

SAFETY DATA SHEET

SECTION 1.0	PRODUCT AND COMPANY IDENTIFICATION
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Product Identifier

UNIPAR® 500 AV

Other means of identification

A complex combination of hydrocarbons obtained as the raffinate from a solvent extraction process. It consists predominantly of saturated hydrocarbons having carbon numbers predominantly in the range of C₂₀ through C₅₀ and produces a finish oil with a viscosity of at least 100 SUS at 100°F (19 cSt at 40°C).

Recommended use (identified)

Base material for the production of various lubricating oils

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
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OSHA/HCS status

Physical Hazards

Not classified

Health Hazards

Not classified

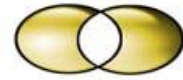
OSHA Defined Hazards

Not classified

GHS label elements

Hazard Symbol

None



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Signal word

None

Hazard Statement

The product does not meet the criteria for classification

Precautionary Statement
Prevention

Observe good industrial hygiene practices.

Response

Wash hands after handling.

Storage

Store away from incompatible materials.

Disposal

Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC)

None known.

SECTION 3.0
COMPOSITION/INFORMATION ON INGREDIENTS
Chemical name

Paraffin oils (petroleum), catalytic dewaxed heavy

CAS number/other identifiers

Ingredient Name	%	CAS number
Paraffin oils (petroleum), catalytic dewaxed heavy	100	64742-70-7

Composition Comments

IP346 method DMSO extract for base oil substances: <3.0%.

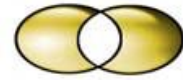
SECTION 4.0
FIRST AID MEASURES
Description of necessary first aid measures
Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.

Inhalation

Move to fresh air. If breathing is difficult, give oxygen. Get medical attention, if needed.

Skin contact



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Remove contaminated clothing and shoes. Wash off immediately with soap and plenty of water. Get medical attention if irritation develops or persists. Wash clothing separately before reuse. Destroy or thoroughly clean contaminated shoes. If high pressure injection under the skin occurs, always seek medical attention.

Ingestion

Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content does not get into the lungs. Get medical attention immediately.

Most important symptoms, acute and delayed

Prolonged or repeated skin contact may cause drying, cracking, or irritation.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Symptoms may be delayed.

General information

Get medical attention if symptoms occur. Show this safety data sheet to the doctor in attendance.

SECTION 5.0	FIRE-FIGHTING MEASURES
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Suitable extinguishing media

Water spray. Water fog. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media

Do not use water jet.

Specific hazards arising from the chemical

The product is not flammable. Will burn if involved in a fire.

Special protective equipment and precautions for firefighters

Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

Fire Fighting equipment/instructions

Withdraw immediately in case of rising sound from venting safety devices or any discoloration of tanks due to fire. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Move containers from fire area if you can do it without risk. In the event of fire, cool tanks with water spray. Cool containers exposed to flames with water until well after the fire is out. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Water runoff can cause environmental damage. Use compatible foam to minimize vapor generation as needed.

General fire hazards

This product is not flammable. Will burn if involved in a fire.



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SECTION 6.0	ACCIDENTAL RELEASE MEASURES
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Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. In case of spills, beware of slippery floors and surfaces. See Section 8 of the SDS for Personal Protective Equipment.

Environmental precautions

Contain spillages with sand, earth or any suitable adsorbent material. Prevent spillage entering a watercourse or sewer, contaminating soil or vegetation. If this is not possible, notify police and appropriate authorities immediately.

Methods and materials for containment and cleaning up

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Clean surface thoroughly to remove residual contamination

Large Spills: Prevent entry into waterways, sewers, basements or confined areas. If necessary dike the product with dry earth, sand or similar non-combustible materials. Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps. Clean surface thoroughly to remove residual contamination

SECTION 7.0	HANDLING AND STORAGE
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Precautions for safe handling

Keep away from heat, spark, open flames and other sources of ignition. Avoid prolonged or repeated contact with skin. Be aware of potential for surfaces to become slippery.

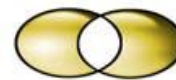
Conditions for safe storage, including any incompatibilities

Store in a dry place. Keep away from incompatible materials, open flames and high temperatures.

SECTION 8.0	EXPOSURE CONTROLS/PERSONAL PROTECTION
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Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)			
Components	Type	Value	Form
Oil Mist, mineral (CAS -)	PEL	5 mg/m ³	Mist
	TWA	5 mg/m ³	Inhalable fraction
US. NIOSH: Pocket Guide to Chemical Hazards			
Oil Mist, mineral (CAS -)	STEL	10 mg/m ³	Mist
	TWA	5 mg/m ³	Mist



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Biological limit values

No biological exposure limits noted for the ingredient(s)

Engineering measures

Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits

Personal protective equipment

Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

Hand protection

Chemical/oil resistant gloves are recommended. Be aware that the liquid may penetrate the gloves. Frequent change is advisable.

Eye protection

Wear safety glasses. If splash potential exists, wear full face shield or chemical goggles.

Other

Normal work clothing (long sleeved shirts and long pants) is recommended.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

SECTION 9.0

PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid
Color	Amber
Odor	Mild
Odor threshold	Not available
pH	Not applicable
Pour point	24.8 °F (-4 °C)
Initial boiling point and boiling range	>600.8 °F (> 316 °C)
Flash point	>300.2 °F (> 149.0 °C) ASTM D-92
Evaporation rate	Not available
Flammability (solid, gas)	Not applicable
Lower explosive (flammable) limits	>0.6%
Upper explosive (flammable) limits	<7%



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Vapor pressure	< 0.1 mm Hg (20°C)
Vapor density	>2
Relative density	Not available
Solubility (water)	Insoluble
Partition coefficient n-octanol/water	No data available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	>20 mm ² /s (40°C)
Explosive properties	Not explosive
Molecular formula	UVCB
Oxidizing properties	Not oxidizing

SECTION 10.0

STABILITY AND REACTIVITY

Reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability

Stable under normal temperature conditions and recommended use.

Possibility of hazardous reactions

Hazardous polymerization does not occur.

Conditions to avoid

Contact with incompatible materials. Do not pressurize, cut, weld, braze, solder, drill, grind or expose empty containers to heat, flame, sparks, static electricity, or other sources of ignition; they may explode and cause injury or death.

Incompatible materials

Strong oxidizing agents.

Hazardous decomposition products

Carbon oxides. Sulfur oxides. Hydrocarbons.

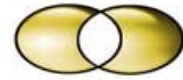
SECTION 11.0

TOXICOLOGICAL INFORMATION

Information on the likely routes of exposure

Inhalation

Inhalation of oil mist or vapors formed during heating of the product will irritate the respiratory system and provoke coughing.



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Skin contact

Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Eye contact

Direct contact with eyes may cause temporary irritation.

Ingestion

No harmful effects expected in amounts likely to be ingested by accident. Ingestion of large amounts may produce gastrointestinal disturbances including irritation, nausea, and diarrhea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms may include redness, drying and cracking of the skin.

Information on toxicological effects**Acute toxicity**

Data from animal tests indicates a low level of acute toxicity by oral, dermal or inhalation routes of exposure.

Skin corrosion/irritation

Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation

Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization**Respiratory sensitization**

Not classified

Skin sensitization

Not classified

Germ cell mutagenicity

Not classified

Carcinogenicity**IARC Monographs. Overall Evaluation of Carcinogenicity**

Not classifiable as to carcinogenicity to humans. (3)

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed

Reproductive toxicity

Not classified

Specific target organ toxicity -single exposure

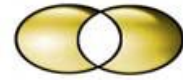
Not classified

Specific target organ toxicity -repeated exposure

Not classified

Aspiration hazard

Not classified



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Further information

Symptoms may be delayed. Pre-existing skin conditions including dermatitis might be aggravated by exposure to this product.

SECTION 12.0	ECOLOGICAL INFORMATION
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Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability

The product is expected to be slowly biodegradable.

Bioaccumulative potential

The product is not expected to bioaccumulate.

Mobility in soil

No data available.

Mobility in general

The product is insoluble in water.

Other adverse effects

Oil spills are generally hazardous to the environment.

SECTION 13.0	DISPOSAL CONSIDERATIONS
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Disposal instructions

Recover and recycle, if practical. Dispose in accordance with all applicable regulations.

Hazardous waste code

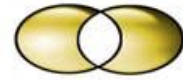
Waste codes should be assigned by the user based on the application for which the product was used

Waste from residues / unused products

Dispose in accordance with applicable federal, state, and local regulations.

Contaminated packaging

Dispose of empty containers according to applicable federal, state/provincial and/or local regulations.



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SECTION 14.0	TRANSPORT INFORMATION
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DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

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

Not applicable. However, this product is a liquid and if transported in bulk covered under MARPOL 73/78, Annex I.

SECTION 15.0	REGULATORY INFORMATION
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OSHA/HCS status

This product is not hazardous according to OSHA 29CFR 1910.1200.

US Federal Regulations**TSCA Section 12(b) Export Notification (40 CFR 707, Subpart. D)**

Not regulated

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed

Superfund Amendments and Reauthorization Act of 1986 (SARA)**Hazard categories**

Immediate Hazard - No

Delayed Hazard - No

Fire Hazard - No

Pressure Hazard - No

Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed

SARA 311/312 Hazardous chemical

No.

SARA 313 (TRI reporting)

Not regulated.

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated



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Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated

Safe Drinking Water Act (SDWA)

Not regulated

US State Regulations

Massachusetts RTK - Substance List

Mineral Oil, highly refined (CAS -)

Oil Mist, mineral (CAS -)

New Jersey Worker and Community Right-to-Know Act

Mineral Oil, highly refined (CAS -)

Oil Mist, mineral (CAS -)

Pennsylvania Worker and Community Right-to-Know Law

Oil Mist, mineral (CAS -)

Paraffin oils (petroleum), catalytic dewaxed heavy (CAS 64742-70-7)

Rhode Island RTK

Not regulated

California Proposition 65

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

International regulations

National Inventory

Country(s) or region	Inventory	On inventory (yes/no) *
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes



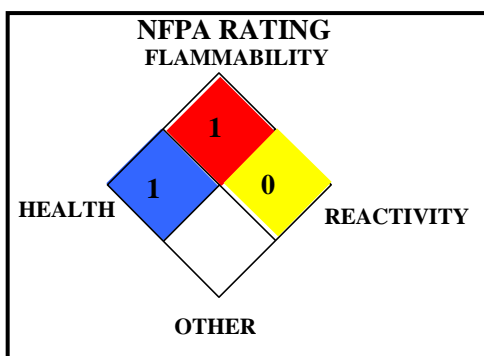
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United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventor	Yes
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*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s). A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

SECTION 16.0	OTHER INFORMATION
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NFPA rating

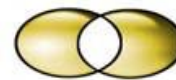


Further information

Japan: MITI ENCS Number (9)-1692

Abbreviations

ACGIH = American Conference of Governmental Industrial Hygienists; ADR = European Road Transport; AICS = Australia Inventory of Chemical Substances; 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; 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 Forschungsgemeinschaft; DIN = Deutsches Institut für Normung; DMEL = Derived Minimal Effect Level; DNEL = Derived No Effect Level; DOT = Department of Transportation; DSL = Domestic Substances List (Canada); EC = European Commission; EC50 = Effective Concentration fifty; ECC = European Economic Community; ECETOC = European Center on Ecotoxicology and Toxicology Of Chemicals; ECHA = European Chemicals Agency; 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



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an ignitable mixture with air. GHS = Globally Harmonized System of Classification and Labelling of Chemicals; 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; 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, 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; OE_HP = Occupational Exposure - High Production Volume; OSHA = U.S. Occupational Safety and Health Administration; PAH = Polycyclic Aromatic Hydrocarbon; PBT = Persistent, Bioaccumulative and Toxic; PEL = 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; 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, TLo = 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; US = United States; UVCB = Unknown, of Variable Composition, or of Biological Origin; 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.