

**Section 1: IDENTIFICATION**

Product Name: LSRD

Synonyms: Gibson Clear – L, Gibson CP 200, Gibson Lite.

Product Use: Multiple uses including but not limited to Asphalt Solvent, Heating Oil, Drilling Fluid (USA) and Hydrocarbon Fracture Stimulation.

Restrictions on Use: Not suitable for use as a “diesel fuel” in Canada or the US.

Manufacturer/Supplier: Gibson Energy ULC
1700, 440 – 2nd Ave. SW
Calgary, Alberta
T2P 5E9

Phone Number: (403) 206-4000

Emergency Phone: Canutec (613) 996-6666 or Cellular *666

Date of Preparation of SDS: August 12, 2020

Section 2: HAZARD(S) IDENTIFICATION**GHS INFORMATION**

Classification: Flammable Liquids, Category 4
Skin Irritation, Category 2
Carcinogenicity, Category 2
Reproductive Toxicity, Category 2
Aspiration Hazard, Category 1

LABEL ELEMENTS**Hazard****Pictogram(s):****Signal Word:** Danger**Hazard****Statements:**

Combustible liquid.
Causes skin irritation.
Suspected of causing cancer.
Suspected of damaging fertility or the unborn child.
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.
Wash hands thoroughly after handling.
Wear protective gloves, protective clothing and eye protection.

Response: IF SWALLOWED: Immediately call a POISON CENTER or doctor.
IF ON SKIN: Wash with plenty of water.
IF exposed or concerned: Get medical attention.
Do NOT induce vomiting.



If skin irritation occurs: Get medical 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 cool.
Store locked up.

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

Hazards Not Otherwise Classified: Not applicable.

Ingredients with Unknown Toxicity: None.

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.
Distillates (petroleum), straight-run middle	Not available.	64741-44-2	100
Benzene, ethyl-	Ethylbenzene	100-41-4	0.1 - 1
Benzene, dimethyl-	Xylene	1330-20-7	0.1 - 1

Section 4: FIRST-AID MEASURES

Inhalation: If inhaled: 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 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.

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

Combustible liquid. Will be ignited by heat, sparks or flames. Vapors may form explosive mixtures with air. Containers may explode when heated. Many liquids are lighter than water.

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

Sensitivity to Static Discharge: Take precautionary measures against static discharge. This material is sensitive to static discharge.

MEANS OF EXTINCTION

Suitable Extinguishing Media: Small Fire: Dry chemical, CO2, 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.

Protection of Firefighters: 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. 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. 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. See Section 8 for information on Personal Protective Equipment.
- Storage:**
Store in a well-ventilated place. 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

- Distillates (petroleum), straight-run middle [CAS No. 64741-44-2]
ACGIH: 200 mg/m³ (TWA); Skin; A3; Application restricted to conditions in which there are negligible aerosol exposures (2003); For Kerosene
OSHA: No PEL established.
- Ethylbenzene [CAS No. 100-41-4]
ACGIH: 20 ppm (TWA); A3; BEI (2010)
OSHA: 100 ppm (TWA), 435 mg/m³ (TWA); 125 ppm (STEL) [Vacated];
- Xylene [CAS No. 1330-20-7]
ACGIH: 100 ppm (TWA); 150 ppm (STEL); A4; BEI (1992)
OSHA: 100 ppm (TWA), 435 mg/m³ (TWA); 150 ppm (STEL) [Vacated];

PEL: Permissible Exposure Limit
TWA: Time-Weighted Average
STEL: Short-Term Exposure Limit

- 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 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 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, 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:	Transparent oily liquid.
Colour:	Colourless.
Odour:	Hydrocarbon.
Odour Threshold:	Not available.
Physical State:	Liquid.
pH:	Not available.
Melting Point / Freezing Point:	Not available.
Initial Boiling Point:	135.5 °C (275.9 °F)
Boiling Range:	135.5 to 303.5 °C (275.9 to 578.3 °F) (ASTM D-2887)
Flash Point:	66 °C (150.8 °F) (ASTM D-93)
Evaporation Rate:	Not available.



SAFETY DATA SHEET

Flammability (solid, gas):	Not applicable.
Lower Flammability Limit:	Not available.
Upper Flammability Limit:	Not available.
Vapor Pressure:	3.4 kPa at 37.8 °C (100 °F) (ASTM D-5191)
Vapor Density:	Not available.
Relative Density:	Not available.
Solubilities:	Insoluble in water.
Partition Coefficient: n-Octanol/Water:	Not available.
Auto-ignition Temperature:	> 225 °C (437 °F)
Decomposition Temperature:	Not available.
Viscosity:	Maximum 2.0 cSt at 40 °C (104 °F) (ASTM D-7042)
Percent Volatile, wt. %:	Not available.
VOC content, wt. %:	Not available.
Density:	815 to 820 kg/m ³ at 15°C (59 °F)
API Gravity:	42 to 41 at 15.6 °C (60 °F)
Coefficient of Water/Oil Distribution:	Not available.
Pour Point:	< -50 °C (-58 °F)

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 oxidizers.
Hazardous Decomposition Products:	Not available.

Section 11: TOXICOLOGICAL INFORMATION

EFFECTS OF ACUTE EXPOSURE

Product Toxicity

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



SAFETY DATA SHEET

Date of Preparation: August 12, 2020

Component Toxicity

Component	CAS No.	LD ₅₀ oral	LD ₅₀ dermal	LC ₅₀
Distillates (petroleum), straight-run middle	64741-44-2	> 5000 mg/kg (rat)	> 2000 mg/kg (rabbit)	1700 mg/m ³ (rat); 4H
Ethylbenzene	100-41-4	3500 mg/kg (rat)	17800 µl/kg (rabbit)	Not available.
Xylene	1330-20-7	4300 mg/kg (rat)	> 1700 mg/kg (rabbit)	5000 ppm (rat); 4H

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

Target Organs: Skin. Eyes. Gastrointestinal tract. Respiratory system. Nervous system.

Symptoms (including delayed and immediate effects)

Inhalation: 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.

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. Blood. Liver. Kidneys. Nervous system.

Chronic Effects: Prolonged or repeated contact may dry skin and cause irritation. Ethylbenzene and Xylene can damage bone marrow thus causing anemia, and can also damage the liver and kidneys, as well as the central and peripheral nervous systems. 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.

Carcinogenicity: May cause cancer.



Component Carcinogenicity

Component	ACGIH	IARC	NTP	OSHA	Prop 65
Distillates (petroleum), straight-run middle	A3	Not listed.	Not listed.	Not listed.	Not listed.
Ethylbenzene	A3	Group 2B	Not listed.	OSHA Carcinogen.	Listed.
Xylene	A4	Group 3	Not listed.	Not listed.	Not listed.

Mutagenicity: Not available.

Reproductive Effects: Suspected of damaging fertility or the unborn child.

Developmental Effects

Teratogenicity: Not available.

Embryotoxicity: Possible risk of harm to the unborn child. Exposure to xylene has produced fetotoxic effects in animal studies.

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: NA1993, COMBUSTIBLE LIQUIDS, N.O.S. (Petroleum distillates), Combustible liquid, PG III

Class: Combustible liquid

UN Number: NA1993

Packing Group: III

Label Code:





SAFETY DATA SHEET

Date of Preparation: August 12, 2020

Canada Transportation of Dangerous Goods (TDG)

Proper Shipping Name: Not regulated.
Class: Not applicable.
UN Number: Not applicable.
Packing Group: Not applicable.
Label Code: Not applicable.

ICAO/IATA

Proper Shipping Name: Not regulated.
Class: Not applicable.
UN Number: Not applicable.
Packing Group: Not applicable.
Label Code: Not applicable.

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.

SARA Title III

Table with 7 columns: Component, Section 302 (EHS) TPQ (lbs.), Section 304 EHS RQ (lbs.), CERCLA RQ (lbs.), Section 313, RCRA CODE, CAA 112(r) TQ (lbs.). Rows include Ethylbenzene and Xylene.

State Regulations

Massachusetts

US Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

Table with 3 columns: Component, CAS No., RTK List. Rows include Distillates (petroleum), straight-run middle; Ethylbenzene; Xylene; Benzene.



Note: E = Extraordinarily Hazardous Substance

New Jersey

US New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)

Component	CAS No.	RTK List
Distillates (petroleum), straight-run middle	64741-44-2	Listed.
Ethylbenzene	100-41-4	SHHS
Xylene	1330-20-7	SHHS

Note: SHHS = Special Health Hazard Substance

Pennsylvania

US Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

Component	CAS No.	RTK List
Distillates (petroleum), straight-run middle	64741-44-2	Listed.
Ethylbenzene	100-41-4	E
Xylene	1330-20-7	E

Note: E = Environmental Hazard

California

California Prop 65:



WARNING This product can expose you to chemicals including Toluene, Benzene, Ethylbenzene and Hexane, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

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 his own particular use.

Date of Preparation of SDS: August 12, 2020

Version: 2.0

GHS SDS Prepared by: Deerfoot Consulting Inc.

Phone: (403) 720-3700