

Conforms to ANSI Z400.1-2004 Standard (United States, Canada).

Material Safety Data Sheet

Synthetic Anti-Wear Hydraulic Oil ISO-22

Section 1. Product and company identification			: 05/15/2012 : 3
Product name	Code		

Synthetic Anti-Wear Hydraulic Oil ISO-22 **Material uses**

Lubricating Fluid. Not to be misted.

Supplier/Manufacturer AMSOIL INC.

925 Tower Avenue Superior, WI 54880

Code

AWG **MSDS** authored by

AMSOIL INC.

In case of emergency CHEMTREC, U.S. : 1-800-424-9300 International: +1-703-527-3887

Section 2. Hazards identification

Emergency overview		
Color	Straw. [Light]	
Physical state	Liquid.	
Odor	Mild hydrocarbon.	
Signal word	CAUTION!	
Hazard statements	MAY CAUSE EYE AND SKIN IRRITATION.	
Precautions	Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Wash horoughly after handling.	
OSHA/HCS status	While this material is not considered hazardous by the OSHA Hazard Communica Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.	
Routes of entry	Dermal contact. Eye contact. Inhalation. Ingestion.	
Potential acute health effect		
Inhalation	No known significant effects or critical hazards.	
Ingestion	No known significant effects or critical hazards.	
Skin	Slightly irritating to the skin.	
Eyes	Slightly irritating to the eyes.	
Potential chronic health effe		
Chronic effects	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.	
Over-exposure signs/symp		
Inhalation	No specific data.	
Ingestion	No specific data.	
Skin	Adverse symptoms may include the following: irritation redness	

Eyes	: Adverse symptoms may include the following: irritation watering redness
Medical conditions aggravated by overexposure See toxicological information (Section	: None known. n 11)

Section 3. Composition/information on ingredients

There are no 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.

Section 4. First aid measures

Eye contact	: Immediately flush eyes with plenty of water for at least 20 minutes, occasionally lifting the upper and lower eyelids. Get medical attention if symptoms occur.
Skin contact	: After contact with skin, wash immediately with plenty of soap and water. Get medical attention if symptoms occur.
Inhalation	: Move exposed person to fresh air.
Ingestion	: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.
Notes to physician	: No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Section 5. Fire-fighting measures

Flammability of the product Extinguishing media	: No specific fire or explosion hazard.
Suitable	: Use an extinguishing agent suitable for the surrounding fire.
Not suitable	: None known.
Hazardous decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide
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 Environmental precautions	 Put on appropriate personal protective equipment (see Section 8). Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods for cleaning up	
Small spill	: Absorb with an inert dry material and place in an appropriate waste disposal container. Dispose via a licensed waste disposal contractor.

Large spill

: 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. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

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Section 7. Handling and storage

Handling	: Put on appropriate personal protective equipment (see Section 8). Avoid contact with used product. 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. Avoid contact with eyes, skin and clothing. Empty containers retain product residue and can be hazardous. Do not reuse container.
Storage	: 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

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

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures	:	Personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.
Engineering measures	:	No special ventilation requirements. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
Hygiene measures	:	Ensure that eyewash stations and safety showers are close to the workstation location. 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.
Respiratory	:	Not required under normal conditions of use. 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. Ensure a MSHA/NIOSH-approved respirator or equivalent is used.
Hands	:	Use gloves appropriate for work or task being performed. Recommended: Natural rubber (latex).
Eyes	:	Safety eyewear should be used when there is a likelihood of exposure. Recommended: Safety glasses with side shields.
Skin	:	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. No special protective clothing is required. Recommended: Coveralls.
Environmental exposure controls	:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Section 9. Physical and chemical properties

Physical state	: Liquid.	Odor	: Mild hydrocarbon.
Color	: Straw. [Light]	рН	: Not available.
Flash point	: Open cup: 174°C (345.2°F) [Cleveland.]	Auto-ignition temperature	: Not available.
Flammable limits	: Not available.	Melting point/ Pour point	: <-60°C (<-76°F)
Boiling point	: Not available.	Vapor pressure	: Not available.
Relative density	: 0.8363	Vapor density	: Not available.
Volatility	: Not available.	Evaporation rate	: Not available.
Viscosity	: Kinematic:0.059 cm²/s (5.9 cSt) (100°C (212° F)) Kinematic:0.207 cm²/s (20.7 cSt) (40°C)	Solubility	: Not available.

Section 10. Stability and reactivity

Chemical stability	: The product is stable.
Conditions to avoid	: No specific data.
Materials to avoid	: 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.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Hazardous polymerization	: Under normal conditions of storage and use, hazardous polymerization will not occur.

Section 11. Toxicological information

Acute toxicity There is no data available. Chronic toxicity There is no data available.	
Irritation/Corrosion	
Skin	: There is no data available.
Eyes	: There is no data available.
Respiratory	: There is no data available.
<u>Sensitizer</u>	
Skin	: There is no data available.
Respiratory	: There is no data available.
Carcinogenicity	
There is no data available.	
Mutagenicity	
There is no data available.	
Teratogenicity	

There is no data available. Reproductive toxicity

There is no data available.

Section 12. Ecological information

Ecotoxicity

: No known significant effects or critical hazards.

Aquatic ecotoxicity

There is no data available.

Persistence/degradability

There is no data available.

Section 13. Disposal considerations

Waste disposal

: The generation of waste should be avoided or minimized wherever possible. This material and its container must be disposed of in a safe way. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Empty containers or liners may retain some product residues. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

Section 14. Transport information

DOT/TDG/IMDG/IATA : Not regulated.

Section 15. Regulatory information

United States	
HCS Classification	: Not regulated.
U.S. Federal regulations	: United States inventory (TSCA 8b): Not determined.
	SARA 302/304/311/312 extremely hazardous substances: No products were found. SARA 302/304 emergency planning and notification: No products were found. SARA 302/304/311/312 hazardous chemicals: No products were found. SARA 311/312 MSDS distribution - chemical inventory - hazard identification: No products were found.
	Clean Water Act (CWA) 307 : Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts; Zinc bis(dinonylnaphthalenesulphonate)
Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)	: Not listed
Clean Air Act Section 602 Class I Substances	: Not listed

Clean Air Act Section 602 Class II Substances	:	Not listed
DEA List I Chemicals (Precursor Chemicals)	:	Not listed
DEA List II Chemicals (Essential Chemicals)	:	Not listed
State regulations		
Massachusetts	:	The following components are listed: Distillates (petroleum), hydrotreated light naphthenic
New York	1	None of the components are listed.
New Jersey	1	None of the components are listed.
Pennsylvania	1	None of the components are listed.
<u>California Prop. 65</u>		
No products were found.		
<u>Canada</u>		
WHMIS (Canada)	1	Not controlled under WHMIS (Canada).
Canadian lists		
Canadian NPRI	1	None of the components are listed.
CEPA Toxic substances	1	None of the components are listed.
Canada inventory	1	Not determined.
This product has been classified in a	200	ordance with the bazard criteria of the Controlled Products Regulations and the MSDS contains all the

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Section 16. Other information

<u>United States</u> Label requirements	: MAY CAUSE EYE AND SKIN IF	RRITATION.			
Hazardous Material Information System (U.S.A.)	:	1 Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing			
	Health	minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the			
	Flammability	1 preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint &			
	Physical hazards	O Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.			
		The customer is responsible for determining the PPE code for this material.			
National Fire Protection Association (U.S.A.)	:				
Health Flammability Special					
Date of issue	: 05/15/2012				
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Version	: 3				

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.