx, smoke and irritating vapours when heated to decomposition.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Eye contact
Ingestion
Inhalation
Skin contact

Acute toxicity

Harmful if inhaled.

Product:

Acute oral toxicity : Remarks: Based on available data, the classification criteria are not met.

Acute inhalation toxicity : Acute toxicity estimate: 11 mg/L
Exposure time: 4 h
Test atmosphere: vapor
Method: Calculation method

Acute dermal toxicity : Remarks: Based on available data, the classification criteria are not met.

Components:

Fuels, diesel; Gasoil — unspecified:

Acute oral toxicity : LD50 (Rat): 7,500 mg/kg

Acute inhalation toxicity : LC50 (Rat): 4.1 mg/l
Exposure time: 4 h
Test atmosphere: vapor

Acute dermal toxicity : LD50 (Mouse): 24,500 mg/kg

Fuel oil No. 2:

Acute oral toxicity : LD50 (Rat): 12,000 mg/kg

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes eye irritation.

Respiratory or skin sensitization

Skin sensitization

Based on available data, the classification criteria are not met.

Respiratory sensitization

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Suspected of causing cancer.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

May cause damage to organs (Liver, thymus, Bone) through prolonged or repeated exposure.

Aspiration toxicity
May be fatal if swallowed and enters airways.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish	:	Remarks: No data available
Toxicity to daphnia and other aquatic invertebrates	:	Remarks: No data available
Toxicity to algae/aquatic plants	:	Remarks: No data available
Toxicity to microorganisms	:	Remarks: No data available

Persistence and degradability

Product:

Biodegradability	:	Remarks: No data available

Bioaccumulative potential
No data available

Mobility in soil
No data available

Other adverse effects
No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues	:	The product should not be allowed to enter drains, water courses or the soil. Offer surplus and non-recyclable solutions to a licensed disposal company. Waste must be classified and labeled prior to recycling or disposal. Send to a licensed waste management company. Dispose of as hazardous waste in compliance with local and national regulations. Dispose of product residue in accordance with the instructions of the person responsible for waste disposal.
Contaminated packaging	:	Contact local or business unit authorities for guidance on disposal of product.

SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA-DGR

UN/ID No.	:	UN 1202
Proper shipping name	:	Diesel fuel
Class	:	3
Packing group	:	III
Labels	:	Flammable Liquids
Packing instruction (cargo aircraft)	:	366

IMDG-Code

UN number	:	UN 1202
Proper shipping name	:	DIESEL FUEL
Class	:	3
Packing group	:	III
Labels	:	3
EmS Code	:	F-E, S-E
Marine pollutant	:	yes

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation

TDG

UN number	:	UN 1202
Proper shipping name	:	DIESEL FUEL
Class	:	3
Packing group	:	III
Labels	:	3
ERG Code	:	128
Marine pollutant	:	yes

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

NPRI Components	:	Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified naphthalene 1,2,4-trimethylbenzene toluene propan-2-ol methanol

The ingredients of this product are reported in the following inventories:

DSL	:	All components of this product are on the Canadian DSL

Canadian lists

No substances are subject to a Significant New Activity Notification.

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
CA AB OEL	:	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
CA BC OEL	:	Canada. British Columbia OEL
CA ON OEL	:	Ontario Table of Occupational Exposure Limits made under the Occupational Health and Safety Act.
CA QC OEL	:	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
ACGIH / TWA	:	8-hour time weighted average
CA AB OEL / TWA	:	8-hour time weighted average
CA BC OEL / TWA	:	8-hour time weighted average
CA ON OEL / TWA	:	8-hour time weighted average
CA QC OEL / TWAEV	:	Time-weighted average exposure value

9.4.3 – Diesel Exhaust Fluid

BlueDEF Diesel Exhaust Fluid

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

1.1. Product identifier

Product form : Mixture

Product name : BlueDEF Diesel Exhaust Fluid

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Solution for NOx reduction in SCR systems

1.3. Details of the supplier of the safety data sheet

Old World Industries, LLC
4065 Commercial Ave.
Northbrook, IL 60062 - USA
T (847) 559-2000
www.oldworldind.com

1.4. Emergency telephone number

Emergency number : (800) 424-9300; (703) 527 3887 (International)
Chemtrec

2.1. Classification of the substance or mixture

GHS-US classification

Not classified

2.2. Label elements

GHS-US labelling

Signal word (GHS-US) : None

Hazard statements (GHS-US) : None

Precautionary statements (GHS-US) : None

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	% by wt	GHS-US classification
Water	(CAS No) 7732-18-5	67.5	Not classified
urea	(CAS No) 57-13-6	32.5	Not classified

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Allow victim to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

6.1. Personal precautions, protective equipment and emergency procedures

General measures : The EPA has no established reportable quantity for spills for this material, secondary containment is not specified.

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Dilute with plenty of water and mop up. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Direct sunlight, Heat sources. Keep container closed when not in use.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

No additional information available

8.1. Control parameters

No additional information available

8.2. Exposure controls

Personal protective equipment : Avoid all unnecessary exposure. Gloves. Protective goggles.

Hand protection	:	Wear protective gloves.
Eye protection	:	Chemical goggles or safety glasses.
Respiratory protection	:	Wear appropriate mask.
Other information	:	Do not eat, drink or smoke during use.

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Color	:	Colorless;Clear
Odor	:	ammonia odor
Odor threshold	:	No data available
pH	:	9 - 10
Relative evaporation rate (butylacetate=1)	:	< 1
Freezing point	:	-11 °C (12 ºF)
Boiling point	:	> 100 °C (212 ºF)
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	No data available
Vapor pressure	:	Not Applicable
Relative vapor density at 20 °C	:	0.6 H2O, >1
Specific Gravity	:	1.09
Solubility	:	Soluble in water. Water: 100 %
Log Pow	:	No data available
Log Kow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	No data available
Explosive limits	:	No data available

9.2. Other information

No additional information available

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Strong acids. Strong bases. oxidizing agents (peroxides, chromates, dichromates).

10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide. Fume.

11.1. Information on toxicological effects

Acute toxicity	:	Not classified

BlueDEF Diesel Exhaust Fluid

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

urea (57-13-6)

LD50 oral rat	8,471 mg/kg (Rat)
LD50 dermal rat	> 3,200 mg/kg (Rat)
LD50 dermal rabbit	> 21,000 mg/kg (Rabbit)
ATE US (oral)	8,471 mg/kg bodyweight

Skin corrosion/irritation	:	Not classified pH: 9 - 10
Serious eye damage/irritation	:	Not classified pH: 9 - 10
Respiratory or skin sensitisation	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
Specific target organ toxicity (single exposure)	:	Not classified
Specific target organ toxicity (repeated exposure)	:	Not classified
Aspiration hazard	:	Not classified
Potential adverse human health effects and symptoms	:	Based on available data, the classification criteria are not met.

12.1. Toxicity

urea (57-13-6)

LC50 fish 1	> 6,810 mg/l (96 h; Leuciscus idus)
EC50 Daphnia 1	> 10,000 mg/l (48 h; Daphnia magna)
LC50 fish 2	17,500 mg/l (96 h; Poecilia reticulata)
EC50 Daphnia 2	> 10,000 mg/l (24 h; Daphnia magna)
TLM fish 1	17,500 ppm (96 h; Poecilia reticulata)
Threshold limit other aquatic organisms 1	120,000 mg/l (16 h; Bacteria; Toxicity test)
Threshold limit other aquatic organisms 2	> 10,000 mg/l (Pseudomonas putida)
Threshold limit algae 2	> 10,000 mg/l (168 h; Scenedesmus quadricauda)

12.2. Persistence and degradability

urea (57-13-6)

Persistence and degradability	Inherently biodegradable. Hydrolysis in water.
ThOD	0.27 g O_2/g substance

12.3. Bioaccumulative potential

urea (57-13-6)

BCF fish 1	1 (72 h; Brachydanio rerio; Fresh water)
BCF other aquatic organisms 1	11700 (Chlorella sp.)
Log Pow	-2.59 - -1.59
Bioaccumulative potential	Bioaccumulation: not applicable.

12.4. Mobility in soil

12.5. Other adverse effects

Effect on ozone layer	:	
Effect on global warming	:	No known ecological damage caused by this product.
Other information	:	Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. As a non-hazardous liquid waste, it should be solidified with stabilizing agents such as sand, fly ash, or clay absorbent, so that no free liquid remains before disposal to an industrial waste landfill.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT

Not a dangerous good in sense of transport regulations

Other information : No supplementary information available.

ADR

No additional information available

Transport by sea

UN-No. (IMDG) : Not regulated by IMDG (in quantities under 5,000 lbs in any one inner package)

Air transport

UN-No.(IATA) : Not regulated by IATA (in quantities under 5,000 lbs in any one inner package)

SECTION 15: Regulatory information

15.1. US Federal regulations

BlueDEF Diesel Exhaust Fluid	
EPA TSCA Regulatory Flag	This material or all of its components are listed on the Inventory of Exisiting Chemical Substances under the Toxic Substance Control Act (TCSA)
RQ (Reportable quantity, section 304 of EPA's List of Lists)	None. This material is not classified as hazardous under U.S. EPA regulations.
SARA Section 302 Threshold Planning Quantity (TPQ)	No extremely hazardous substances are in this product.
SARA Section 311/312 Hazard Classes	Urea. No hazards resulting from the material as supplied.

urea (57-13-6)	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard

15.2. International regulations

CANADA

BlueDEF Diesel Exhaust Fluid	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

WHMIS Classification

Uncontrolled product according to WHMIS classification criteria

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

15.2.2. National regulations

BlueDEF Diesel Exhaust Fluid
Canadian Enviornmental Protection Act (CEPA) information: All ingredients listed appear on the Domestic Substances List (DSL).

15.3. US State regulations

NFPA health hazard	: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
NFPA fire hazard	: 0 - Materials that will not burn.
NFPA reactivity	: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

HMIS III Rating	
Health	: 1 Slight Hazard - Irritation or minor reversible injury possible
Flammability	: 0 Minimal Hazard
Physical	: 0 Minimal Hazard
Personal Protection	: B

SDS GHS US (GHS HazCom 2012) OWI