

MATERIAL SAFETY DATA SHEET

Product: ThixO SYN MARYN Aviation Grease

Revision Date: 20 April 2012 Version: 1.0

SECTION I: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: Hydris MX GOLD (22, 32, 46, 68)

Product use: For lubricating hydraulic systems.

If this product is used in combination with other products, refer to the

Material Safety Data Sheets for those products.

Manufacturer: WYS Manufacturing Ltd.

Bay 7 & 8, 4216 – 54th Ave. SE

Calgary, Alberta T2C 2E3 Phone 1-403-252-2239

Canada

Supplier: Maryn International Ltd.

Bay 5 & 6, 4216 – 54th Ave. SE Calgary, Alberta T2C 2E3 Phone 1-403-252-2239

Canada

Emergency Phone Number: CANUTEC – 24 hr Emergency No. 1-613-996-6666

Business Hour Number 1-403-252-2239

(Monday through Friday 8:00am to 4:30pm MST)

MSDS Prepared By MARYN Research

Phone 1-403-252-2239

Date Prepared 11 June, 2012

SECTION II: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients	Concentration %	C.A.S. #	LD50 (Species/Route)	LC50 (Species/Route)
Lubricating oils, petroleum, hydrotreated	81-99%	64742-58-1	>2000 mg/kg (Oral/Dermal Rat) >4480 mg/kg (Dermal Rabbit) NA	
Lubricating oils (petroleum), C>25, hydrotreated	0-<16%	72623-83-7	>5000 mg/kg (Oral Rat)	NA
Residual oils (petroleum), solvent dewaxed	0-<16%	64742-62-7	>5000 mg/kg (Oral Rat) 2.18 mg/l >2000 mg/kg (Dermal Rabbit) (Inhalation	
Residual oils (petroleum), solvent refined	0-<16%	64742-01-4	>5000 mg/kg (Oral Rat) 2.18 mg/L/4H >2000 mg/kg (Dermal Rabbit) (Inhalation Rat)	
Isopropylated triphenyl phosphate	≤1%	68937-41-7	NA NA	
Calcium alkylnaphthalene sulphonate	≤1%	57855-77-3	NA	NA



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Light naphthenic distillate	≤1%	64742-53-6	5000mg/kg (Rat/Oral) 3160mg/kg (Rabbit/Dermal)	5000mg/kg (Rat/Inhalation)
Acrylic Copolymer	≤1%	Trade Secret	NA	NA
Triphenyl phosphate	≤0.5%	115-86-6	NA	NA
Alkyl amino benzotriazole	≤0.5%	94270-86-7	NA	NA

NA: Not Available

SECTION III: Hazards Identification

Emergency
Overview

May be harmful if swallowed. May irritate eyes and skin.

Route of entry

Skin and eye contact, inhalation, and ingestion are the primary routes of exposure to this product.

Ingestion

May be harmful if ingested. Ingestion of large amounts may cause intestinal blockage, laxative effects, nervous system effects, nausea, abdominal discomfort, throat irritation, vomiting, and diarrhea. Breathing product into

the lungs during ingestion or vomiting may cause lung injury and possible death.

Inhalation

May cause respiratory tract irritation, mucous membrane irritation and nervous system effects. If product is misted at elevated temperatures, high concentration of vapour and/or mist may cause irritation, nasal discomfort

and discharge, headaches, dizziness and nausea.

Skin Contact and absorption

Frequent or prolonged contact is expected to irritate the skin and cause a skin rash, defatting, drying, or

dermatitis.

Eye Contact

May cause irritation.

Effects of Chronic Exposure

Prolonged or repeated inhalation of oil mist may cause oil pneumonia, lung tissue inflammation, and/or fibrous tissue formation. Prolonged or repeated eye contact may cause inflammation of the membrane lining the eyelids and covering the eyeball (conjunctivitis). Prolonged or repeated skin contact may cause

drying, cracking, redness, itching, and/or swelling (dermatitis).

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.

Effects of Acute Exposure

Breathing mist caused by high temperature or swallowing large quantities may be irritating to skin,

respiratory system, mucous membranes and eyes.



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SECTION IV: First Aid Measures

Ingestion Do NOT induce vomiting. Immediately get medical attention. Call

1-800-468-1760 for additional information. If spontaneous vomiting occurs, keep head below hips to avoid breathing

the product into the lungs. Never give anything by mouth to an unconscious person.

Skin Remove affected clothing and shoes. Wash skin thoroughly with soap and water. Get medical attention if Contact irritation or pain develops or persists. If product is injected under pressure into or under the skin, or into any part

of the body, regardless of the appearance of the wound or its size, a physician should immediately evaluate the

individual as a medical emergency.

Inhalation Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Oxygen should

only be administered by qualified personnel. Someone should stay with victim. Get medical attention if breathing

difficulty persists.

Eye Contact If irritation or redness from exposure to vapour develops, move away from exposure into fresh air. Upon contact,

immediately flush eyes with plenty of lukewarm water, holding eyelids apart, for 15 minutes. Get medical attention.

Notes to Product has low acute oral and dermal toxicity and is likely to be irritating to the eyes and skin. Treatment is **Physician** controlled removal from exposure followed by symptomatic and supportive care. Human systemic toxicity

information is unavailable, but expected to be low.

SECTION V: Fire-Fighting Measures

Flammability Non flammable at ambient temperature. Liquid may burn at temperatures above flash point if exposed to an

open flame.

Decomposition and combustion materials may be toxic. Burning may produce hydrogen sulphide, sulphur oxides, nitrogen oxides, phosphorus oxides, carbon monoxides, and unidentified organic compound.

Means of Extinction

Carbon dioxide foam, dry chemicals. Keep containers cool with water spray. When fighting fire, treat as

petroleum product, wear full protective clothing, including NIOSH approved self-contained breathing

apparatus. Avoid spreading with water flooding.

Flash Point (ASTM 150°C (302°F)

D92)

Upper Flammability Not Determined.

Limits

Lower Flammability Not Determined.

Limits

Auto Ignition Not Determined.

Temperature

Hazardous Decomposition and combustion materials may be toxic. Burning may produce

Combustion Products hydrogen sulphide, sulphur oxides, nitrogen oxides, phosphorus oxides, carbon

monoxides, and unidentified organic compound

Fire and Explosion

Hazards

Heated containers may rupture. "Empty" containers may retain residue and can be dangerous.

Sensitivity to impact Product is not sensitive to mechanical impact or static discharge.

Static Discharge None at normal temperatures below flash point. Do not cut, weld, or pressurize empty container.

Container may explode in heat of fire.



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SECTION VI: Accidental Release Measures

Personal Wear suitable protective equipment. Eliminate sources and or potential sources of ignition. Do not touch or **Protection** walk through spilled product. Stop leak if you can do it without risk. Isolate hazard area. Keep unnecessary

and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. Product has very low solubility in water. Do not flush to sewers, streams or other bodies of water. For disposal, see

Environmental very low solutions Section XIII.

Methods for Absorb on inert material such as sand, earth, vermiculite. Sweep up and collect with a clean, spark proof

cleaning up tool into a suitable container for disposal. Observe government regulations.

Large spills Stop leak if without risk. Dike far ahead of liquid spill for collection and later disposal. Pump excess material into

suitable container (metal drums, metal tanks, or such).

SECTION VII: Handling and Storage

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 vapour 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 vapour or mist. Use in a well ventilated area. Avoid contact with eyes, skin, clothing,

and shoes.

Storage 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 flame, sparks, static electricity, or other

sources of ignition. Empty product containers may retain product residue and can be dangerous.

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SECTION IX: Physical and Chemical Properties

Physical State: Amber; liquid. Odour: Petroleum odour **Appearance**: Clear, light amber Odour

Threshold: Not established

Specific Gravity: 0.86 (water = 1) (approximately)

<0.1 mm Hg at 20°C Vapour Density: Vapour Pressure: Not available **Evaporation Rate:** Not available

Boiling Point: >230°C (>446°F) minimum **Pour Point:** -33°C (-22°F) maximum

Flash Point: 150°C (302°F) minimum, Cleveland Open Cup Flammable Limits Air: Lower: Not Available;

Upper: Not Available Auto ignition Temperature: Not Available

Solubility in Water: Insoluble Not available **Partitioning Coefficient:** Not available

SECTION X: Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Avoid sparks or flame when not in use.

Incompatibility: Avoid contact with oxidizing agents, reducing agents, and/or acids.

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

Decomposition Products: Oxides of carbon, chlorine, sulphur, nitrogen, phosphorous, dense smoke, irritating fumes,

methacrylates and hydrogen sulphide.

SECTION XI: Toxicological Information

Effects of Acute and **Chronic Exposure:**

Frequent or prolonged contact is likely to irritate, defat, and dry the skin and cause a skin rash, or dermatitis. **Skin Contact**

Acute exposure is expected to cause slight irritation.

Skin Absorption

Eye Contact

No evidence of adverse effects from available information. Prolonged contact may cause mild irritation.

Irritating to eyes, but will not injure eye tissue. May irritate the respiratory tract (nose, throat, and lungs), eyes, and skin. Aspiration Hazard:

Inhalation Breathing product into the lungs during ingestion or vomiting may cause lung injury and possible death.

Ingestion May be harmful if swallowed. May be harmful if ingested.

Irritancy: Irritation to eyes and respiratory tract. Frequent or prolonged contact may irritate skin. If misted, inhalation of

mist may cause irritation.

Repeated or prolonged contact is likely to cause skin or respiratory tract sensitization in some individuals. **Sensitization:**

Based on best current information, there is no known carcinogenicity as regulated by OSHA; as categorized

by ACGIH A1 or A2 substances; as categorized by IARC Group 1, Group 2A, or Group

Carcinogenicity: 2B agents; or as listed by NTP as either known carcinogens or substances for which there is limited evidence

of carcinogenicity in humans or sufficient evidence of carcinogenicity in experimental animals.

Reproductive This material has potential reproductive toxicity. Potential risk of impaired fertility and harm to the

Toxicity:

Teratogenicity: Based on best current information, there is no known teratogenicity associated with this product.

Mutagenicity: Experimental evidence suggests that this product does not cause mutagenesis.

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SECTION XII: Ecological information

Ecotoxicity: Component Analysis - Ecotoxicity - Aquatic Toxicity

Component	96 Hr LC50 Brachydanio rerio	96 Hr LC50 Pimephales promelas	96 Hr LC50 Lepomis macrochirus
Lubricating oils, petroleum, hydrotreated spent	79.6 mg/L (semi-static)	3.2 mg/L (semi-static)	N.A.
Residual oils (petroleum), solvent refined	N.A.	>5000 mg/L	N.A.
Residual oils (petroleum), solvent dewaxed	N.A.	>5000 mg/L	N.A.
Lubricating oils (petroleum), C>25, hydrotreated bright stock	N.A.	N.A.	>10000 mg/L

Persistence/Degradability: No information available. Bioaccumulation/Accumulation: No information

available. **Mobility in Environmental Media:** No information available.

Other Adverse Effects: No additional information available.

Octanol/Water Partition Coefficient: Not available

Volatile Organic Compounds: Negligible

SECTION XIII: Disposal Consideration

Disposal: Dispose in accordance with federal, state, provincial, and local regulations. Regulations may also apply to empty

containers. The responsibility for proper waste disposal lies with the owner of the waste.

SECTION XIV: Transport Information

Department Of Transport: Not regulated as a hazardous material. **TDG – Canada** Not regulated as a

dangerous good. **DOT/TDG Proper Shipping Name:** Not regulated as a hazardous material

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SECTION XV: Regulatory Information

CPR Compliance:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CERCLA:

Based on the ingredient(s) listed in SECTION 3, this product does not contain any "hazardous substances" listed pursuant to the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4.

SARA Title III Section 302/304:

Based on the ingredient(s) listed in SECTION 3, these products do not contain any "extremely hazardous substances" listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

SARA Title III Section 311/312:

This product poses the following health hazard(s) as defined in 40 CFR Part 370 and is subject to the requirements of sections 311 and 312 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA):

Immediate (Acute) Health Hazard Delayed (Chronic) Health Hazard

SARA Title III Section 313:

This product does not contain "toxic" chemical(s) subject to the requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

TSCA: All the components of these products are listed on, or are automatically included as "naturally occurring chemical substances" on, or are exempted from the requirement to be listed on, the TSCA Inventory

CEPA: All the components of these products are listed on, or are automatically included as "substance occurring in nature" on, or are exempted from the requirements to be listed on, the Canadian Domestic Substances List (DSL).



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SECTION XVI Other Information

HMIS Information

HMIS Rating
Health 1*
Flammability 1
Reactivity 0

Revision Information Prepared by: Maryn Research Phone: 1-403-252-2239

Effective Date: June 11, 2012

Supersedes: N.A. **Revision:** 0.0

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