



SAFETY DATA SHEET

1. Identification

DURAGARD® INDUSTRIAL TURBINE R&O AA-320 CIRCULATING OIL

Product Use: Circulating Oil

Product Number(s): DURINDRO320xx

Synonyms: Duragard® R&O AA-320, Duragard® IND R&O 320

Company Identification

Advantage Dist. & Lubricants, LLC

3434 Marion RD SE

Rochester, MN 55904

United States of America

www.advantagelubes.com

Transportation Emergency Response

CHEMTREC: (800) 424-9300 US, Canada, or U.S. Virgin Islands or (703) 527-3887 all other areas.

Health Emergency

Poison Control Center: Located in the USA. 1-800-222-1222

Product Information

email: info@advantagelubes.com

Product Information: (800) 420-1414, (507) 289-5555 local

SDS Requests: (800) 420-1414, (507) 289-5555 local

2. Hazard(s) identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200:

GHS Classification: Not classified as hazardous under OSHA

Hazards not otherwise classified: Avoid prolonged or repeated skin contact with used fluid.

3. Composition/information on ingredients

Chemical Name	Common name and synonyms	CAS #	%
Residual oils, petroleum, solvent-refined	No data available	64742-01-4	60 - 90

One or more hazardous ingredient(s) is claimed as a trade secret under the OSHA Hazard Communication Standard. The hazards of this (these) ingredient(s) are given on this SDS.

4. First-aid measures

Description of necessary measures, subdivided according to the different routes of exposure, i.e., inhalation, skin and eye contact, and ingestion:

Inhalation: Remove to fresh air. If breathing is difficult, have a trained individual



SAFETY DATA SHEET

	administer oxygen. If not breathing, give artificial respiration and have a trained individual administer oxygen and get medical attention immediately.
Eye Contact:	None expected to be needed, however, use an eye wash to remove a chemical from your eye regardless of the level of hazard.
Skin Contact:	No data available. Seek medical advice if symptoms persist.
Ingestion:	Minimal risk of harm if swallowed. Do not induce vomiting. Seek medical attention immediately. Provide medical care provider with this SDS.
Most important symptoms/effects, acute and delayed:	None Known
Indication of immediate medical attention and special treatment needed, if necessary:	Aspiration during swallowing or vomiting may severely damage the lungs. If evacuation of stomach contents is necessary, use method least likely to cause aspiration.

5. Fire-fighting measures

Suitable (and unsuitable) extinguishing media:

Suitable extinguishing media:	Use alcohol resistant foam, carbon dioxide, or dry chemical when fighting fires. Water or foam may cause frothing if liquid is burning but it still may be a useful extinguishing agent if carefully applied to the surface of the fire. Do not direct a stream of water into the hot burning liquid.
Unsuitable extinguishing media:	No data available
Specific hazards arising from the chemical:	No data available
Hazardous combustion products:	Carbon monoxide, Smoke
Special protective equipment and precautions for fire-fighters:	No data available

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:	No health effects expected from the clean up of this material if contact can be avoided. Follow personal protective equipment recommendations found in Section 8 of this SDS.
Methods and materials for containment and cleaning up:	Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a



SAFETY DATA SHEET

minimum. Dike with suitable absorbent material like granulated clay. Dispose of according to Federal, State, Local, or Provincial regulations. Used fluid should be disposed of at a recycling center.

7. Handling and storage

Precautions for safe handling: No special handling instructions due to toxicity. No data available

Conditions for safe storage, including any incompatibilities:

Safe storage conditions: Store in a cool dry place. Isolate from incompatible materials.

Materials to Avoid/Chemical Incompatibility: Strong oxidizing agents

8. Exposure controls/personal protection

OSHA permissible exposure limit (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV), and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the safety data sheet, where available:

Chemical component	OSHA PEL	ACGIH TLV	ACGIH STEL	IDLH
No data available				

Appropriate engineering controls: Use local exhaust ventilation or other engineering controls to minimize exposures and maintain operator comfort.

Individual protection measures, such as personal protective equipment:

Respiratory Protection: Respiratory protection may be required to avoid overexposure when handling this product. General or local exhaust ventilation is the preferred means of protection. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms. None required where adequate ventilation is provided. If airborne concentrations are above the applicable exposure limits, use NIOSH/MSHA approved respiratory protection.

Respirator Type(s): None required where adequate ventilation is provided. If airborne concentrations are above the applicable exposure limits, use NIOSH/MSHA approved respiratory protection.

Eye protection: No special requirements under normal industrial use.

Skin protection: Not normally considered a skin hazard. Where use can result in skin contact, practice good personal hygiene. Wash hands and other exposed



SAFETY DATA SHEET

areas with mild soap and water before eating, drinking, and when leaving work.

Gloves: Neoprene, Nitrile

General hygiene conditions: No data available

9. Physical and chemical properties

Appearance (physical state, color etc.):

Physical state: Liquid

Color: Amber

Odor: Mild

Odor Threshold: Not determined

pH: Not determined

Melting point/freezing point:

Melting Point: No data available

Freezing point: No data available

Initial boiling point and boiling range (°C): Not determined

Flash Point (°C): 213

Flash Point Method: COC

Evaporation Rate: No data available

Flammability (solid, gas): No data available

Upper/lower flammability or explosive limits:

Upper flammability or explosive limits: Not established

Lower flammability or explosive limits: Not established

Vapor pressure: No data available

Vapor density: No data available

Relative density: 0.89

Solubility(ies): Negligible; 0-1%

Partition coefficient: n-octanol/water: Not determined

Auto-ignition temperature: No data available

Decomposition Temperature: Not determined



SAFETY DATA SHEET

Viscosity: 319.9
Volatile organic compound (VOC)
content and percentage of volatiles: 0.000000

10. Stability and reactivity

Reactivity: No data available
Chemical stability: Stable under normal conditions.
Possibility of hazardous reactions: No data available
Conditions to avoid (e.g., static discharge, shock, or vibration): Temperatures above the high flash point of this combustible material in combination with sparks, open flames, or other sources of ignition.
Moisture (will lead to product performance degradation).
Incompatible materials: Strong oxidizing agents
Hazardous decomposition products: Carbon monoxide, Smoke

11. Toxicological information

Description of the various toxicological (health) effects and the available data used to identify those effects:

Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact): No data available

Symptoms related to the physical, chemical and toxicological characteristics: None Known

Delayed and immediate effects and also chronic effects from short- and long-term exposure:

Ingestion Toxicity: Although this product has a low order of acute oral toxicity, aspiration of minute amounts into the lungs during ingestion or vomiting may cause mild to severe pulmonary injury and possibly death.

Skin Contact: Likely to be non-irritating to skin based on animal data.No hazard in normal industrial use.

Absorption: Likely to be practically non-toxic based on animal data.

Inhalation Toxicity: Harmful! Can cause systemic damage (see "Target Organs"). Likely to be practically non-toxic based on animal data.

Eye Contact: This material is likely to be non-irritating to eyes based on animal data.



SAFETY DATA SHEET

Sensitization: No data available

Mutagenicity: No data available to indicate product or any components present at greater than 0.1% is mutagenic or genotoxic.

Carcinogenicity: Not expected to cause cancer. This product meets the IP-346 criteria of <3% PAH's and is not considered a carcinogen by the International Agency for Research on Cancer.

STOT-single exposure: Non-hazardous under Specific Target Organ Systemic Toxicity Single Exposure category.

STOT-repeated exposure: Non-hazardous under Specific Target Organ Systemic Toxicity Repeated Exposure category.

Aspiration hazard: Non-hazardous under Aspiration category.

Other information: No data available

Numerical measures of toxicity (such as acute toxicity estimates):

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Residual oils, petroleum, solvent-refined	OLD50 Rat > 5000 mg/kg	Dermal LD50 Rabbit > 2000 mg/kg	Inhalation LC50 (4h) Rat 2.18 mg/L

Is the hazardous chemical is listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition), or by OSHA:

Chemical Name	OSHA Carcinogen	IARC Carcinogen	NTP Carcinogen
There are no components that are known or reported to cause cancer.			

12. Ecological information

Ecotoxicity (aquatic and terrestrial, where available): No data available

Ecological Toxicity Data:

Chemical Name	CAS #	Aquatic EC50 Crustacea	Aquatic ERC50 Algae	Aquatic LC50 Fish
No data available				

Persistence and degradability: Biodegrades slowly.

Bioaccumulative potential: Bioconcentration may occur.



SAFETY DATA SHEET

Mobility in soil:	This material is expected to have essentially no mobility in soil. It absorbs strongly to most soil types.
Other adverse effects (such as hazardous to the ozone layer):	No data available

13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging:	Spent or discarded material is non-hazardous according to environmental regulations.
Contaminated packaging:	Recycle containers whenever possible.

14. Transport information

Carriage of dangerous goods by road (DOT), rail or inland waterways:

No data available

International carriage of dangerous goods by sea (IMDG/IMO):

No data available

International carriage of dangerous goods by air (IATA):

No data available

Environmental hazards (e.g., Marine pollutant (Yes/No)): None.

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): No data available

Special precautions which a user needs to be aware of or needs to comply with in connection with transport or conveyance either within or outside their premises: No data available

15. Regulatory information

Safety, health and environmental regulations specific for the product in question:

TSCA Status: All components of this material are on the US TSCA Inventory or are exempt.



SAFETY DATA SHEET

Regulated Components:

Chemical Name	CAS #	CERCLA	Sara EHS	Sara 313	U.S. HAP
Residual oils, petroleum, solvent-refined	64742-01-4	N	N	N	N
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	N	N	N	N

Chemical Name	CAS #	California Prop 65 - Cancer	California Prop 65 - Dev. Toxicity	California Prop 65 - Reprod fem	California Prop 65 - Reprod male
Residual oils, petroleum, solvent-refined	64742-01-4	N	N	N	N
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	N	N	N	N

Chemical Name	CAS #	Massachusetts RTK List	New Jersey RTK List	Pennsylvania RTK List	Rhode Island RTK List	Minnesota Hazardous Substance List
Residual oils, petroleum, solvent-refined	64742-01-4	N	N	N	N	N
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	N	N	N	N	N

16. Other information, including date of preparation or last revision.

SDS Prepared by:	HAZADM
Revision Date:	09-26-2016
Revision Number:	23
Reason for revision:	Activated by Document Formulation Generation
References:	No data available
Other Info:	No data available



SAFETY DATA SHEET

Disclaimer:

This safety data sheet and the information it contains is offered to you in good faith as accurate. We have reviewed any information contained in the data sheet which we have received from outside sources and we believe the information to be correct, but cannot guarantee its accuracy or completeness. Health and safety precautions in this data sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product in a safe manner and to comply with all applicable laws and regulations. No statement made in this data sheet shall be construed as permission or recommendation for the use of any product in a manner that might infringe existing patents. No warranty is made, either expressed or implied.