



AW Hydraulic Oils ISO 22, 32, 46, 68, 100, 150, 220

Safety Data Sheet

SDS ID: 820434

## Section 1 - PRODUCT AND COMPANY IDENTIFICATION

### Material Name

PROTECT AW Hydraulic Oils, ISO 22, 32, 46, 68, 100, 150, 220

### Product Code

Prefix 31

### Synonyms

Petroleum oil, Petroleum hydrocarbon, lube oil, lubricant.

### Product Use

Hydraulic oil. If this product is used in combination with other products, refer to the Safety Data Sheet for those products.

### Restrictions on Use

None known.

### FOR PRODUCT MANUFACTURED IN THE U.S.A.:

#### MANUFACTURER

Safety-Kleen Systems, Inc.  
42 Longwater Drive  
Norwell, MA 02061-9149  
U.S.A.

#### SUPPLIER (in Canada)

Safety-Kleen Canada, Inc.  
25 Regan Road  
Brampton, Ontario, Canada L7A 1B2

### FOR PRODUCT MANUFACTURED IN CANADA:

#### MANUFACTURER

Safety-Kleen Canada, Inc.  
25 Regan Road  
Brampton, Ontario, L7A 1B2  
Canada

#### SUPPLIER (in the U.S.A.)

Safety-Kleen Systems, Inc.  
42 Longwater Drive  
Norwell, MA 02061-9149  
U.S.A.

[www.safety-kleen.com](http://www.safety-kleen.com)

Phone: 1-800-669-5740

Emergency Phone: 1-800-468-1760

### Issue Date

March 20, 2023

### Supersedes Issue Date

July 9, 2021

### Original Issue Date

July 9, 2021

## Section 2 - HAZARDS IDENTIFICATION

Classification in accordance with Schedule 1 of Canada's Hazardous Products Regulations (HPR) (SOR/2015-17) and paragraph (d) of 29 CFR 1910.1200 in the United States

None needed according to classification criteria.

### GHS Label Elements

#### Symbol(s)

None needed according to classification criteria.

#### Signal Word

None needed according to classification criteria.

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## Hazard Statement(s)

None needed according to classification criteria.

## Precautionary Statement(s)

### Prevention

None needed according to classification criteria.

### Response

None needed according to classification criteria.

### Storage

None needed according to classification criteria.

### Disposal

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

## Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component Name	Percent
64742-58-1	Lubricating oils, petroleum, hydrotreated spent	9-99
64742-62-7	Residual oils (petroleum), solvent dewaxed	0-71
68649-42-3	Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	0.2-0.55
128-39-2	2,6-Di-tert-butylphenol	0.085-0.17
72623-85-9	Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based, high-viscosity	0.085-0.17

## Section 4 - FIRST AID MEASURES

### Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical attention if needed.

### Skin

IF ON SKIN: Wash with plenty of soap and water. Get medical attention if needed.

### Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Get medical attention if needed.

### Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.

### Most Important Symptoms/Effects

#### Acute

No information on significant adverse effects.

#### Delayed

Repeated exposure may cause skin dryness or cracking.

### Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively. Treatment may vary with condition of victim and specifics of incident.

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## Section 5 - FIRE FIGHTING MEASURES

### Extinguishing Media

#### Suitable Extinguishing Media

Carbon dioxide, dry chemical, regular foam, water spray, water fog. Water or foam may cause frothing.

#### Unsuitable Extinguishing Media

Do not use high pressure water streams.

### Special Hazards Arising from the Chemical

Negligible fire hazard.

### Hazardous Combustion Products

Decomposition and combustion materials may be toxic. Burning may produce aldehydes, hydrogen sulfide, alkyl mercaptans, sulfides, nitrogen oxides, phosphorus oxide, sulfur oxides, carbon monoxide, unidentified organic compounds.

### Fire Fighting Measures

Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Stay away from the ends of tanks. Keep unnecessary people away, isolate hazard area and deny entry.

### Special Protective Equipment and Precautions for Firefighters

A positive-pressure, self-contained breathing apparatus (SCBA) and full-body protective equipment are required for fire emergencies.

## Section 6 - ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8.

### Methods and Materials for Containment and Cleaning Up

Remove all ignition sources. Do not touch or walk through spilled products. Stop leak if you can do it without risk. Wear protective equipment and provide engineering controls as specified in SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. Contain spill away from surface water and sewers. Contain spill as a liquid for possible recovery or absorb with compatible sorbent material and shovel with a clean, sparkproof tool into a sealable container for disposal. Additionally, for large spills: Dike far ahead of liquid spill for collection and later disposal.

## Section 7 - HANDLING AND STORAGE

### Precautions for Safe Handling

Keep away from sparks or flame. Where flammable mixtures may be present, equipment safe for such locations should be used. Use clean tools and explosion-proof equipment. When transferring large volumes of product, metal containers, including trucks and tank cars, should be grounded and bonded. These products have a low vapor pressure and are not expected to present an inhalation hazard under normal temperatures and pressures. However, when aerosolizing, misting, or heating these products, do not breathe vapor or mist. Use in a well ventilated area. Avoid contact with eyes, skin, clothing, shoes.

### Conditions for Safe Storage, Including any Incompatibilities

None needed according to classification criteria.

Keep container tightly closed when not in use and during transport. Store containers in a cool, dry place. Do not pressurize, cut, weld, braze, solder, drill, or grind containers. Keep containers away from heat, flame, sparks, static electricity, or other sources of ignition. Empty product containers may retain product residue and can be dangerous.

### Incompatible Materials

Acids, oxidizing agents, reducing agents.

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## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

### Component Exposure Limits

Canada, ACGIH, OSHA, and NIOSH have not developed exposure limits for any of this product's components.

### ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI)

There are no biological limit values for any of this product's components.

### Engineering Controls

Provide general ventilation. Where adequate general ventilation is unavailable, use process enclosures, local exhaust ventilation, or other engineering controls.

### Individual Protection Measures, such as Personal Protective Equipment

#### Eye/face protection

Wear safety glasses. Additional protection like goggles, face shields, or respirators may be needed dependent upon anticipated use and concentrations of mists or vapors. Eye wash fountain and emergency showers are recommended. Contact lens use is not recommended.

#### Respiratory Protection

A respiratory protection program which meets USA's OSHA General Industry Standard 29 CFR 1910.134 or Canada's CSA Standard Z94.4-M1982 requirements must be followed whenever workplace conditions warrant a respirator's use. Consult a qualified Industrial Hygienist or Safety Professional for respirator selection guidance.

#### Glove Recommendations

Where skin contact is likely, wear neoprene, nitrile, or equivalent protective gloves; use of natural rubber or equivalent gloves is not recommended. To avoid prolonged or repeated contact where spills and splashes are likely, wear appropriate chemical-resistant faceshield, boots, apron, coveralls, long sleeve shirts, or other protective clothing. When product is heated and skin contact is likely, wear heat-resistant gloves, boots, and other protective clothing.

#### Protective Materials

Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to regulatory requirements. The following PPE should be considered the minimum required: Safety glasses, Gloves, and Lab coat or apron.

## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Amber, red, blue to green liquid.	<b>Physical State</b>	Liquid
<b>Odor</b>	petroleum	<b>Color</b>	Amber, red, blue to green
<b>Odor Threshold</b>	Not available	<b>pH</b>	Not available
<b>Melting Point</b>	Not available	<b>Boiling Point</b>	246 °C (475 °F Minimum )
<b>Boiling Point Range</b>	Not available	<b>Freezing point</b>	Not available
<b>Evaporation Rate</b>	Not available	<b>Flammability (solid, gas)</b>	Not available
<b>Autoignition Temperature</b>	Not available	<b>Flash Point</b>	165 °C (329 °F Minimum )
<b>Lower Explosive Limit</b>	Not available	<b>Decomposition temperature</b>	Not available

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<b>Upper Explosive Limit</b>	Not available	<b>Vapor Pressure</b>	<0.1 mmHg @ 68 °F (20° C )
<b>Vapor Density (air=1)</b>	Not available	<b>Specific Gravity (water=1)</b>	0.88 (Approximate Water = 1 )
<b>Water Solubility</b>	(Insoluble )	<b>Partition coefficient: n-octanol/water</b>	Not available
<b>Viscosity</b>	>20.5 mm <sup>2</sup> /s 40 °C (104 °F )	<b>Kinematic viscosity</b>	Not available
<b>Solubility (Other)</b>	Not available	<b>Density</b>	7.3 lb/gal (US Approximate )
<b>Pour Point</b>	-6 °C (21 °F Maximum )	<b>Volatile Organic Compounds (As Regulated)</b>	Negligible, as per 40 CFR 51.100(s)
<b>Molecular Weight</b>	Not available		

## Section 10 - STABILITY AND REACTIVITY

### Chemical Stability

Stable under normal temperatures and pressures.

### Possibility of Hazardous Reactions

Polymerization is not known to occur under normal temperature and pressures. Not reactive with water.

### Conditions to Avoid

Avoid sparks or flame.

### Incompatible Materials

Acids, oxidizing agents, reducing agents.

### Hazardous decomposition products

None under normal temperatures and pressures. See also SECTION 5: HAZARDOUS COMBUSTION PRODUCTS.

## Section 11 - TOXICOLOGICAL INFORMATION

### Information on Likely Routes of Exposure

#### Inhalation

No information on significant adverse effects.

#### Skin Contact

Prolonged or repeated skin contact may cause skin dryness or cracking.

#### Eye Contact

No information on significant adverse effects.

#### Ingestion

May be harmful if swallowed.

### Acute and Chronic Toxicity

#### Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

**Lubricating oils, petroleum, hydrotreated spent (64742-58-1)**

Oral LD50 Rat >2000 mg/kg; Dermal LD50 Rabbit >4480 mg/kg

**Residual oils (petroleum), solvent dewaxed (64742-62-7)**

Oral LD50 Rat >5000 mg/kg; Dermal LD50 Rabbit >2000 mg/kg; Inhalation LC50 Rat 2.18 mg/L 4 h

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## 2,6-Di-tert-butylphenol (128-39-2)

Oral LD50 Rat >5000 mg/kg; Dermal LD50 Rabbit >10 g/kg

## Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based, high-viscosity (72623-85-9)

Oral LD50 Rat >5000 mg/kg; Dermal LD50 Rabbit >2000 mg/kg; Inhalation LC50 Rat 2.18 mg/L 4 h

### Product Toxicity Data

#### Acute Toxicity Estimate

Oral	> 2000 mg/kg
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#### Immediate Effects

No information on significant adverse effects.

#### Delayed Effects

No information on significant adverse effects.

#### Irritation/Corrosivity Data

May cause slight skin or respiratory irritation.

#### Respiratory Sensitization

Based on best current information, there is no known human sensitization associated with these products.

#### Dermal Sensitization

Based on best current information, there is no known human sensitization associated with this product.

#### Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, NTP, DFG or OSHA.

#### Germ Cell Mutagenicity

Based on best current information, there is no known mutagenicity associated with this product.

#### Tumorigenic Data

No information is available for the product.

#### Reproductive Toxicity

Based on best current information, there is no known reproductive toxicity associated with this product.

#### Specific Target Organ Toxicity - Single Exposure

No target organs identified.

#### Specific Target Organ Toxicity - Repeated Exposure

No target organs identified.

#### Aspiration hazard

No information available for the product.

#### Medical Conditions Aggravated by Exposure

Individuals with pre-existing respiratory tract (nose, throat, and lungs), eye, and/or skin disorders may have increased susceptibility to the effects of exposure.

## Section 12 - ECOLOGICAL INFORMATION

#### Ecotoxicity

Harmful to aquatic life with long lasting effects.

#### Component Analysis - Aquatic Toxicity

Residual oils (petroleum), solvent dewaxed	64742-62-7
Fish:	LC50 96 h Oncorhynchus mykiss >5000 mg/L
Invertebrate:	EC50 48 h Daphnia magna >1000 mg/L IUCLID
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	68649-42-3

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Fish:	LC50 96 h Pimephales promelas 1 - 5 mg/L [static ]; LC50 96 h Pimephales promelas 10 - 35 mg/L [semi-static ]
Invertebrate:	EC50 48 h Daphnia magna 1 - 1.5 mg/L IUCLID
<b>2,6-Di-tert-butylphenol</b>	<b>128-39-2</b>
Invertebrate:	EC50 48 h Daphnia magna 0.45 mg/L IUCLID
<b>Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based, high-viscosity</b>	<b>72623-85-9</b>
Fish:	LC50 96 h Oncorhynchus mykiss >5000 mg/L
Invertebrate:	EC50 48 h Daphnia magna >1000 mg/L IUCLID

## Persistence and Degradability

No information available for the product.

## Bioaccumulative Potential

No information available for the product.

## Mobility

No information available for the product.

## Other Toxicity

No additional information is available.

## Section 13 - DISPOSAL CONSIDERATIONS

### Disposal Methods

Dispose in accordance with federal, state, provincial, and local regulations. The responsibility for proper waste disposal lies with the owner of the waste. Processing, use, or contamination by the user may change the waste code applicable to the disposal of this product. Regulations may also apply to empty containers. Contact Safety-Kleen regarding proper recycling or disposal.

### Component Waste Numbers

The U.S. EPA has not published waste numbers for this product's components.

## Section 14 - TRANSPORT INFORMATION

**US DOT Information:** Not regulated for transport.

**IATA Information:** Not regulated for transport.

**IMDG Information:** Not regulated for transport.

**TDG Information:** Not regulated for transport.

### International Bulk Chemical Code

This material does not contain any chemicals required by the IBC Code to be identified as dangerous chemicals in bulk.

## Section 15 - REGULATORY INFORMATION

### Canada Regulations

#### CEPA - Priority Substances List

None of this product's components are on the list.

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**Ozone Depleting Substances**

None of this product's components are on the list.

**Council of Ministers of the Environment - Soil Quality Guidelines**

None of this product's components are on the list.

**Council of Ministers of the Environment - Water Quality Guidelines**

None of this product's components are on the list.

**U.S. Federal Regulations**

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

<b>Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts</b>	<b>68649-42-3</b>
SARA 313:	1 % de minimis concentration (related to Zinc compounds)

**SARA Section 311/312 (40 CFR 370 Subparts B and C) reporting categories**

No hazard categories applicable.

**U.S. State Regulations**

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
<b>Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts</b>	<b>68649-42-3</b>	Yes	No	No	Yes	Yes

**California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)**

Not listed under California Proposition 65.

**Component Analysis - Inventory**

**Lubricating oils, petroleum, hydrotreated spent (64742-58-1)**

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	No	No	Yes	No
KR - REACH CCA		MX	NZ	PH	TH-TECI	TW	VN (Draft)	
No		Yes	Yes	Yes	No	Yes	Yes	

**Residual oils (petroleum), solvent dewaxed (64742-62-7)**

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	No	No	Yes	No
KR - REACH CCA		MX	NZ	PH	TH-TECI	TW	VN (Draft)	
No		Yes	Yes	Yes	Yes	Yes	Yes	



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**Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (68649-42-3)**

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	No	No	Yes	No
KR - REACH CCA			MX	NZ	PH	TH-TECI	TW	VN (Draft)
No			Yes	Yes	Yes	No	Yes	Yes

**2,6-Di-tert-butylphenol (128-39-2)**

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	Yes	Yes	Yes	No
KR - REACH CCA			MX	NZ	PH	TH-TECI	TW	VN (Draft)
No			Yes	Yes	Yes	Yes	Yes	Yes

**Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based, high-viscosity (72623-85-9)**

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
Yes	DSL	Yes	Yes	EIN	No	No	Yes	No
KR - REACH CCA			MX	NZ	PH	TH-TECI	TW	VN (Draft)
No			No	Yes	Yes	No	Yes	Yes

## Section 16 - OTHER INFORMATION

**NFPA Ratings**

Health: 1 Fire: 1 Instability: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

**Summary of Changes**

Regulatory review and update.

**Key / Legend**

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CA/MA/MN/NJ/PA - California/Massachusetts/Minnesota/New Jersey/Pennsylvania\*; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CFR - Code of Federal Regulations (US); CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EC – European Commission; EEC - European Economic Community; EIN - European Inventory of (Existing Commercial Chemical Substances); EINECS - European Inventory of Existing Commercial Chemical Substances; ENCS - Japan Existing and New Chemical Substance Inventory; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; F - Background (for Venezuela Biological Exposure Indices); IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; ISHL - Japan Industrial Safety and Health Law; IUCLID - International Uniform Chemical Information Database; JP - Japan; Kow - Octanol/water partition

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coefficient; KR KECI Annex 1 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL); KR KECI Annex 2 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL) , KR - Korea; LD50/LC50 - Lethal Dose/ Lethal Concentration; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; MX – Mexico; Ne- Non-specific; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; Nq - Non-quantitative; NSL – Non-Domestic Substance List (Canada); NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PEL- Permissible Exposure Limit; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; Sc - Semi-quantitative; STEL - Short-term Exposure Limit; TCCA – Korea Toxic Chemicals Control Act; TDG - Transportation of Dangerous Goods; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act; TW – Taiwan; TWA - Time Weighted Average; UEL - Upper Explosive Limit; UN/NA - United Nations /North American; US - United States; VLE - Exposure Limit Value (Mexico); VN (Draft) - Vietnam (Draft); WHMIS - Workplace Hazardous Materials Information System (Canada).

## **Other Information**

### **Disclaimer:**

User assumes all risks incident to the use of this product. To the best of our knowledge, the information contained herein is accurate. However, Safety-Kleen assumes no liability whatsoever for the accuracy or completeness of the information contained herein. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to the information or the product to which the information refers. The data contained on this sheet apply to the product as supplied to the user.