

SAFETY DATA SHEET

All Season Hydraulic Oil ISO-22, Oil ISO-32, Oil ISO-46

Section 1. Identification			: 03/15/2014 : 3
GHS product identifier	: All Season Hydraulic Oil ISO-22, Oil ISO-32, Oil ISO-46		
Code	: HAS22, HAS32, HAS46		
Product type	: Liquid.		
Identified uses			
Lubricating oil. Not to be mi	sted.		
Supplier's details	: SEVERUS INC. 1101 Susquehanna Ave Superior, WI 54880		
Emergency telephone number (with hours of operation)	: CHEMTREC, U.S. : 1-800-424-9300 International: +1-70 (24/7)	3-527-3887	

Section 2. Hazards identification

OSHA/HCS status	: While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.
Classification of the substance or mixture	: Not classified.
	Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 6% Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 11%
GHS label elements	
Signal word	: No signal word.
Hazard statements	: No known significant effects or critical hazards.
Precautionary statements	
Prevention	: Not applicable.
Response	: Not applicable.
Storage	: Not applicable.
Disposal	: Not applicable.
Hazards not otherwise classified	: None known.

CAS number

128-39-2

Section 3. Composition/information on ingredients

Substance/mixture	1	Mixture
Other means of identification	:	Not available.
CAS number/other identifiers	2	
CAS number	1	Not applicable.
Product code	1	HAS22, HAS32, HAS46
United States		
Ingredient name		
2,6-Di-tert-butylphenol		

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

%

0.1 - 1

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

t aid measures
 Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Maintain an open airway. Get medical attention if symptoms occur.
 Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
: Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.

Potential acute health	effects
Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Over-exposure signs/s	symptoms

Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.

Indication of immediate med	lical attention and special treatment needed, if necessary
Notes to physician	: Treat symptomatically.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No special protection is required.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	: No specific fire or explosion hazard.
Hazardous thermal decomposition products	: No specific data.
Special protective actions for fire-fighters	: No special protection is required.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures			
For non-emergency personnel	Put on appropriate personal protective equipment.		
For emergency responders	If specialised clothing is required to deal with the spillage, take note of any information Section 8 on suitable and unsuitable materials. See also the information in "For emergency personnel".		
Environmental precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, dra and sewers. Inform the relevant authorities if the product has caused environmen pollution (sewers, waterways, soil or air).		

Methods and materials for containment and cleaning up

Spill

: Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling		
Protective measures	:	Put on appropriate personal protective equipment (see Section 8). Avoid contact with used product. Do not reuse container.
Advice on general occupational hygiene	:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	:	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Under conditions which may generate mists, the following exposure limits are recommended: ACGIH TLV TWA: 5 mg/m³; STEL: 10 mg/m³.

Appropriate engineering controls Environmental exposure controls		Good general ventilation should be sufficient to control worker exposure to airborne contaminants. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.
Individual protection measur	<u>es</u>	
Hygiene measures	:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	:	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
Skin protection		
Hand protection	:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection	 Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

<u>Appearance</u>		
Physical state	:	Liquid.
Color	1	Straw.
Odor	1	Mild hydrocarbon.
Odor threshold	1	Not available.
рН	1	Not available.
Melting point / Pour point	1	-48 to -43°C (-54.4 to -45.4°F)
Boiling point	1	Not available.
Flash point	1	Open cup: 224 to 244°C (435.2 to 471.2°F) [Cleveland.]
Evaporation rate	1	Not available.
Flammability (solid, gas)	1	Not available.
Lower and upper explosive (flammable) limits	:	Not available.
Vapor pressure	:	Not available.
Vapor density	1	Not available.
Relative density	1	0.8418 to 0.8509
Solubility	1	Not available.
Partition coefficient: n- octanol/water	:	Not available.
Auto-ignition temperature	:	Not available.
Decomposition temperature	:	Not available.
Viscosity	:	Kinematic: 0.053 to 0.085 cm²/s (5.3 to 8.5 cSt) (100°C) Kinematic: 0.239 to 0.47 cm²/s (23.9 to 47 cSt) (40°C)

Section 10. Stability and reactivity

Reactivity	No specific test data related to reactivity available for this product or its ingredier	nts.
Chemical stability	The product is stable.	

Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Product/ingredient name	Result	Spec	ies	Dose	Exposure	
2,6-Di-tert-butylphenol	LD50 Dermal LD50 Oral	Rabbit Rat		>10 g/kg 1320 mg/kg	-	
Irritation/Corrosion						
Product/ingredient name	Result	Species	Score	Exposure	Observation	
2,6-Di-tert-butylphenol	Skin - Moderate irritant	Rat	-	0.5 mL	-	
Sensitization			I		1	
There is no data available.						
Carcinogenicity						
There is no data available.						
Specific target organ toxicit	t <u>y (single exposure)</u>					
There is no data available.						
Specific target organ toxicit	t <u>y (repeated exposure)</u>					
There is no data available.						
Aspiration hazard						
There is no data available.						
nformation on the likely outes of exposure	: Dermal contact. Eye c	ontact. Inhalatior	n. Ingestion	n.		
Potential acute health effects	5					
Eye contact	: No known significant e	effects or critical I	nazards.			
Inhalation	: No known significant e	effects or critical I	nazards.			
Skin contact	: No known significant e	effects or critical I	nazards.			
Ingestion	: No known significant e	effects or critical I	nazards.			
Symptoms related to the phy	vsical, chemical and toxic	cological charac	<u>teristics</u>			
Eye contact	: No known significant e	effects or critical I	nazards.			
Inhalation	: No known significant e		nazards.			

Ingestion

: No known significant effects or critical hazards.

Delayed and immediate effect	S	and also chronic effects from short and long term exposure
Short term exposure		
Potential immediate effects	:	No known significant effects or critical hazards.
Potential delayed effects	:	No known significant effects or critical hazards.
<u>Long term exposure</u>		
Potential immediate effects	:	No known significant effects or critical hazards.
Potential delayed effects	:	No known significant effects or critical hazards.
Potential chronic health effe	ct	<u>s</u>
General	:	No known significant effects or critical hazards.
Carcinogenicity	:	No known significant effects or critical hazards.
Mutagenicity	:	No known significant effects or critical hazards.
Teratogenicity	:	No known significant effects or critical hazards.
Developmental effects	:	No known significant effects or critical hazards.
Fertility effects	:	No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

There is no data available.

Section 12. Ecological information

Toxicity

There is no data available.

Persistence and degradability

There is no data available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
2,6-Di-tert-butylphenol	4.5	-	high

Mobility in soil

Soil/water partition coefficient (Koc)	:	There is no data available.
Other adverse effects	:	No known significant effects or critical hazards.

Section 13. Disposal considerations

: The generation of waste should be avoided or minimized wherever possible. Disposal **Disposal methods** of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Additional information	-	-	-

AERG : Not applicable.

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not available. to Annex II of MARPOL 73/78 and the IBC Code

Section 15. Regulatory information

U.S. Federal regulations	:	 TSCA 8(a) PAIR: Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts; Diphenylamine; Naphthalene TSCA 8(a) CDR Exempt/Partial exemption: Not determined United States inventory (TSCA 8b): All components are listed or exempted. Clean Water Act (CWA) 307: Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zin salts; Arsenic; Naphthalene Clean Water Act (CWA) 311: Naphthalene 						ted.
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	:	Not liste	d					
Clean Air Act Section 602 Class I Substances	:	Not liste	d					
Clean Air Act Section 602 Class II Substances	:	Not liste	d					
DEA List I Chemicals (Precursor Chemicals)	:	Not liste	d					
DEA List II Chemicals (Essential Chemicals)	:	Not liste	d					
SARA 302/304 No products were found. SARA 304 RQ SARA 311/312	:	Not app	licable.					
Classification	:	Immedia	ate (acute)) health haza	rd			
Composition/information	on	<u>ingredie</u>	<u>nts</u>					
Name			%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
2,6-Di-tert-butylphenol			0.1 - 1	No.	No.	No.	Yes.	No.

State regulations

Massachusetts

: The following components are listed: Distillates, hydrotreated light paraffinic

New York

- : None of the components are listed.
- **New Jersey**

Pennsylvania

- : The following components are listed: Distillates, hydrotreated heavy paraffinic; Distillates, hydrotreated light paraffinic
- : None of the components are listed.

California Prop. 65

WARNING: This product contains less than 0.1% of a chemical known to the State of California to cause cancer.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level	
Paraffin oils Arsenic Naphthalene Ethyl acrylate	Yes. Yes. Yes. Yes.	No. No. No. No.	No. 0.06 µg/day (inhalation) Yes. No.	No. No. No. No.	
ternational regulations Chemical Weapon Convention	n List Schedules I. II &	III Chemicals			
Ingredient name		.ist name		Status	
Not listed.					
Montreal Protocol (Annexes A	<u>, B, C, E)</u>				
Ingredient name	L	.ist name		Status	
Not listed.					
Stockholm Convention on Per	sistent Organic Pollu	tants			
Ingredient name	L	.ist name		Status	
Not listed.					
Rotterdam Convention on Prie	or Inform Consent (Pl	<u>C)</u>		I	
Ingredient name	L	.ist name		Status	
Not listed.					
JNECE Aarhus Protocol on P	OPs and Heavy Metals	2		I	
Ingredient name	L	ist name		Status	
Not listed.					

Section 16. Other information

<u>History</u>		
Date of issue mm/dd/yyyy	:	03/15/2014
Date of previous issue	:	11/15/2013
Version	:	3
Prepared by	:	SEVERUS INC.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.