

SECTION 1.0

PRODUCT AND COMPANY IDENTIFICATION

Product Identifier UNIPAR® 100 CC **Other Means of Identification** Unfinished Distillates, Hydraulic Oils and Lubricating Oils **Recommended use (identified)** Process oil **Uses Advised Against** All others Manufacturer/Importer/Supplier/Distributor Information UniSource Energy, LLC. 40 Shuman Blvd, Suite 290 Naperville, IL 60563 E-mail orders@unisource-energy.com **Telephone number** Phone: 630-470-6030 Fax: 630-470-6031 **Emergency telephone number**

UniSource Energy, LLC. 1-800-444-5510

CHEMTREC 1-800-424-9300

SECTION 2.0

HAZARD(S) IDENTIFICATION

GHS Label Elements Hazard pictograms



Signal word DANGER Hazard statements May be fatal if swallowed and enters airways. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician; Do NOT induce vomiting: Disposed of contents/container to an approved waste disposal plant. Classified Hazards Aspiration Hazard – Category 1 Precautionary Statements IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.

Dispose of contents/ container to an approved waste disposal plant

Hazards not Otherwise Classified



None known.

SECTION 3.0 COMPOSITION/INFORMATION ON INGREDIENTS

CAS Number

Concentration	CAS number
0 - 100	64742-54-7
0 - 100	64742-55-8
	0 - 100 0 - 100

Total Sulfur: <0.1 wt.%

*All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

SECTION 4.0	FIRST AID MEASURES

Description of Necessary First Aid Measures

Eye contact

If irritation or redness develops from exposure, flush eyes with clean water. If symptoms persist, seek medical attention.

Inhalation

First aid is not normally required. If breathing difficulties develop, move victim away from source of exposure and into fresh air in a position comfortable for breathing. Seek immediate medical attention.

Skin contact

Remove contaminated shoes and clothing and cleanse affected area(s) thoroughly by washing with mild soap and water or a waterless hand cleaner. If irritation or redness develops and persists, seek medical attention.

Ingestion

Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. If victim is drowsy or unconscious and vomiting, place on the left side with the head down. If possible, do not leave victim unattended and observe closely for adequacy of breathing. Seek medical attention.

Most Important Symptoms and Effects, Acute and Delayed

Inhalation of oil mists or vapors generated at elevated temperatures may cause respiratory irritation.

Accidental ingestion can result in minor irritation of the digestive tract, nausea and diarrhea.

Notes to Physician

Acute aspirations of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities.



FIRE-FIGHTING MEASURES

NFPA 704 Hazard Class

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Instability: 0



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Health: 0

Flammability: 1



0 (Minimal) 1 (Slight) 2 (Moderate) 3 (Serious) 4 (Severe)

Extinguishing Media

Dry chemical, carbon dioxide, foam, or water spray is recommended. Water or foam may cause frothing of materials heated above 212°F/100°C. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

Specific Hazards Arising from the Chemical

Unusual fire & Explosive Hazards

This material may burn but will not ignite readily. If container is not properly cooled, it can rupture in the heat of a fire.

Hazardous Composition Products

Combustion may yield smoke, carbon monoxide, and other products of incomplete combustion. Oxides of nitrogen and sulfur may also be formed.

Special Protective Actions for Firefighters

For fires beyond the initial stage, emergency responders in the immediate hazard area should wear protective clothing. When the potential chemical hazard is unknown, in enclosed or confined spaces, a self-contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8). Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Cool equipment exposed to fire with water, if it can be done safely. Avoid spreading burning liquid with water used for cooling purposes.

See Section 9 for Flammable Properties including Flash Point and Flammable (Explosive) Limits

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ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

This material may burn but will not ignite readily. Keep all sources of ignition away from spill/release. Stay upwind and away from spill/release. Avoid direct contact with material. For large spillages, notify persons down wind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Wear appropriate protective equipment, including respiratory protection, as conditions warrant (see Section 8). See Sections 2 and 7 for additional information on hazards and precautionary measures.

Environmental Precautions

Stop and contain spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways. Use water sparingly to minimize environmental contamination and reduce disposal requirements. Spills into or upon navigable waters, the contiguous zone, or adjoining shorelines that cause a sheen or discoloration on the surface of the water, may require notification of the National Response Center (phone number 800-424-8802). If spill occurs on water notify appropriate authorities and advise shipping of any hazard.

Methods and Materials for Containment and Cleaning Up

Notify relevant authorities in accordance with all applicable regulations. Immediate cleanup of any spill is recommended. Dike far ahead of spill for later recovery or disposal. Absorb spill with inert material such as sand or vermiculite, and place in suitable container for disposal. If spilled on water remove with

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appropriate methods (e.g. skimming, booms or absorbents). In case of soil contamination, remove contaminated soil for remediation or disposal, in accordance with local regulations. Recommended measures are based on the most likely spillage scenarios for this material; however local conditions and regulations may influence or limit the choice of appropriate actions to be taken. See Section 13 for information on appropriate disposal.

HANDLING AND STORAGE

Precautions for Safe Handling

Keep away from flames and hot surfaces. Wash thoroughly after handling. Use good personal hygiene practices and wear appropriate personal protective equipment (see section 8). Spills will produce very slippery surfaces. Do not wear contaminated clothing or shoes. Do not enter confined spaces such as tanks or pits without following proper entry procedures such as ASTM D-4276 and 29CFR 1910.146.

Conditions for Safe Storage

Keep container(s) tightly closed and properly labeled. Use and store this material in cool, dry, wellventilated area away from heat and all sources of ignition. Store only in approved containers. Keep away from any incompatible material (see Section 10). Protect container(s) against physical damage. "Empty" containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations. Before working on or in tanks which contain or have contained this material, refer to OSHA regulations, ANSI Z49.1, and other references pertaining to cleaning, repairing, welding, or other contemplated operations.

SECTION 8.0

EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

Ingredient name	ACIGH
Distillates, petroleum, hydrotreated heavy paraffinic	TWA: 5mg/m3 STEL: 10 mg/m3 as Oil Mist, if Generated
Distillates, petroleum, hydrotreated light paraffinic	TWA: 5mg/m3 STEL: 10 mg/m3 as Oil Mist_if Generated

Note: State, local or other agencies or advisory groups may have established more stringent limits. Consult an industrial hygienist or similar professional, or your local agencies, for further information.

Biological Occupational Exposure Limits

Note: This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies.

Engineering Controls



If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits, additional engineering controls may be required.

Individual Protective Measures, such as Personal Protective Equipment

Eye/Face protection

The use of eye/face protection is not normally required; however, good industrial hygiene practice suggests the use of eye protection that meets or exceeds ANSI Z.87.1 whenever working with chemicals.

Skin/Hand protection

The use of gloves impervious to the specific material handled is advised to prevent skin contact. Users should check with manufacturers to confirm the breakthrough performance of their products. Suggested protective materials: Nitrile

Respiratory protection

Where there is potential for airborne exposure above the exposure limit a NIOSH certified air purifying respirator equipped with R or P95 filters may be used.

A respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed whenever workplace conditions warrant a respirator's use. Air purifying respirators provide limited protection and cannot be used in atmospheres that exceed the maximum use concentration (as directed by regulation or the manufacturer's instructions), in oxygen deficient (less than 19.5 percent oxygen) situations, or under conditions that are immediately dangerous to life and health (IDLH).

Suggestions provided in this section for exposure control and specific types of protective equipment are based on readily available information. Users should consult with the specific manufacturer to confirm the performance of their protective equipment. Specific situations may require consultation with industrial hygiene, safety, or engineering professionals.

SECTION 9.0

PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Physical form
Odor
Odor threshold
рН
Melting point/freezing point
Initial boiling point and boiling range
Flash point, Cleveland Open Cup, ASTM D92
Evaporation rate (nBuAc=1)
Flammability (solid, gas)
Lower and upper explosive (flammable) limits
Vapor pressure
Vapor density (air=1)
Specific gravity (water=1)
Bulk density
Solubility in water
Partition coefficient n-octanol/water (Kow)
Auto-ignition temperature
Decomposition temperature
Kinematic Viscosity @ >104°F (> 40°C)
Percent volatile

Clear and bright, Water-white Liquid Petroleum No data Not applicable No data No data 350°F/177°C <1 Not applicable No data <0.1 kPa @ 104°F/40°C >1 0.8618 - 0.8529 @ 60°F (15.6°C) 7.10 - 7.17 lbs/gal Insoluble No data 549 - 662°F/287 - 350°C No data 3.0 - 4.25 cSt @ 100°C; 13.5 - 20.3 cSt @ 40°C nil



Particle size Pour point

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Not applicable 10°F to -17°F/12°C - 27°C

STABILITY AND REACTIVITY

Reactivity

Not chemically reactive.

Chemical Stability.

Stable under normal ambient and anticipated conditions of use.

Possibility of Hazardous Reactions

Hazardous reactions not anticipated.

Conditions to Avoid

Extended exposure to high temperatures can cause decomposition. Avoid all possible sources of ignition.

Incompatible Materials

Avoid contact with strong oxidizing agents and strong reducing agents.

Hazardous Decomposition Products

Not anticipated under normal conditions of use.

SECTION 11.0	TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity	Hazard	Additional Information	LC ₅₀ LD ₅₀ Data
Inhalation	Unlikely to be harmful		>5 mg/L (mist)
Dermal	Unlikely to be harmful		>2 g/kg
Oral	Unlikely to be harmful		>5 g/kg

Information on the likely Routes of Exposure

Inhalation, eye contact, skin contact

Aspiration hazard

May be fatal if swallowed and enters airways.

Skin Corrosion/Irritation

Not expected to be irritating. Repeated exposure may cause skin dryness or cracking.

Serious Eye Damage/Irritation

Not expected to be irritating.

Skin Sensitization

Not expected to be a skin sensitizer.

Respiratory Sensitization

No information available.

Specific Target Organ Toxicity (Single Exposure)

Not expected to cause organ effects from single exposure.

Specific Target Organ Toxicity (Repeated Exposure)

Not expected to cause organ effects from repeated exposure.

Carcinogenicity

Not expected to cause cancer. This oil has been highly refined by a variety of processes to reduce aromatics and improve performance characteristics. It meets the IP-346 criteria of less than 3 percent PAH's and is not considered a carcinogen by the International Agency for Research on Cancer.



Germ Cell Mutagenicity

Not expected to cause heritable genetic effects.

Reproductive Toxicity

Not expected to cause reproductive toxicity.

ECOLOGICAL INFORMATION

GHS Classification

No classified hazards

Toxicity

All acute aquatic toxicity studies on samples of lubricant base oils show acute toxicity values greater than 100 mg/L for invertebrates, algae and fish. These tests were carried out on water accommodated fractions and the results are consistent with the predicted aquatic toxicity of these substances based on their hydrocarbon compositions.

Persistence and Degradability

The hydrocarbons in this material are not readily biodegradable, but since they can be degraded by microorganisms, they are regarded as inherently biodegradable.

Persistence per IOPC Fund Definition

Persistent

Bioaccumulative Potential

Log K_{ow} values measured for the hydrocarbon components of this material are greater than 5.3, and therefore regarded as having the potential to bioaccumulate. In practice, metabolic processes may reduce bioconcentration.

Mobility in Soil

Volatilization to air is not expected to be a significant fate process due to the low vapor pressure of this material. In water, base oils will float and spread over the surface at a rate dependent upon viscosity. There will be significant removal of hydrocarbons from the water by sediment adsorption. In soil and sediment, hydrocarbon components will show low mobility with adsorption to sediments being the predominant physical process. The main fate process is expected to be slow biodegradation of the hydrocarbon constituents in soil and sediment.

Other Adverse Effects

None anticipated.

SECTION 13.0

DISPOSAL CONSIDERATIONS

Disposal Instructions

The generator of a waste is always responsible for making proper hazardous waste determinations and needs to consider state and local requirements in addition to federal regulations. This material, if discarded as produced, would not be a federally regulated RCRA "listed" hazardous waste and is not believed to exhibit characteristics of hazardous waste. See Sections 7 and 8 for information on handling, storage and personal protection and Section 9 for physical/chemical properties. It is possible that the material as produced contains constituents which are not required to be listed in the SDS but could affect the hazardous waste determination. Additionally, use which results in chemical or physical change of this material could subject it to regulation as a hazardous waste. This material under most intended uses would become "Used Oil" due to contamination by physical or chemical impurities. Whenever



possible, Recycle used oil in accordance with applicable federal and state or local regulations. Container contents should be completely used, and containers should be emptied prior to discard.

SECTION 14.0

TRANSPORT INFORMATION

U.S. Department of Transportation (DOT)

UN Number

Not regulated.

UN Proper Shipping Name

Not regulated.

Transport Hazard Class(es)

None.

Packaging Group

None.

Environmental Hazards

This product does not meet the DOT/UN/IMDG/IMO criteria of a marine pollutant.

Special Precautions for User

If shipped by land in a packaging having a capacity of 3,500 gallons or more, the provisions of 49 CFR, Part 130 apply. (Contains oil) **If transported in bulk by marine vessel in international waters,**

product is being carried under the scope of MARPOL Annex I.

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

Not applicable.

REGULATORY INFORMATION

US Federal Regulations

CERCLA/SARA - Section 302 Extremely Hazardous Substances and TPQs (in pounds)

This material does not contain any chemicals subject to the reporting requirements of SARA 302 and 40 CFR 372.

CERCLA/SARA - Section 311/312 (Title III Hazard Categories)

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CERCLA/SARA - Section 313 and 40 CFR 372

This material does not contain any chemicals subject to the reporting requirements of SARA 313 and 40 CFR 372.

EPA (CERCLA) Reportable Quantity (in pounds)

This material does not contain any chemicals with CERCLA Reportable Quantities.

State Regulations

California Proposition 65

This material does not contain any chemicals which are known to the State of California to cause cancer, birth defects or other reproductive harm at concentrations that trigger the warning requirements of California Proposition 65.

National Inventories

Australia	Х
Canada DSL	Х
Canada NDSL	-



China	Х
Europe ELINICS	-
Europe EINECS	265-158-7
Japan ENCS	Х
Philippines PICCS	Х
Republic of Korea	Х
United States TSCA	X

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OTHER INFORMATION

Abbreviations

ACGIH = American Conference of Governmental Industrial Hygienists; ADR = European Road Transport; AICS = Australia Inventory of Chemical Substances: AIHA = American Industrial Hydiene Association: ASTM = American society of Testing and Materials: ATE = Acute Toxicity Estimation: AU = Australia: Autoignition Temperature = The minimum temperature required to initiate combustion in air with no other source of ignition, BCF = Bioconcentration Factor; BEI = - Biological Exposure Indices, represent the levels of determinants which are most likely to be observed in specimens collected from a healthy worker who has been exposed to chemicals to the same extent as a worker with inhalation exposure to the TLV, BEL = Biological exposure limits; BOD = Biochemical Oxygen Demand; BTEX = Benzene, Toluene, Ethylbenzene, Xylenes; bw = body weight; bw/day = body weight/day; C = Celsius, CA = Canada, CAS = Chemical Abstracts Service; CEFIC = European Chemical Industry Council; CEILING = Ceiling Limit (15 minutes); CERCLA = The Comprehensive Environmental Response, Compensation, and Liability Act; CLP = Classification Packaging and Labelling Regulation (Regulation (EU) No. 1272/2008; COC = Cleveland Open Cup; CN = China; CPR= Controlled Products Regulations; CWA = Clean Water Act; DEA - Drug Enforcement Administration; DFG = Deutsche Forschungsgemeinschaf; DIN = Deutsches Institut fur Normung; DMEL = Derived Minimal Effect Level; DNEL = Derived No Effect Level; DOT = Department of Transportation; DSL = Domestic Substances List (Canada); dw = dry weight; EC = European Commission; EC50 = Effective Concentration fifty; ECC = European Economic Community; ECETOC = European Center on Ecotoxicology and Toxicology Of Chemicals; ECHA = European Chemicals Agency; $EC_x = Effect$ Concentration associated with x% response; EINECS - European Inventory of Existing Commercial Chemical Substances; ELINCS = European List of Notified Chemical Substances; EL50 = Effective Loading fifty; ENCS = Japan Existing and New Chemical Substances; EPA = Environmental Protection Agency; EU = European Union; EUH statement = CLP - specific Hazard statement: EWC = European Waste Code; F = Fahrenheit; Flash Point = Minimum temperature at which a liquid gives off sufficient vapors to form an ignitable mixture with air; fw = fresh water; GHS = Globally Harmonized System of Classification and Labelling of Chemicals; GLP = Good Laboratory Practice; HAPs = Hazardous Air Pollutants; IARC = International Agency for Research on Cancer; IATA = International Air Transport Association; IBC = Intermediate Bulk Container; IC₅₀ = Inhibitory Concentration fifty; ICAO = International Civil Aviation Organization; IDL = Ingredient Disclosure List; IDLH = Immediately Dangerous to Life and Health; IL₅₀ = Inhibitory Level fifty; IMDG = International Maritime Dangerous Goods; INSHT = National Institute for Health and Safety at Work; INV = Chinese Chemicals Inventory; IOPC = International Oil Pollution Compensation; IP346 = Institute of Petroleum test method N° 346 for the determination of polycyclic aromatics DMSO-extractables; JP -Japan; , Kow = Octanol/water partition; KECI = Korea Existing Chemicals Inventory, LC₅₀ = Lethal Concentration (gases) which kills 50% of the exposed animals, LD₅₀ = :Lethal Dose (solids & liquids) which kills 50% of the exposed animals; . LL/EL/IL = Lethal Loading/Effective Loading/Inhibitory loading; LL₅₀ = Lethal Loading fifty; LEL = The lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source.; LogPow = logarithm of the octanol/water partition coefficient; LOLI = List of LIsts™ - ChemADVISOR's Regulatory Database; LRT = Lower Respiratory Tract, MARPOL 73/78 = International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution; MAK = Maximum Concentration Value in the Workplace; MEL = Maximum Exposure Limits; mg/m³ = : Concentration expressed in weight of substance per volume of air, mg/kg = Quantity of material, by weight, administered to a test subject, based on their body weight in kg, mw = marine water; NDSL = Non-Domestic Substances List (Canada); NE = Not Established; NFPA = National Fire Protection Association; NIOSH = National Institute for Occupational Safety and Health; NJTSR = New Jersey Trade Secret Registry; NOEC/NOEL = No Observed Effect Concentration / No Observed Effect Level; NTP = National Toxicology Program: NZ = New Zealand: OECD = Organization for Economic Co-operation and Development; OE-HPV = Occupational Exposure - High Production Volume; or = occasional release; OSHA = U.S. Occupational Safety and Health Administration; PAH = Polycyclic Aromatic Hydrocarbon; PBT = Persistent, Bioaccumulative and Toxic; PEL =

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Permissible Exposure Limit (OSHA); PH= Philippines; PICCS = Philippines Inventory of Chemicals and Chemical Substances; ppm = Concentration expressed in parts of material per million parts of air or water, PMCC = Pensky Martin Closed Cup; PNEC = Predicted No Effect Concentration; RCRA = Resource Conservation and Recovery; REACH = Registration Evaluation And Authorization Of Chemicals; RID = European Rail Transport; RRN = REACH Registration Number: RQ = Reportable Quantity; RTECS = Registry of Toxic Effects of Chemical Substances®; RTK = Right To Know; SARA = Superfund Amendments and Reauthorization Act; S* = Skin notation; SKIN_DES = Skin Designation; STEL = Short Term Exposure Limit (15 minutes); SCBA = Self-Contained Breathing Apparatus; SDWA = Safe Drinking Water Act; STOT = Specific Target Organ Toxicity, TDLo, = the lowest dose to cause a symptom, TSCA = Toxic Substance Control Act; TCLo = the lowest concentration to cause a symptom; TDo, LDLo, and LDo, or TC, TCo, LCLo, and LCo, the lowest dose (or concentration) to cause lethal or toxic effects, TDG = Transportation of Dangerous Goods; TLV = Threshold Limit Value (ACGIH); TRA = Targeted Risk Assessment; TSCA = Toxic Substances Control Act ; TWA = Time Weighted Average (8 hours); UEL = The highest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source.; UN = United Nations; URT = Upper Respiratory Track, US = United States; UVCB = Chemical Substances of Unknown or Variable Composition, Complex Reaction Products and Biological Materials (UVCB Substance) on the TSCA Inventory vPvB = very Persistent and very Bioaccumulative; WHMIS = Worker Hazardous Materials Information System (Canada)

Disclaimer

The information presented herein has been compiled from sources considered to be dependable and is accurate as of the date of preparation of this Safety Data Sheet. However, Seller does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. The information provided above, and the product, are furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use. In addition, no authorization is given nor implied to practice any patented invention without a license. All materials may present unknown hazards and should be used with caution. In addition, no responsibility can be assumed by the Seller for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the material. Seller assumes no responsibility for injury to Buyer or to third persons or any damage to any property. Buyer assumes all such risks.