SAFETY DATA SHEET

Issuing Date 11-12-2019 Revision Date 11-12-2019 Revision Number 1

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Identifier

Product Name AWARD Synthetic Hydraulic Fluid HD 46

Other means of identification

Product Code(s) PHY0153AB

Synonyms No information available

Recommended use of the chemical and restrictions on use

Identified uses Lubricant

Restrictions on use Consumer use

Details of the supplier of the safety data sheet

Initial Supplier Identifier Manufacturer

AFD Petroleum Ltd. 1444 78 Avenue NW

Edmonton, AB Canada T6P 1L7

afdpetroleum.com

Emergency Telephone Number

Emergency Telephone Number CHEMTREC: 1-800-424-9300 (NORTH AMERICA)

+1-703-527-3887 (INTERNATIONAL)

2. HAZARDS IDENTIFICATION

Classification

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

Label Elements

Hazard statements

Not classified.

Other Information

not applicable

AWARD Synthetic Hydraulic Fluid HD 46

Issuing Date 11-12-2019 Revision Date 11-12-2019 Revision Number 1

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical name	CAS No.	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated	68037-01-4	80 - 90%	-	

The producer of "PHY0153AB" declares that it contains less than 3% DMSO extractable material by IP-346

4. FIRST AID MEASURES

First Aid Measures

Inhalation Remove to fresh air. If not breathing, give artificial respiration.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Consult a physician if necessary.

Ingestion Do NOT induce vomiting. Drink plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms None known.

Indication of any immediate medical attention and special treatment needed

 Page 3/9

SDS: PHY0153AB

AWARD Synthetic Hydraulic Fluid HD 46

Issuing Date 11-12-2019 Revision Date 11-12-2019 Revision Number 1

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media Water spray. Carbon dioxide (CO2). Foam. Dry chemical.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the

chemical

Thermal decomposition can lead to release of irritating gases and vapors.

Explosion Data

Sensitivity to mechanical impact None.

Sensitivity to static discharge May be ignited by friction, heat, sparks or flames.

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout

gear. Use personal protection equipment.

NFPA Health hazard 1 Flammability 1 Stability 1

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Do not touch damaged packages or spilled material. Wear protective gloves/protective

clothing and eye/face protection. Ensure adequate ventilation. Remove all sources of

ignition.

Other information Refer to protective measures listed in Sections 7 and 8. See Section 12 for additional

Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so. Absorb with earth, sand or other

non-combustible material and transfer to containers for later disposal.

Methods for cleaning upUse personal protective equipment as required. Take up mechanically, placing in

appropriate containers for disposal. Clean contaminated surface thoroughly.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or

smoke when using this product. See section 8 for more information.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible products. Strong oxidizing agents. Strong acids. Strong bases.

AWARD Synthetic Hydraulic Fluid HD 46

Issuing Date 11-12-2019 Revision Date 11-12-2019 Revision Number 1

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational

exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection No special protective equipment required.

Hand protection No special protective equipment required.

Skin and body protectionNo special protective equipment required.

exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

AWARD Synthetic Hydraulic Fluid HD 46

Issuing Date 11-12-2019 Revision Date 11-12-2019 Revision Number 1

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state liquid appearance green

ColorNo information availableOdorNo information availableOdor thresholdNo information available

<u>Property</u> <u>Property</u>

Remarks • 1 litre of liquid placed under atmospheric pressure gives a volume of vapour of approximately ? litres.

pH VALUE 6-8

Melting Point / Freezing Point

Boiling Point/Range

No data available

No data available

No data available

246 °C / 475 °F

Flashpoint Method

No information available

Evaporation rateNo data availableFlammability (solid, gas)No data availableFlammability Limits in AirNo data availableUpper flammability limit:No data available

Lower Flammability Limit No data available

Vapor pressure
No data available
Vapor Density
No data available

Relative Density 0.837
Water solubility negligible

Solubility in other solvents

Partition coefficient: n-octanol/water

Autoignition Temperature

Decomposition Temperature

Viscosity, kinematic

Viscosity, dynamic

No data available
No data available
46.5 cSt @ 40°C
No data available

Other information

Explosive propertiesNo information available.Oxidizing propertiesNo information available.Softening PointNo information availableDensity VALUENo data availableBulk DensityNo data available

10. STABILITY AND REACTIVITY

Reactivity No information available.

Chemical stability Stable under recommended storage conditions.

Possibility of Hazardous Reactions None under normal processing.

Conditions to Avoid Heat, flames and sparks. Contact with other chemicals.

Incompatible Materials Strong oxidizing agents, strong acids, and strong bases.

Hazardous Decomposition Products Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

AWARD Synthetic Hydraulic Fluid HD 46

Issuing Date 11-12-2019 Revision Date 11-12-2019 Revision Number 1

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation May cause irritation of respiratory tract.

Eye contact May cause eye irritation with susceptible persons.

Skin contact May cause sensitization in susceptible persons.

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Information on toxicological effects

Symptoms No information available.

Acute Toxicity

Numerical measures of toxicity

No information available

Unknown acute toxicity No information available

Component Information No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

The producer of "PHY0153AB" declares that it contains less than 3% DMSO extractable material by IP-346

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposureNo information available.

Aspiration hazard No information available.

AWARD Synthetic Hydraulic Fluid HD 46

Issuing Date 11-12-2019 Revision Date 11-12-2019 **Revision Number** 1

12. ECOLOGICAL INFORMATION

Ecotoxicity The environmental impact of this product has not been fully investigated.

Persistence and Degradability No information available. No information available.

Other Adverse Effects No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Bioaccumulation

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

Do not reuse empty containers. Empty containers should be taken to an approved waste Contaminated packaging

handling site for recycling or disposal.

14. TRANSPORT INFORMATION

TDG Not regulated

Not regulated **DOT**

AWARD Synthetic Hydraulic Fluid HD 46

Issuing Date 11-12-2019 Revision Date 11-12-2019 Revision Number 1

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer not applicable

The Stockholm Convention on Persistent Organic Pollutants not applicable

The Rotterdam Convention not applicable

International Inventories

TSCA Complies **DSL/NDSL** Complies Not determined **EINECS/ELINCS** Not determined **ENCS IECSC** Not determined **KECL** Not determined **PICCS** Not determined Not determined **AICS**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

NFPA Health hazard 1 Flammability 1 Stability 1

AWARD Synthetic Hydraulic Fluid HD 46

Issuing Date 11-12-2019 Revision Date 11-12-2019 Revision Number 1

16. OTHER INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA: Time weighted average STEL: Short term exposure limit

Ceiling: Maximum limit value: * Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA) EPA (Environmental Protection Agency) Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

Issuing Date 11-12-2019

Revision Date 11-12-2019

Revision Note Initial Release.

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet