



Safety Data Sheet

POWER STEERING FLUID



1. Identification

Product identifier	POWER STEERING FLUID
Product code	2302
Other means of identification	Power Steering fluid of viscosity grade ISO 32.
Recommended use of the chemical and restrictions on use	Lubricating oil
Manufacturer	PRODUITS LUBRI-DELTA INC. 2215, Industriel Laval, Québec H7S 1P8 Tel. 800.465.5954 450.629.4555 Fax 514.383.4241 http://www.lubri-delta.com/accueil.asp http://www.lubri-delta.com/eng/
Emergency phone number	Canutec: 613-996-6666 Quebec Antipoison Center: 1-800-463-5060

2. Hazard identification

Summary	Avoid contact with eyes. Avoid prolonged contact with skin. Avoid prolonged or repeated inhalation of mist or vapor. Do not ingest. If ingested consult physician immediately and show this Safety Data Sheet. Wear eye protection, gloves and other protective clothing that are adapted to the task being performed and the risks involved.

Non-WHMIS controlled

3. Composition/information on ingredients

Common name	CAS	Weight % content
Distillates (petroleum), solvent-refined heavy paraffinic	64741-88-4	10 - 90 %
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	10 - 90 %
Residual oils (petroleum), solvent-refined	64742-01-4	10 - 90 %
Note: The product is made at 99.9% of a mixture of these highly refined ingredients, containing no polycyclic aromatic hydrocarbon (PAH).		

4. First-aid measures

Inhalation	Move person to fresh air. If not breathing, give artificial respiration. If a problem develops or persists, seek medical attention.
Skin contact	Wash skin with warm water and mild soap. Remove contaminated clothing and wash before reuse. If a problem develops or persists, seek medical attention. Discard contaminated leather articles such as shoes and belt.
Eye contact	Flush with water for at least 15 minutes. Remove contact lenses. Hold eyelids apart to rinse properly. If a problem develops or persists, seek medical attention.
Ingestion	DO NOT INDUCE VOMITING! If victim is conscious wash out mouth with water. Never give anything by mouth if victim is unconscious or convulsing. If spontaneous vomiting occurs, keep head below hip level to prevent aspiration into the lungs. Seek medical attention or contact a Poison Centre immediately.
Other	No information available.
Symptoms	No information available.
Notes to the physician	Aspiration hazard for the lungs (ingestion/vomiting). Can enter lungs and cause damage. If gastric lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. Fire-fighting measures

Suitable extinguishing media	dried powder, carbon dioxide (CO ₂), chemical foam. Do not use direct water jet.
Specific hazards arising from the chemical	Non-Flammable. May be combustible at high temperature.
Special protective equipment	Firefighters must wear self contained breathing apparatus with full face mask. Firefighting suit may not be efficient against chemicals.
Special protective actions for fire-fighters	Use water spray to cool fire-exposed containers. Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply.

6. Accidental release measures



Personal precautions, protective equipment and emergency procedures	Do not touch spilled material. Make sure to wear personal protective equipment mentioned in this Safety Data Sheet.
Environmental precautions	Prevent entry in sewer and other enclosed area. For a large spill, consult the Department of Environment or the relevant authorities.
Methods and materials for containment and cleaning up	Ventilate the area well. Remove sources of ignition. Absorb with inert material (soil, sand, vermiculite) and place in an appropriate waste disposal clearly identified. Dispose via a licensed waste disposal contractor.

7. Handling and storage

Precautions for safe handling	Use in well ventilated area. Avoid contact with eyes. Avoid prolonged contact with skin. Avoid prolonged or repeated breathing of vapour or mists. Make sure to wear personal protective equipment mentioned in this Safety Data Sheet. Turn off all pilot lights, flames, stoves, heaters, electric motors,
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	welding equipment and other sources of ignition. Avoid contamination with another chemical product. Keep containers tightly closed when not in use. Do not eat, do not drink and do not smoke during use. After use, wash hands with soap and water. Wash contaminated clothing before reuse.
Conditions for safe storage, including any incompatibilities	Store tightly close and in properly labelled container. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Store away from incompatible materials (see section 10). Keep away from direct sunlight and heat.
Storage temperature	5 to 45°C (41 to 113°F)

8. Exposure controls/personal protection

Immediately Dangerous to Life or Health	No IDLH value is reported.				
Mixture	TWA (8h)	Mist	5 mg/m ³	ACGIH	
Distillates (petroleum), hydrotreated heavy paraffinic	TWA (8h)	Mist	5 mg/m ³	ACGIH , RSST	
Distillates (petroleum), solvent-refined heavy paraffinic	TWA (8h)	Mist	5 mg/m ³	ACGIH , RSST	
Residual oils (petroleum), solvent-refined	TWA (8h)	Mist	5 mg/m ³	ACGIH , RSST	
Appropriate engineering controls	Provide sufficient mechanical ventilation (general and/or local exhaust) to keep the airborne concentrations of vapours, mists, aerosols or dust below their respective occupational exposure limits.				
Individual protection measures					
Eye	Wear safety glasses. If there is a risk of contact with eyes, wear chemical splash goggles. If respiratory hazards exist, a full face respirator may be required instead.				
Hands	If any risk of skin contact wear nitrile gloves. Disposable nitrile gloves can also be used, but discard after single use. Before using, user should confirm impermeability. Discard gloves with tears, pinholes, or signs of wear. Gloves must only be worn on clean hands. Wash gloves with water before removing them. After using gloves, hands should be washed and dried thoroughly.				
Skin	Personal protective equipment for the body should be selected based on the task being performed and the risks involved. Wear normal work clothing covering arms and legs as required by employer code. To clean up a spill, if necessary, wear a synthetic polyethylene coveralls such as the Tychem (DuPont) or equivalent coveralls manufactured to provide protection against liquid chemical.				
Respiratory	A respirator is not required in a well-ventilated area. Where the conditions in the workplace require a respirator, it is necessary to follow a respiratory protection program. Moreover, respiratory protection equipment (RPE) must be selected, fitted, maintained and inspected in accordance with regulations and standard 29 CFR 1910.134 (OSHA), ANSI Z88.2 or CSA Z 94.11 (Canada) and approved by NIOSH/MSHA. In case of insufficient ventilation or in confined or enclosed space and for an assigned protection factor (APF) up to 10 times the exposure limit, wear a half mask respirator with organic vapour cartridges fitted with P100 filters. For an APF until maximum 100 times of exposure limit, wear a full face respirator mask with organic vapour cartridges and P100 filters.				
Feet	Wear rubber boots to clean up a spill.				
<div><div></div><div></div></div> <div>Safety glasses Nitrile gloves</div>					

9. Physical and chemical properties

Physical state	Liquid	Flammability	Non-flammable.
Colour	Brownish	Flammability limits	N/Av.
Odour	Characteristic	Flash point	

			>190°C (374°F) Tagliabue closed cup
Odour threshold	N/Av.	Auto-ignition temperature	>350°C (662°F)
pH	N/Av.	Sensibility to electrostatic charges	N.Av.
Melting point	-40°C (-40°F)	Sensibility to sparks and/or friction	N.Av.
Freezing point	-40°C (-40°F)	Vapour density	>1 (Air = 1)
Boiling point	N/Av.	Relative density	0.86 kg/L (Water = 1)
Solubility	Insoluble in water.	Partition coefficient n-octanol/water	5 to 24
Evaporation rate	< Butyl Acetate	Decomposition temperature	N/Av.
Vapour pressure	<0.13kPa (1 mm Hg) @ 25°C (77°F)	Viscosity	29 to 35 cSt @ 40°C (104°F)
Percent Volatile	N/Av.	Molecular mass	N/Av.
N/Av.: Not Available N/Av.: Not Applicable Und.: Undetermined N/E: Not Established			

10. Stability and reactivity

Reactivity	No known dangerous reactions.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions (including polymerizations)	Hazardous polymerization will not occur.
Conditions to avoid	Avoid contact with incompatible materials. Avoid high temperatures and intense heat.
Incompatible materials	Strong oxidizing agents (such as nitric acid, perchloric acid, peroxides, chlorates and perchlorates).
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information


Numerical measures of toxicity	Distillates (petroleum), hydrotreated heavy paraffinic	Ingestion >15000 mg/kg Rat LD50
		Skin >5000 mg/kg Rabbit LD50
	Distillates (petroleum), solvent-refined heavy paraffinic	Ingestion >5000 mg/kg Rat LD50
		Inhalation 2.18 mg/l/4h Rat LC50
		Skin >5000 mg/kg Rabbit LD50
	Residual oils (petroleum), solvent-refined	Ingestion >5000 mg/kg Rat LD50
		Skin >5000 mg/kg Rabbit LD50
Likely routes of exposure	Skin, eyes, inhalation, ingestion.	

Delayed, immediate and chronic effects	Eye contact	May cause slight irritation to eyes. Eye Irritation, Rabbit: tests performed with each ingredient of this mixture gave not irritating to slightly irritating results.
	Skin contact	Prolonged and repeated contact may cause skin irritation and/or dermatitis. Skin Irritation, Rabbit : tests performed with each ingredient of this mixture gave not irritating to slightly irritating results.
	Inhalation	Generally speaking, working cleanly and following basic precautionary measures will greatly minimize the potential for harmful exposure to this product under normal use conditions. Exposure to high concentrations of vapor from heated product may cause headache, dizziness, respiratory tract irritation.
	Ingestion	Low degree of acute toxicity. Aspiration hazard for the lungs (ingestion/vomiting). Can enter lungs and cause damage. However, the risk of aspiration hazard into the lungs can be minimal due to the high viscosity of the material.
	Respiratory or skin sensitization	This product is not a skin or respiratory sensitizer. Skin sensitisation, Guinea pig: tests performed with each ingredient of this mixture gave negative results.
	IARC/NTP Classification	No ingredients listed.
	Carcinogenicity	The following information has been reported for the aliphatic petroleum distillates with regards to carcinogenicity (IARC, 1987): Untreated and mildly-treated oils are carcinogenic to humans (Group 1), and highly-refined oils are not classified as carcinogenic to humans.
	Mutagenicity	This material is not known to cause mutagenic effect.
	Reproductive toxicity	This material is not known to cause effects on reproduction.
	Specific target organ toxicity - single exposure	No target organ is listed.
	Specific target organ toxicity - repeated exposure	No target organ is listed.
Interactive effects	No information available.	
Other information	No information available.	

12. Ecological information

Ecological toxicity	Fish, various	LC50 SES / NES
	Aquatic Invertebrates, various	EC50 SES / NES
	Aquatic Plant - various	EC50 SES / NES
Persistence	Moderately persistent in the environment.	
Degradability	Biodegradable (<30% in 28 days). The product is a heavy hydrocarbon mixture in which some ingredients are not readily biodegradable (OECD 301B, IUCLID).	
Bioaccumulative potential	Log Kow values ranging from about 5 to 25. Bioconcentration Factor (BCF) between 0.9 and 750000 for the mixture. These values indicate a high degree of bioaccumulation.	
Mobility in soil	Insoluble in water. This mixture is likely to have high Koc values (>5000), indicating a high degree of sorption to the organic matter in soils. This value suggests that some components will display low mobility and some will be essentially immobile in soil. This product pollutes water and contaminates the soil.	
Other adverse effects	Due to the very low solubility of these chemicals in water, the acute toxicity to fish and aquatic invertebrates, and the toxicity to aquatic plants are considered to be no effects at saturation (NES). The chronic toxicity to aquatic invertebrates is also considered to be no effects at saturation (NES).	

13. Disposal considerations



Container 	Important! Prevent waste generation. Use in full. DO NOT dispose residue in sewers, streams or drinking water supply. Unused oils and waste oils residue can be reprocessed (recycled) where there is a recovery program. Dispose via a licensed waste disposal contractor. Observe all federal, state/provincial and municipal regulations. If necessary consult the Department of Environment or the relevant authorities.
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14. Transport information

UN Number	UN
UN Proper Shipping Name	Not regulated by TDG (Canada) and 49 CFR DOT (USA).
Environmental hazards	This material is not listed as a marine pollutant.
Special precautions for user	No information available for this product.
TDG - Transportation of Dangerous Goods (Canada)	
Transport hazard class(es)	Not regulated
Packing group	Not regulated
Emergency response guidebook 2012	
IMO/IMDG - International Maritime Transport	
Classification	Not regulated
IATA - International Air Transport Association	
Classification	Not regulated
These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. In addition, if a domestic exemption exists, it is the responsibility of the shipper to define the application of it.	

15. Regulatory information

Other regulations	<p>UNITED STATE OF AMERICA:</p> <ul style="list-style-type: none">- Toxic Substance Control Act (TSCA) : All ingredients are listed in the TSCA Inventory.- EPCRA Section 302/304 Extremely Hazardous Substances: No material is listed.- EPCRA Section 313 Toxic Chemicals: No material is listed.- CERCLA Hazardous Substances: No material is listed.- Clean Water Act (CWA) 311 Hazardous Substances: This material is listed. <p>CANADA :</p> <ul style="list-style-type: none">- List of Toxic Substances Managed Under CEPA 1999 (annexe 1, Canadian Environmental Protection Act): No material is listed.- Canada DSL and NDSL: All ingredients are listed in the Domestic Substances List (DSL).- Canadian National Pollutant Release Inventory Substances (NPRI): No material is listed.
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	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> HMIS  </div> <div style="text-align: center;"> NFPA  </div> </div>
Globally Harmonized System	<p>Not Regulated under WHMIS 2015/GHS</p> <p>P101: If medical advice is needed, have product container or label at hand. P102: Keep out of reach of children. P264: Wash skin thoroughly after handling. P270: Do not eat, drink or smoke when using this product. P280: Wear eye protection, gloves and other protective clothing that are adapted to the task being performed and the risks involved. P301+310+331: IF SWALLOWED: Immediately call a POISON CENTER or a physician. Do NOT induce vomiting. P363: Wash contaminated clothing before reuse. P305+351+338: IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. P403: Store in a well-ventilated place. P501: Dispose of contents and container to an approved waste disposal plant.</p>

16. Other information

Date (YYYY-MM-DD)	PRODUITS LUBRI-DELTA INC. 2015-05-27
Version	01
Other information	<p>REFERENCES:</p> <ul style="list-style-type: none"> - Haz-Map, Information on Hazardous Chemicals and Occupational Diseases, http://hazmap.nlm.nih.gov/index.php - High Production Volume (HPV) Chemical Challenge Program, U.S. EPA, http://www.epa.gov/hpv/ - Service du répertoire toxicologique de la Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST), http://www.reptox.csst.qc.ca <p>ACGIH: American Conference of Governmental Industrial Hygienists AIHA: American Industrial Hygiene Association HMIS: Hazardous Materials Identification System NFPA: National Fire Protection Association OSHA: Occupational Safety and Health Administration (USA) NIOSH: National Institute for Occupational Safety and Health NTP: National Toxicology Program RSST: Règlement sur la santé et la sécurité du travail (Québec) GHS: Globally Harmonized System IARC: International Agency for Research on Cancer IDLH: Immediately Dangerous to Life or Health STEL: Short Term Exposure Limit (15 min) TWA: Time Weighted Averages WHMIS: Workplace Hazardous Materials Information System</p> <p>To the best of our knowledge, the information contained herein is accurate. However, neither Préventis System nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.</p>