Section 1: IDENTIFICATION

Product Name:	XYSOL®
Synonyms:	Not available.
Product Use:	Solvent.
Restrictions on Use:	Not available.
Manufacturer/Supplier:	Enerchem Partnership Manulife Place 707 5th street SW, Suite 1300 Calgary, AB T2P 0Y3
Phone Number:	1-800-380-4580
Emergency Phone:	1-866-975-1011 CANUTEC: 1-888-CAN-UTEC (226-8832), 613-996-6666 or *666 on a cellular phone
Date of Preparation of SDS:	May 26, 2025

Section 2: HAZARD(S) IDENTIFICATION

GHS INFORMATION

Classification:
Flammable Liquids, Category 2
Skin Irritation, Category 2
Germ Cell Mutagenicity, Category 1B
Carcinogenicity, Category 1A
Reproductive Toxicity, Category 2
Specific Target Organ Toxicity (Single Exposure), Category 3 - Narcotic Effects
Specific Target Organ Toxicity (Repeated Exposure), Category 2
Aspiration Hazard, Category 1

LABEL ELEMENTS

Hazard Pictogram(s):

Signal Word: Danger

Hazard Statements:
Highly flammable liquid and vapor.
Causes skin irritation.
May cause genetic defects.
May cause cancer.
Suspected of damaging fertility or the unborn child.
May cause drowsiness or dizziness.
May cause damage to organs through prolonged or repeated exposure.
May be fatal if swallowed and enters airways.

Precautionary Statements

Prevention:
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking.
Keep container tightly closed.
Ground and bond container and receiving equipment.
Use explosion-proof electrical, ventilating, and lighting equipment.
Use non-sparking tools.
Take action to prevent static discharges.
Do not breathe mist, vapours, or spray.
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves, protective clothing and eye protection.

Response: IF SWALLOWED: Immediately call a POISON CENTER or doctor.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF exposed or concerned: Get medical advice/attention.
Call a POISON CENTER or doctor if you feel unwell.
Do NOT induce vomiting.
If skin irritation occurs: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
In case of fire: Use dry chemical, CO2, water spray or regular foam to extinguish.

Storage: Store in a well-ventilated place. Keep container tightly closed.
Keep cool.
Store locked up.

Disposal: Dispose of contents/container in accordance with applicable regional, national and local laws and regulations.

Hazards Not Otherwise Classified: Not applicable.

Ingredients with Unknown Toxicity: 5% of this product mixture consists of ingredient(s) of unknown acute toxicity.

This material is considered hazardous by the OSHA Hazard Communication Standard, (29 CFR 1910.1200). This material is considered hazardous by the Hazardous Products Regulations.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredient(s)	Common name / Synonyms	CAS No.	% wt./wt.
Octane	Not available.	111-65-9	40 - 70
Benzene, methyl-	Toluene	108-88-3	15 - 40
Heptane	Not available.	142-82-5	10 - 30
Nonane	Not available.	111-84-2	10 - 30
Cyclohexane, methyl-	Methylcyclohexane	108-87-2	5 - 10
Hexane	Not available.	110-54-3	3 - 7
Benzene, dimethyl-	Xylene	1330-20-7	1 - 5
Decane	Not available.	124-18-5	1 - 5
Cyclohexane	Not available.	110-82-7	1 - 5
Cyclopentane, methyl-	Methylcyclopentane	96-37-7	1 - 5
Benzene, ethyl-	Ethylbenzene	100-41-4	0.5 - 1.5

Benzene	Not available.	71-43-2	0.1 - 1
Benzene, 1,2,4-trimethyl-	1,2,4-Trimethylbenzene	95-63-6	0.1 - 1

Section 4: FIRST-AID MEASURES

Inhalation:

If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell. If breathing or the heart stops, trained personnel should immediately begin artificial respiration (AR) or cardiopulmonary resuscitation (CPR) respectively. Get medical attention immediately.

Acute and delayed symptoms and effects: May cause drowsiness or dizziness. May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Excessive inhalation may cause headache, dizziness, confusion, loss of appetite and/or loss of consciousness. Inhalation of Toluene may result in peculiar skin sensations (e.g. pins and needles) or numbness. Very high concentrations may cause unconsciousness and death.

Eye Contact:

If in eyes: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center or doctor if you feel unwell.

Acute and delayed symptoms and effects: May cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Skin Contact:

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Acute and delayed symptoms and effects: Causes skin irritation. Signs/symptoms may include localized redness, swelling, and itching.

Ingestion:

If swallowed: Do NOT induce vomiting. Immediately call a poison center or doctor. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Never give anything by mouth to an unconscious person. If breathing or the heart stops, trained personnel should immediately begin artificial respiration (AR) or cardiopulmonary resuscitation (CPR) respectively. Get medical attention immediately.

Acute and delayed symptoms and effects: May be fatal if swallowed and enters airways. May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

General Advice:

In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

Note to Physicians:

Symptoms may not appear immediately.

Section 5: FIRE-FIGHTING MEASURES

FLAMMABILITY AND EXPLOSION INFORMATION

Highly flammable liquid and vapor. Will be easily ignited by heat, sparks or flames. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapor explosion hazard indoors, outdoors or in sewers. Runoff to sewer may create fire or explosion hazard. Containers may explode when heated. Many liquids are lighter than water.

If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

Fire involving Tanks or Car/Trailer Loads: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. ALWAYS stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

Sensitivity to Mechanical Impact: This material is not sensitive to mechanical impact.

Sensitivity to Static Discharge: Take action to prevent static discharges. This material is sensitive to static discharge.

MEANS OF EXTINCTION

Suitable Extinguishing Media: Small Fire: Dry chemical, CO_2, water spray or regular foam.

Large Fire: Water spray, fog or regular foam. Move containers from fire area if you can do it without risk.

Unsuitable Extinguishing Media: Do not use straight streams.

Products of Combustion: Oxides of carbon. Aldehydes.

Protection of Firefighters: Inhalation or contact with material may irritate or burn skin and eyes. Fire may produce irritating, corrosive and/or toxic gases. Vapors may cause dizziness or suffocation. Runoff from fire control or dilution water may cause pollution. Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.

Section 6: ACCIDENTAL RELEASE MEASURES

Emergency Procedures: As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). All equipment used when handling the product must be grounded.

Personal Precautions: Do not touch or walk through spilled material. Use personal protection recommended in Section 8.

Environmental Precautions:	Prevent entry into waterways, sewers, basements or confined areas.
Methods for Containment:	Stop leak if you can do it without risk. A vapor suppressing foam may be used to reduce vapors.
Methods for Clean-Up:	Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean non-sparking tools to collect absorbed material.
Other Information:	See Section 13 for disposal considerations.

Section 7: HANDLING AND STORAGE

Handling:
Do not swallow. Do not breathe mist, vapours, or spray. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use non-sparking tools. Take action to prevent static discharges. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. See Section 8 for information on Personal Protective Equipment.

Storage:
Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up. Store away from incompatible materials. See Section 10 for information on Incompatible Materials. Keep out of the reach of children.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines
Component

Octane [CAS No. 111-65-9]

ACGIH: 300 ppm (TWA); (1999)
OSHA: 500 ppm (TWA), 2350 mg/m³ (TWA);
300 ppm (TWA); 375 ppm (STEL) [Vacated];

Toluene [CAS No. 108-88-3]

ACGIH: 20 ppm (TWA); OTO; A4; BEI (2020)
OSHA: 200 ppm (TWA); 300 ppm (C); 500 ppm (Peak) (Maximum duration: 10 minutes.)
100 ppm (TWA); 150 ppm (STEL) [Vacated];

Heptane [CAS No. 142-82-5]

ACGIH: 200 ppm (TWA); 400 ppm (STEL); OTO (2024)
OSHA: 500 ppm (TWA), 2000 mg/m³ (TWA);
400 ppm (TWA); 500 ppm (STEL) [Vacated];

Nonane [CAS No. 111-84-2]

ACGIH: 200 ppm (TWA); (2011)
OSHA: 200 ppm (TWA) [Vacated];

Methylcyclohexane [CAS No. 108-87-2]

ACGIH: 400 ppm (TWA); (1987)
OSHA: 500 ppm (TWA), 2000 mg/m³ (TWA);
400 ppm (TWA) [Vacated];

Hexane [CAS No. 110-54-3]

ACGIH: 50 ppm (TWA); Skin, BEI (1998)
OSHA: 500 ppm (TWA), 1800 mg/m³ (TWA); Skin.
50 ppm (TWA) [Vacated];

Xylene [CAS No. 1330-20-7]

ACGIH: 20 ppm (TWA); OTO; A4; BEI (2021)
OSHA: 100 ppm (TWA), 435 mg/m³ (TWA);
150 ppm (STEL) [Vacated];

Decane [CAS No. 124-18-5]

ACGIH: No TLV established.
OSHA: No PEL established.

Cyclohexane [CAS No. 110-82-7]

ACGIH: 100 ppm (TWA); (2020)
OSHA: 300 ppm (TWA), 1050 mg/m³ (TWA);

Methylcyclopentane [CAS No. 96-37-7]

ACGIH: No TLV established.
OSHA: No PEL established.

Ethylbenzene [CAS No. 100-41-4]

ACGIH: 20 ppm (TWA); OTO; A3; BEI (2021)
OSHA: 100 ppm (TWA), 435 mg/m³ (TWA);
125 ppm (STEL) [Vacated];

Benzene [CAS No. 71-43-2]

ACGIH: 0.02 ppm (TWA); Skin; A1; BEI (2023)
OSHA: 1 ppm (TWA); 5 ppm (STEL);

1,2,4-Trimethylbenzene [CAS No. 95-63-6]

ACGIH: 10 ppm (TWA); A4 (2021)
OSHA: No PEL established.

PEL: Permissible Exposure Limit
TLV: Threshold Limit Value
TWA: Time-Weighted Average
STEL: Short-Term Exposure Limit
C: Ceiling

Engineering Controls: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapour, gas, etc.) below recommended exposure limits. Use explosion-proof electrical, ventilating, and lighting equipment.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Eye/Face Protection:	Wear chemical safety goggles. Use equipment for eye protection that meets the standards referenced by CSA Standard CAN/CSA-Z94.3:20 and OSHA regulations in 29 CFR 1910.133 for Personal Protective Equipment.
Hand Protection:	Wear protective gloves. Consult manufacturer specifications for further information.
Skin and Body Protection:	Wear protective clothing. Flame resistant clothing that meets the NFPA 2112 and CAN/CGSB 155.20-2017 standards is recommended in areas where material is stored or handled.
Respiratory Protection:	If engineering controls and ventilation are not sufficient to control exposure to below the allowable limits then an appropriate NIOSH/MSHA approved air-purifying respirator that meets the requirements of CSA Standard CAN/CSA-Z94.4-18, with organic vapor cartridge, or self-contained breathing apparatus must be used. Supplied air breathing apparatus must be used when oxygen concentrations are low or if airborne concentrations exceed the limits of the air-purifying respirators.
General Hygiene Considerations:	Handle according to established industrial hygiene and safety practices. Consult a competent industrial hygienist to determine hazard potential and/or the PPE manufacturers to ensure adequate protection.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear colourless liquid.
Colour:	Colourless.
Odour:	Petroleum.
Odour Threshold:	Not available.
Physical State:	Liquid.
pH:	Not available.
Melting Point / Freezing Point:	Not available.
Initial Boiling Point:	37.2 °C (99 °F) (ASTM D2887)
Boiling Range:	37.2 to 175.6 °C (99 to 348.1 °F) (ASTM D2887)
Flash Point:	21 °C (69.8 °F) (ASTM D93)
Evaporation Rate:	Not available.
Flammability:	Not applicable.

Lower Flammability Limit:	Not available.
Upper Flammability Limit:	Not available.
Vapor Pressure:	Not available.
Relative Relative Vapor Density:	Not available.
Relative Density:	0.750 to 0.775 (Water = 1) at 15 °C (59 °F) (ASTM D5002)
Solubility:	Insoluble in water.
Partition Coefficient: n-Octanol/Water:	Not available.
Auto-ignition Temperature:	Not available.
Decomposition Temperature:	Not available.
Kinematic Kinematic Viscosity:	0.6933 cSt at 15 °C (59 °F) (ASTM D7042)
Percent Volatile, wt. %:	Not available.
VOC content, wt. %:	Not available.
Density:	0.750 to 0.775 kg/m³ at 15 °C (59 °F) (ASTM D5002)
Coefficient of Water/Oil Distribution:	Not available.
Particle Characteristics:	Not available.

Section 10: STABILITY AND REACTIVITY

Reactivity:	Contact with incompatible materials. Sources of ignition. Exposure to heat.
Chemical Stability:	Stable under normal storage conditions.
Possibility of Hazardous Reactions:	None known.
Conditions to Avoid:	Contact with incompatible materials. Sources of ignition. Exposure to heat.
Incompatible Materials:	Strong acids. Strong oxidizers. Oxides of nitrogen. Chlorine.

Hazardous Decomposition Products: Not available.

Section 11: TOXICOLOGICAL INFORMATION

EFFECTS OF ACUTE EXPOSURE

Product Toxicity

Oral:	Not available.
Dermal:	Not available.
Inhalation:	Not available.

Component Toxicity

Component	CAS No.	LD_{50} oral	LD_{50} dermal	LC_{50}
Octane	111-65-9	Not available.	Not available.	118000 mg/m³ (rat); 4H
Toluene	108-88-3	2600 mg/kg (rat)	14.1 mL/kg (rabbit)	49000 mg/m³ (rat); 4H
Heptane	142-82-5	Not available.	Not available.	103000 mg/m³ (rat); 4H
Nonane	111-84-2	Not available.	Not available.	3200 ppm (rat); 4H
Methylcyclohexane	108-87-2	> 3200 mg/kg (rat)	> 86700 mg/kg (rabbit)	15227 ppm (rabbit); 1H
Hexane	110-54-3	25000 mg/kg (rat)	Not available.	48000 ppm (rat); 4H
Xylene	1330-20-7	4300 mg/kg (rat)	> 1700 mg/kg (rabbit)	5000 ppm (rat); 4H
Decane	124-18-5	Not available.	Not available.	> 1369 ppm (rat); 8H
Cyclohexane	110-82-7	813 mg/kg (mouse)	180000 mg/kg (rabbit)	Not available.
Methylcyclopentane	96-37-7	Not available.	Not available.	Not available.
Ethylbenzene	100-41-4	3500 mg/kg (rat)	17800 µL/kg (rabbit)	Not available.
Benzene	71-43-2	930 mg/kg (rat)	> 9400 µL/kg (rabbit)	10000 ppm (rat); 7H
1,2,4-Trimethylbenzene	95-63-6	5000 mg/kg (rat)	Not available.	18000 mg/m³ (rat); 4H

Likely Routes of Exposure: Eye contact. Skin contact. Inhalation. Ingestion. Skin absorption.

Target Organs: Skin. Eyes. Gastrointestinal tract. Respiratory system. Blood. Bone marrow. Liver. Kidneys. Reproductive system. Central nervous system. Peripheral nervous system.

Symptoms (including delayed and immediate effects)

Inhalation: May cause drowsiness or dizziness. May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Excessive inhalation may cause headache, dizziness, confusion, loss of appetite and/or loss of consciousness. Inhalation of Toluene may result in peculiar skin sensations (e.g. pins and needles) or numbness. Very high concentrations may cause unconsciousness and death.

Eye: May cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Skin: Causes skin irritation. Signs/symptoms may include localized redness, swelling, and itching.

Ingestion: May be fatal if swallowed and enters airways. May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

Skin Sensitization: Not available.

Respiratory Sensitization: Not available.

Medical Conditions Aggravated By Exposure: Not available.

EFFECTS OF CHRONIC EXPOSURE (from short and long-term exposure)

Target Organs: Skin. Eyes. Gastrointestinal tract. Respiratory system. Cardiovascular system. Blood. Bone marrow. Liver. Kidneys. Reproductive system. Central nervous system. Peripheral nervous system.

Chronic Effects: Hazardous by OSHA/WHMIS criteria. May cause chronic effects. Prolonged or repeated contact may dry skin and cause irritation. High vapour concentrations, generally greater than 10% by volume, may sensitize the heart and lead to lethal cardiac arrhythmias. Reports of chronic poisoning with Benzene, Toluene, Ethylbenzene or Xylene describe anemia, decreased blood cell count and bone marrow hypoplasia. Liver and kidney damage may occur. Repeated exposure of the eyes to high concentrations of Xylenes vapour may cause reversible eye damage. Chronic inhalation exposure to xylene causes mid-frequency hearing loss in laboratory animals. Xylene reacts synergistically with n-hexane to enhance hearing loss. Immunodepressive effects have also been reported for Benzene. Prolonged or repeated skin contact with Nonane may cause liver and kidney damage and cause blood effects. Chronic inhalation of n-Hexane may cause peripheral nerve disorders and central nervous system effects. This material contains Cyclohexane which is known to cause liver and kidney damage. 1,2,4-Trimethylbenzene may cause CNS changes, asthmatic bronchitis, and changes in the blood such as anemia or thrombocytopenia (i.e. low thrombocyte count that may affect the blood's ability to clot).

Carcinogenicity: May cause cancer. Chronic exposure to benzene has been associated with an increased incidence of leukemia and multiple myeloma (tumour composed of cells of the type normally found in the bone marrow).

Component Carcinogenicity

Component	ACGIH	IARC	NTP	OSHA	Prop 65
Toluene	A4	Group 3	Not listed.	Not listed.	Not listed.
Xylene	A4	Group 3	Not listed.	Not listed.	Not listed.
Ethylbenzene	A3	Group 2B	Not listed.	OSHA Carcinogen.	Listed.
Benzene	A1	Group 1	List 1	OSHA Carcinogen.	Listed.

Mutagenicity: May cause genetic defects.

Reproductive Effects: Suspected of damaging fertility or the unborn child. Studies exist which report a link to crude oil and reproductive effects including menstrual disorders.

Developmental Effects

Teratogenicity: Not available.

Embryotoxicity: Possible risk of harm to the unborn child. Exposure to Toluene may affect the developing fetus. Benzene and Xylene have caused adverse fetal effects in laboratory animals.

Toxicologically Synergistic Materials: Xylene reacts synergistically with n-hexane to enhance hearing loss.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: Not available.

Persistence / Degradability: Not available.

Bioaccumulation / Accumulation: Not available.

Mobility in Environment: Not available.

Other Adverse Effects: Not available.

Section 13: DISPOSAL CONSIDERATIONS

Disposal Instructions: Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

Section 14: TRANSPORT INFORMATION

U.S. Department of Transportation (DOT)

Proper Shipping Name: UN1268, PETROLEUM DISTILLATES, N.O.S., 3, PG II

Class: 3

UN Number: UN1268

Packing Group: II

Placard(s):

Canada Transportation of Dangerous Goods (TDG)

Proper Shipping Name: UN1268, PETROLEUM DISTILLATES, N.O.S., 3, PG II

Class: 3

UN Number: UN1268

Packing Group: II

Placard(s):

Section 15: REGULATORY INFORMATION

Chemical Inventories

US (TSCA)
The components of this product are in compliance with the chemical notification requirements of TSCA.

Canada (DSL)
The components of this product are in compliance with the chemical notification requirements of the NSN Regulations under CEPA, 1999.

Federal Regulations

United States
This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Section 16: OTHER INFORMATION

Disclaimer:
The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for their own particular use.

Date of Preparation of SDS:	May 26, 2025
Version:	1.0
GHS SDS Prepared by:	**Aegis Regulatory Inc.**
	Phone: 1 (519) 488-0351
	www.aegisreg.com