



SECTION I: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: **THIXO TAK 2**

Product use: Lubricating Grease

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 Z. Ansarizadeh
Phone 1-403-252-2239

Date Prepared July 24, 2008

SECTION II: COMPOSITION/ INFORMATION ON INGREDIENTS

Hazardous Ingredients	Concentration %	C.A.S. #	LD₅₀ (Species/Route)	LC₅₀ (Species/Route)
None Applicable	NA	NA	NA	NA

SECTION III: Hazards Identification

Emergency Overview May cause eye and skin irritation.

Route of entry Skin and eye contact are the primary routes of exposure to this product.

Ingestion No significant hazard. Not expected to be toxic by ingestion.

Inhalation Aspiration may cause pulmonary edema or aspiration pneumonia.



Skin Contact and absorption	Frequent or prolonged contact may irritate the skin and cause a skin rash.
Eye Contact	Slight irritation to the eyes but will not cause injury to the eye tissue.
Effects of Chronic Exposure	Repeated exposure over prolonged periods of time may cause irritation to the skin, respiratory system and eyes. Follow good industrial hygiene practices to avoid 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.

SECTION IV: First Aid Measures

Ingestion	Consult physician. Never give anything by mouth to an unconscious person. Do not induce vomiting as aspiration may occur.
Skin Contact	Wash well with mild soap and warm water. If hot material contacts the skin, cool immediately before attempting removal. If irritation persists or if contact has been prolonged, consult physician. If pressure forces the product under the skin, obtain immediate medical attention. Launder clothes prior to re-use.
Inhalation	Remove victim to fresh air. Aspiration may cause pulmonary edema or aspiration pneumonia. If breathing is difficult, oxygen may be administered by qualified personnel. Consult physician if symptoms persist.
Eye Contact	Flush with clean tepid water for 15 minutes keeping eyelids open. If irritation persists, consult physician.
Notes to Physician	Not available.

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.
Means of Extinction	Carbon dioxide foam, dry chemicals, dry sand, vermiculite. Use water fog or foam for larger fires. Keep containers cool with water spray. When fighting fire, treat as petroleum product, wear full protective clothing, including NIOSH approved self-contained breathing apparatus with full face piece operated in positive pressure mode. Avoid spreading with water flooding.
Flash Point (ASTM D92)	>180°C (356°F)
Upper Flammability Limits	Not Determined.
Lower Flammability Limits	Not Determined.
Auto Ignition Temperature	Not Determined.
Hazardous Combustion Products	Oxides of carbon, oxides of sulphur, and oxides of calcium.
Fire and Explosion Hazards	None.



Sensitivity to impact Static Discharge

None at normal temperatures below flash point. Do not cut, weld, or pressurize empty container. Container may explode in heat of fire.

SECTION VI: Accidental Release Measures

- Personal Protection** Wear suitable protective equipment. Eliminate sources and or potential sources of ignition.
- Environmental Precautions** Product has very low solubility in water. Do not flush to sewers, streams or other bodies of water. For disposal, see Section XIII.
- Methods for cleaning up** Absorb on inert material such as sand, earth, vermiculite. Sweep up and collect in a suitable container for disposal. Observe government regulations.
- Large spills** Stop leak if without risk. Dike to contain spill. Pump excess material into suitable container (metal drums, metal tanks, or such).

SECTION VII: Handling and Storage

- Handling** Keep drums tightly closed to prevent contamination. Avoid contact with eyes, skin and clothing. Wear recommended personal protection equipment.
- Storage** Store in a cool well ventilated area. Keep away from strong oxidizing agents.

SECTION VIII: Exposure Controls / Personal Protection

Exposure Limits

If used in a way that generates a mist, observe the limits for mineral oil mist

Component	Exposure Limit (ACGIH)	Exposure Limit (OSHA)	Immediately Dangerous to Life and Health (IDLH)
Mineral Oil Mist	5 mg/m ³ TWA-TLV 10 mg/m ³ STEL-TLV	5 mg/m ³ TWA-PEL Not Established STEL-PEL	2500 mg/m ³

- Engineering Controls** For normal application, special ventilation is not necessary. If user's operation generates mist, use local ventilation to keep exposure to airborne contaminants below exposure limits
- Respiratory Protection** None required under normal conditions of use. Use approved respirator with dual organic vapour / mist and particulate cartridge if vapour concentration exceeds permissible exposure limit
- Eye Protection** Use chemical splash goggles or full face shield if risk of splashing present.
- Skin Protection** Use rubber or plastic apron. Wear protective clothing to minimize skin contact. Use heat protective equipment when handling molten material.



Hand Protection Use oil resistant gloves.

SECTION IX: Physical and Chemical Properties

Physical State: Semi-solid
Odour: Mild petroleum odour
Appearance: Tan
Odour Threshold: Not established
Specific Gravity: 0.95 – 1.05 g/cm³ at 25°C (77°F)
Vapour Pressure: <0.0008 hPa (0.00 mm Hg) at 20°C (68°F)
Vapour Density: Not available
Evaporation Rate: Not available
Boiling Point: Not available
Pour Point: Not applicable
Solubility in Water: Negligible
pH: Not available
Partitioning Coefficient: Not available

SECTION X: Stability and Reactivity

Chemical Stability: Stable
Incompatibility: Avoid contact with oxidizing agents.
Reactivity: No reactivity
Polymerization: Will not occur
Decomposition Products: Oxides of carbon, oxides of sulphur, and oxides of calcium.

SECTION XI: Toxicological Information

Effects of Acute and Chronic Exposure: No evidence of harmful effects from available information.

Skin Contact May cause irritation.

Skin Absorption If high pressure forces the product under the skin, get immediate medical attention.

Eye Contact May cause irritation.

Inhalation No information available. Mist or spray may cause delayed onset of pulmonary edema.

Ingestion No significant hazard. No evidence of harmful effects from available information. May cause diarrhea

Irritancy: Slight irritation to eyes. Frequent or prolonged contact may irritate skin. If misted, inhalation of mist may cause irritation.

Sensitization: No information is available and no adverse effects are anticipated.

Carcinogenicity: This product contains material that has not been listed as a carcinogen or potential carcinogen by the National Toxicology Program, International Agency for Research on Cancer, or the Occupational Safety and Health Administration.



Reproductive Toxicity: No information is available and no adverse effects are anticipated.

Teratogenicity: No information is available and no adverse effects are anticipated.

Embryotoxicity: No information is available and no adverse effects are anticipated.

Mutagenicity: No information is available and no adverse effects are anticipated.

Toxicologically Synergistic Products: Not available.

SECTION XII: Ecological information

Environmental Fate:

No specific environmental fate data is available. This product is not expected to be readily biodegradable. This product is stable in water, and can be mechanically separated from water. The water may be suitable for disposal in a biological waste water treatment plant.

Environmental Effects:

No specific toxicity or environmental effect data is available.

SECTION XIII: Disposal Consideration

RCRA 40 CFR 261 Classification Not listed
US EPA Waste Number / Classification Not available

Waste Disposal

Dispose of waste material in compliance with all federal, state, provincial and local regulations. Incinerate in a furnace or bury in an approved landfill where permitted under appropriate federal, provincial and local regulations.

SECTION XIV: Transport Information

Department of Transport:	Not regulated under DOT
TDG – Canada	Not regulated under TDG.
DOT/TDG Proper Shipping Name:	None
DOT/TDG Hazard Class:	None
Product Identification Number:	None
Packing Group:	None
DOT/TDG Labels: Primary:	None required
Subsidiary:	None required
DOT/TDG Placards:	None required

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.



OSHA Hazard Communication Standards 29CFR 1910.1200:

This product is not known to contain any of the carcinogens required to be listed under OSHA Hazards Communication Standards 29 CFR 1910.1200.

WHMIS Classification:

Not a controlled product under WHMIS.

CERCLA:

Not listed on CERCLA (40CFR 302.4). If this product is accidentally spilled, it is not subject to special reporting under requirements of the Comprehensive Environmental Response and Liability Act. We recommend you contact local authorities to determine if there may be other local reporting requirements.

SARA Title III Section 311/312:

Under the provisions of Title III, Section 311/312 of the Superfund Amendments and Reauthorization Act, this product is classified into the following hazard category: **NONE**.

SARA Title III Section 313:

This product does not contain more than 1 % of any of the chemical substances listed under SARA Section 313.

RCRA:

Not listed on the **RCRA** (40 CFR 261.33) for hazardous waste.

NPRI:

Not listed in the **NPRI** under Canadian EPA.

Chemical Inventory

Canada: The ingredients of this product are on the DSL.

United States: The ingredients of this product are on the TSCA

SECTION XVI Other Information

HMIS Information

Degree of Hazard	HMIS Rating
4= Severe	Health 1
3= Serious	Flammability 1
2= Moderate	Reactivity 0
1= Slight	
0= Minimal	

Revision Information

Prepared by: Maryn Research

Phone: 1-403-252-2239

Effective Date: July 24th 2008

Supersedes: March 17, 2008

Revision: 3.0

Maryn International Ltd. (the "Company"), shall not be liable for any damages arising from the information contained on this data sheet howsoever caused, if the product in question is not employed in a normal or foreseeable use or circumstances. The Company shall not be liable for any indirect or consequential damages arising out of the use of the information contained on this data sheet howsoever caused.