



SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Duragard® Industrial R&O Turbine 46 Circulating Oil

Product Use: Applications requiring a high pressure anti-wear oil

Product Number(s): DURROT46

Synonyms: Duragard® R&O Turbine 46 Oil, Duragard® Diamond Plate® Circulating Oil R&O 46

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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Not classified under GHS

2.2. Label elements

2.3. Other hazards

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

Unknown acute toxicity (GHS-US)

SECTION 3: Composition/information on ingredients

| Chemical Name | % | CAS # | GHS Classification |
|--|---|-------|--------------------|
| Components not listed are not physical or health hazards as defined in 29 CFR 1910.1200 (Hazard Communication Standard). | | | |

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|---------------------|---|
| Inhalation | Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. |
| Eyes | 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 | Wash with soap and water. Get medical attention if irritation develops or persists. 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. |

4.2. Most important symptoms and effects, both acute and delayed

Symptoms Not determined

4.3. Indication of any immediate medical attention and special treatment needed

Note to Doctor Aspiration during swallowing or vomiting may severely damage the lungs. If evacuation of stomach contents is necessary, use method least likely to cause aspiration.



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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable and Unsuitable

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.

5.2. Special hazards arising from the substance or mixture

Fire and/or Explosion

Hazards

Material may be ignited only if preheated to temperatures above the high flash point, for example in a fire.

5.3. Advice for firefighters

Fire Fighting Methods and Protection

Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Use methods for the surrounding fire.

Hazardous Combustion

Carbon monoxide, Smoke

Products

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General Measures: No data available.

6.2. Environmental precautions

Do not flush to sewer.

Avoid runoff into storm sewers and ditches that lead to waterways.

Remove from water surface by skimming or with suitable absorbents. Do not use dispersants.

6.3. Methods and material for containment and cleaning up

Methods for 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 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.

6.4. Reference to other sections

Follow all protective equipment recommendations provided in Section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

No special handling instructions due to toxicity.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool dry place. Isolate from incompatible materials.

Incompatible materials

See Section 10.

7.3. Specific end use(s)

Hydraulic Oil

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Chemical Name

Oil mist, mineral

Oil mist, mineral

Oil mist, mineral

None.

None.

Occupational Exposure Limits

OSHA PEL

ACGIH TLV-TWA

ACGIH STEL

IDLH

OSHA PEL-Skin Notation

Value

5 mg/m³

5 mg/m³

10 mg/m³

8.2. Exposure controls

Engineering Measures

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

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.



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8.2. Exposure controls

| | |
|---------------------------|--|
| 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 areas with mild soap and water before eating, drinking, and when leaving work. |
| Gloves | Neoprene, Nitrile |

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|--|------------------|
| Physical State | Liquid |
| Color | Amber |
| Odor | Mild |
| Odor threshold | Not determined |
| pH | Not determined |
| Freezing point | Not determined |
| Boiling Point | Not determined |
| Flash Point (°C) | 207 |
| Flash Point Method | COC |
| Evaporation Rate | Not determined |
| Upper Flammable/Explosive Limit, % in air | Not established |
| Lower Flammable/Explosive Limit, % in air | Not established |
| Flammability (solid, gas) | Not applicable |
| Vapor pressure | <0.20 |
| Vapor Density | Not determined |
| Relative Density | 0.87 |
| Solubility in Water | Negligible; 0-1% |
| Octanol/Water Partition Coefficient | Not determined |
| Autoignition Temperature | Not determined |
| Decomposition Temperature | Not determined |
| Viscosity(°C) | 46.65 |
| 9.2. Other information | |
| Volatiles, % by weight | 0.000000 |

SECTION 10: Stability and reactivity

| | |
|---|--|
| 10.1. Reactivity | No data available. |
| 10.2. Chemical stability | Stable under normal conditions. |
| 10.3. Possibility of hazardous reactions | Hazardous polymerization will not occur. |
| 10.4. Conditions to avoid | 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). |
| 10.5. Incompatible materials | Strong oxidizing agents |
| 10.6. Hazardous decomposition products | Carbon monoxide, Smoke |

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| | |
|----------------------------|---|
| Ingestion Toxicity | No hazard in normal industrial use. Estimated to be > 5.0 g/kg. |
| 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 | No hazard in normal industrial use. Likely to be practically non-toxic based on animal data. |



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SECTION 11: Toxicological information

| | |
|---|--|
| Eye Contact | This material is likely to be non-irritating to eyes based on animal data. No hazard in normal industrial use. |
| Sensitization | Non-hazardous under Respiratory Sensitization category. No data available to indicate product or components may be a skin sensitizer. |
| 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. |
| Reproductive and Developmental Toxicity | No data available to indicate product or any components present at greater than 0.1% may cause birth defects. |
| Specific target organ toxicity-Single exposure | Non-hazardous under Specific Target Organ Systemic Toxicity Single Exposure category. |
| Specific target organ toxicity-Repeated exposure | Non-hazardous under Specific Target Organ Systemic Toxicity Repeated Exposure category. |
| Aspiration toxicity | Non-hazardous under Aspiration category. |
| Other information | No data available. |

Agents Classified by IARC Monographs

| | |
|-----------------|---------------|
| Arsenic | IARC Group 1 |
| Ethylene oxide | IARC Group 1 |
| Not applicable | IARC Group 2A |
| Ethyl acrylate | IARC Group 2B |
| 1,4-Dioxane | IARC Group 2B |
| Propylene oxide | IARC Group 2B |

National Toxicity Program (NTP) Status

| | |
|-----------------|---|
| Arsenic | Known Human Carcinogen |
| Ethylene oxide | Known Human Carcinogen |
| 1,4-Dioxane | Reasonably Anticipated To Be A Human Carcinogen |
| Propylene oxide | Reasonably Anticipated To Be A Human Carcinogen |

SECTION 12: Ecological information

12.1. Toxicity

Acute Aquatic ecotoxicity: Non-hazardous under Aquatic Acute Environment category.

Chronic Aquatic ecotoxicity: Non-hazardous under Aquatic Chronic Environment category.

12.2. Persistence and degradability

Biodegrades slowly.

12.3. Bioaccumulative potential

Bioconcentration may occur.

12.4. Mobility in soil

This material is expected to have essentially no mobility in soil. It absorbs strongly to most soil types.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

Not determined

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal Methods

Dispose of according to Federal, State, Local, or Provincial regulations. Recycle used oil.

Waste Disposal Code(s)

Waste Description for Spent Product

Spent or discarded material is non-hazardous according to environmental regulations.

Contaminated packaging:



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SECTION 13: Disposal considerations

Recycle containers whenever possible.
Recycle containers whenever possible.

SECTION 14: Transport information

DOT Basic Description Not classified as hazardous for transport (DOT, TDG, IMO/IMDG, IATA/ICAO).

SECTION 15: Regulatory information

Chemical Inventories

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

U.S. State Restrictions: Not applicable

WHMIS: Uncontrolled product according to WHMIS classification criteria.

| Chemical Name | Regulation | CAS # | % |
|---------------|------------|-------|---|
| None. | CERCLA | | |
| None. | SARA 313 | | |
| None. | SARA EHS | | |
| None. | TSCA 12b | | |

U.S. State Regulations

| Chemical Name | Regulation | CAS # | % |
|---------------|---------------------------------------|-------|---|
| None. | California Prop 65- Cancer | | |
| None. | California Prop 65- Dev. Toxicity | | |
| None. | California Prop 65- Reprod -fem | | |
| None. | California Prop 65- Reprod-male | | |
| None. | Massachusetts RTK List | | |
| None. | New Jersey RTK List | | |
| None. | Pennsylvania RTK List | | |
| None. | Rhode Island RTK List | | |
| None. | Minnesota Hazardous Substance List | | |

HMIS Ratings:

Health: 0
Fire: 1
Reactivity: 0
PPE: B

NFPA Ratings:

Health: 0
Fire: 1
Reactivity: 0

KEY: 0 - Least 1 - Slight 2 - Moderate 3 - High 4 - Extreme

SECTION 16: Other information

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References
ACGIH: American Conference of Governmental Industrial Hygienists
AIHA: American Industrial Hygiene Association
CFR: Code of Federal Regulations
DOT: United States Department of Transportation
GHS: Globally Harmonized System of Classification and Labeling of Chemicals
HMIS: Hazardous Materials Identification System
IARC: International Agency for Research on Cancer



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SECTION 16: Other information

IATA: International Air Transportation Association
IDLH: Immediately Dangerous to Life or Health
IMDG: International Maritime Dangerous Goods
NFPA: National Fire Protection Association
NIOSH: National Institute for Occupational Safety and Health
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration
PEL: Permissible Exposure Limit
RTK: Right-to-Know
SARA: Superfund Amendments and Reauthorization Act
STEL: Short-term Exposure Limit
TLV: Threshold limit value
TSCA: Toxic Substances Control Act
TWA: Time weighted average
UN: United Nations
WHMIS: Workplace Hazardous Materials Information System

Disclaimer

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