



SECTION I: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: PowerUp HydraMaxx
Product use: Used as 5% additive to hydraulic fluid.
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 June 11, 2012

SECTION II: COMPOSITION/ INFORMATION ON INGREDIENTS

| Hazardous Ingredients | Concentration % | C.A.S. # | LD ₅₀ (Species/Route) | LC ₅₀ (Species/Route) |
|-------------------------------------|-----------------|--------------|---|----------------------------------|
| Isopropylated triphenyl phosphate | 1-5% | 68937-41-7 | NA | NA |
| Calcium alkylnaphthalene sulphonate | 1-5% | 57855-77-3 | NA | NA |
| Light naphthenic distillate | 1-5% | 64742-53-6 | 5000mg/kg (Rat/Oral) 3160mg/kg (Rabbit/Dermal) | 5000mg/kg (Rat/Inhalation) |
| Acrylic Copolymer | 1-5% | Trade Secret | NA | NA |
| Triphenyl phosphate | 0.5-1.5% | 115-86-6 | NA | NA |



| | | | | |
|---------------------------|----------|------------|----|----|
| Alkyl amino benzotriazole | 0.5-1.5% | 94270-86-7 | NA | NA |
|---------------------------|----------|------------|----|----|

NA: Not Available

SECTION III: Hazards Identification

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| Emergency Overview | No hazards under normal conditions of use. |
| Route of entry | Skin and eye contact, ingestion and inhalation are the primary routes of exposure to this product. |
| Ingestion | No significant hazard. Moderate toxicity. Ingestion of large amounts may cause intestinal blockage, laxative effects, nervous system effects, nausea, abdominal discomfort, vomiting and diarrhea. If drawn into lungs from swallowing or vomiting, this product may cause bronchopneumonia or pulmonary edema. |
| 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 | Likely to cause irritation to the eyes but will not likely 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. It also contains ingredients that may also cause liver, adrenal, thymus, reproductive, developmental and neurological effects based on animal data. 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

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| Ingestion | Do not induce vomiting. Have victim drink 240 to 300 mL of water. Do not give anything by mouth if victim is rapidly losing consciousness, is unconscious, or convulsing. Call physician immediately. |
| Skin Contact | Wash well with soap and water (at least 5 minutes). Launder clothes prior to re-use. |
| Inhalation | Remove source of contamination. Remove victim to fresh air. If no relief is obtained, consult physician. |
| Eye Contact | Flush with clean tepid water for 15 minutes keeping eyelids open. If irritation persists, consult physician. |
| Notes to Physician | Product has low acute oral and dermal toxicity and is likely to be irritating to the eyes and skin. Treatment is 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

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| 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. 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 D92) | 150°C (302°F) |
| Upper Flammability Limits | Not Determined. |
| Lower Flammability Limits | Not Determined. |
| Auto Ignition Temperature | Not Determined. |
| Hazardous Combustion Products | Oxides of carbon, chlorine, sulphur, nitrogen, phosphorous, dense smoke, irritating fumes, methacrylates and hydrogen sulphide. |
| Fire and Explosion Hazards | Under fire conditions, toxic and irritating fumes may be emitted. |
| 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

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| Personal Protection | Wear suitable protective equipment. Eliminate sources and or potential sources of ignition. Where prolonged and repeated skin and eye contact is likely to occur, wear safety glasses with side shields, long sleeves, and chemical resistant gloves (butyl or nitrile). Where high temperature applications or exposure to misted product occurs, wear a NIOSH approved organic cartridge respirator or a self-contained breathing apparatus. Eliminate sources and or potential sources of ignition. |
| Environmental Precautions | Avoid releasing into the environment. Product has very low solubility in water. Do not flush to sewers, streams or other bodies of water. This product is a marine pollutant. 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. Wash the area with a suitable detergent and rinse thoroughly. 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 Use appropriate personal protection equipment. Avoid excess heat, formation of oil mist, breathing vapours and mist from hot oil, and prolonged or repeated contact with skin.

Storage Store in a cool, dry, well ventilated area. Keep container tightly closed and away from heat, spark and open flame.

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 |
| Triphenyl Phosphate | 3 mg/m ³ STEL-TLV | 3 mg/m ³ TWA-PEL | 1000 mg/m ³ |

Engineering Controls For normal application, special ventilation is not necessary. If user's operation generates mist, use ventilation to keep exposure to airborne contaminants below exposure limits. Make-up air should always be supplied to balance air removed by exhaust ventilation.

Respiratory Protection Use approved respirator with dual organic vapour / mist and particulate cartridge if vapour concentration exceeds permissible exposure limit. A NIOSH-approved positive-pressure, air-supplied respirator or self-contained breathing apparatus may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

Eye Protection Use chemical splash goggles with side shields if risk of splashing present.

Skin Protection Use rubber or plastic apron.

Hand Protection Use oil resistant gloves. (Neoprene, nitrile, polyvinyl alcohol, fluoro-elastomer.)



SECTION IX: Physical and Chemical Properties

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| Physical State: | Liquid |
| Odour: | Mild petroleum odour |
| Appearance: | Clear, light amber |
| Odour Threshold: | Not established |
| Specific Gravity: | 0.980 kg/L at 20°C (68°F) |
| Vapour Pressure: | <1.00 mm Hg at 20°C |
| Vapour Density: | Not available |
| Evaporation Rate: | Not available |
| Boiling Point: | >230°C (>446°F) |
| Pour Point: | -30°C (-22F) |
| Solubility in Water: | Insoluble |
| pH: | Not available |
| Partitioning Coefficient: | <1.0 |

SECTION X: Stability and Reactivity

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| Chemical Stability: | Stable |
| Incompatibility: | Avoid contact with oxidizing agents, reducing agents, acids and ignition source. |
| Reactivity: | No reactivity |
| Polymerization: | Will not occur |
| 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:

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| Skin Contact | Frequent or prolonged contact is likely to irritate, defat, and dry the skin and cause a skin rash, or dermatitis. Acute exposure is expected to cause slight irritation. |
| Skin Absorption | No evidence of adverse effects from available information. Prolonged contact may cause mild irritation. |
| Eye Contact | Expected irritation to eyes, but will not injure eye tissue. |
| Inhalation | May cause respiratory tract irritation, mucous membrane irritation and nervous system effects. If the product is misted, high concentrations of vapours and/or mist may cause irritation, experienced as nasal discomfort and discharge. |
| Ingestion | No significant hazard. Moderate toxicity. Ingestion of large amounts may cause laxative effects, |



nervous system effects, nausea, abdominal discomfort, vomiting and diarrhea. If drawn into lungs from swallowing or vomiting, may cause chemical pneumonitis or pulmonary edema.

- Irritancy:** Irritation to eyes. Frequent or prolonged contact irritating to skin. If misted, inhalation of mist may cause irritation.
- Sensitization:** Repeated or prolonged contact is likely to cause skin or respiratory tract sensitization in some individuals.
- Carcinogenicity:** This product contains material that has not been listed as a carcinogen or a potential carcinogen by either the National Toxicology Program, International Agency for Research on Cancer, or the Occupational Safety and Health Administration.
Triphenyl phosphate (115-86-6): A4 (ACGIH) – The agent is not classifiable as to its carcinogenicity to humans.
- Reproductive Toxicity:** This material has potential reproductive toxicity. Potential risk of impaired fertility and harm to the unborn child.
- 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 soluble in water and contains material that is highly toxic to fish.

Environmental Effects:

This product is harmful to the environment. It is considered to be a marine pollutant. Avoid releasing into the environment.

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

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|---------------------------------------|---|
| Department of Transport: | Regulated under DOT for MARINE TRANSPORT ONLY and not regulated in containers <450L. |
| TDG – Canada | Regulated under TDG for MARINE TRANSPORT ONLY. |
| DOT/TDG Proper Shipping Name: | Environmentally hazardous substance, liquid, n. o. s. (Contains isopropylated, triaryl, and isopropylated phosphates.) |
| DOT/TDG Hazard Class: | 9 |
| Product Identification Number: | UN3082 |
| Packing Group: | III |
| DOT/TDG Labels: | Primary: Miscellaneous Subsidiary: Marine Pollutant |
| DOT/TDG Placards: | None required |
| Note: | TDG documentation and Dangerous Goods Safety Marks do not apply if in transport solely on land by road vehicle or railway vehicle and/or by air. (<i>sec 1.45.1 Marine Pollutants Exemption, SOR/2008-34 & Special Provision A97, Technical Instructions for the Safe Transport of Dangerous Good by Air, ICAO</i>) |
| Marine Pollutant: | Yes |
| Reportable Quantity: | Isopropylated tripehnyl phosphate: 0.2 kg (20L drums) & 2.0 kg (205L drums) |
| Shipping Containers: | Plastic Drums UN1H2 (20L), UN1H1 (205L) |

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 hazardous under the criteria of the Federal OSHA Hazards Communication Standards 29 CFR 1910.1200.

WHMIS Classification:

This product is classified under the following WHMIS category:
D2A Materials Causing Other Toxic Effects: Very Toxic
D2B Materials Causing Other Toxic Effects: Toxic

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: **ACUTE and CHRONIC**.

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 | |
| *= Chronic | |

Revision Information

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