



SECTION I: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: **POWERUP BLACKOUT**

Product use: Diesel Fuel Antifoulant

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 Dr. Brett Chandler
Date Prepared March 12th, 2010

SECTION II: COMPOSITION/ INFORMATION ON INGREDIENTS

Hazardous Ingredients	Concentration %	C.A.S. #
Light ends of Polyethylbenzene Residue	30-60	178535-25-6
solvent naphtha (petroleum), heavy arom.	10-15	64742-94-5
naphthalene	1-5	91-20-3

SECTION III: Hazards Identification

Emergency Overview Combustible liquid. Harmful if swallowed. May be harmful if absorbed through skin. Irritating to skin. Moderately irritating to eyes. Aspiration hazard if swallowed. Can enter lungs and cause damage. Keep away from heat, sparks and flame. Avoid exposure - obtain special instructions before use. Do not breathe vapor or mist. Do not ingest. Do not get in eyes. Avoid contact with skin and clothing. Contains material that can cause target organ damage. Contains material which may cause cancer, based on animal data. Risk of cancer depends on duration and level of exposure. Use only with adequate ventilation.



Route of entry	Wash thoroughly after handling. Contains material which causes damage to the following organs: blood, kidneys, liver, skin, central nervous system (CNS), eye, lens or cornea. Skin contact, skin adsorption, eye contact, inhalation and ingestion are the primary routes of exposure to this product.
Ingestion	Adverse symptoms may include the following: nausea or vomiting
Inhalation	No specific data.
Skin Contact	Adverse symptoms may include the following: irritation, redness
Eye Contact	Adverse symptoms may include the following: irritation, watering, redness
Effects of Chronic Exposure	Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.
Effects of Acute Exposure	Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

SECTION IV: First Aid Measures

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. Get medical attention immediately.
Skin Contact	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
Inhalation	Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
Eye Contact	Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.
Notes to Physician	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

SECTION V: Fire-Fighting Measures

Flammability	May be combustible at high temperature. Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.
Means of Extinction	Use dry chemical, CO ₂ , water spray (fog) or foam. Do not use water jet.
Flash Point (ASTM)	Closed cup: 88.889°C (192°F)



D92)	
Upper Flammability Limits	Not Determined.
Lower Flammability Limits	Lowest known value: 400°C (752°F) (Light ends of Polyethylbenzene Residue).
Auto Ignition Temperature	Not Determined.
Hazardous Combustion Products	carbon dioxide, carbon monoxide, nitrogen oxides
Fire and Explosion Hazards	None
Sensitivity to 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	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
Environmental Precautions	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	Stop leak if without risk. Move containers from spill area. Approach release from upwind. 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. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.
Large spills	Stop leak if without risk. Dike to contain spill. Pump excess material into suitable container (metal drums, metal tanks, or such). Clean up residual with absorbent material, place in appropriate container, and flush with water. Unless released material is cleaned up for reprocessing, recycling, or reuse, a release of 100lbs may trigger reporting requirements for CERCLA Section 103.

SECTION VII: Handling and Storage

Handling	Put on appropriate personal protective equipment. 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. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring
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material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage Store in accordance with local regulations. Store in a segregated and approved area. 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. Eliminate all ignition sources. Separate from oxidizing materials. 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 VIII: Exposure Controls / Personal Protection

Component	Exposure Limit (ACGIH)	Exposure Limit (OSHA)	Immediately Dangerous to Life and Health (IDLH)
Solvent Naphtha (petroleum), Heavy Aromatic	Not available	Not available	Not available
Light ends of polyethylbenzene residue	Not available	Not available	Not available
Napthalene	TWA: 10 ppm, 0 times per shift, 8 hour(s). TWA: 52 mg/m ³ , 0 times per shift, 8 hour(s). STEL: 15 ppm, 0 times per shift, 15 minute(s). STEL: 79 mg/m ³ , 0 times per shift, 15 minute(s).	TWA: 10 ppm, 0 times per shift, 8 hour(s). TWA: 50 mg/m ³ , 0 times per shift, 8 hour(s). STEL: 15 ppm, 0 times per shift, 15 minute(s). STEL: 75 mg/m ³ , 0 times per shift, 15 minute(s).	Not available

- Engineering Controls** Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Respiratory Protection** Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. 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.
- Eye Protection** Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
- Skin Protection** 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.
- Hand Protection** Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.



SECTION IX: Physical and Chemical Properties

Physical State:	Liquid
Appearance:	Clear, amber
Odor:	Aromatic
Boiling Point:	Lowest known value: 178 to 215°C (352.4 to 419°F) (solvent naphtha (petroleum), heavy arom.). Weighted average: 214.47°C (418°F)
Melting/Freezing Point	May start to solidify at the following temperature: <-20°C (-4°F) This is based on data for the following ingredient: solvent naphtha (petroleum), heavy arom.. Weighted average: -48.36°C (-55°F)
Specific Gravity:	0.918 [ASTM D 4052]
Vapor Pressure:	Highest known value: 0.1 kPa (0.8 mm Hg) (at 20°C) (solvent naphtha (petroleum), heavy arom.). Weighted average: 0.03 kPa (0.23 mm Hg) (at 20°C)
Vapor Density:	Highest known value: 5.5 (Air = 1) (Light ends of Polyethylbenzene Residue). Weighted average: 5.41 (Air = 1)
Evaporation Rate:	0.05 (solvent naphtha (petroleum), heavy arom.) compared with Butyl acetate
Dispersibility	Not dispersible in the following materials: cold water.
Solubility	Very slightly soluble in the following materials: cold water. Insoluble in the following materials: hot water.

SECTION X: Stability and Reactivity

Chemical Stability:	Stable
Incompatibility:	Flammable in the presence of the following materials or conditions: open flames, sparks and static discharge.
Reactivity:	Highly reactive or incompatible with the following materials: oxidizing materials
Polymerization:	Under normal conditions of storage and use, hazardous polymerization will not occur
Decomposition Products:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION XI: Toxicological Information

Acute toxicity

Product	Result	Species	Dose	Exposure
solvent naphtha (petroleum), heavy arom.	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	
naphthalene	LD50 Dermal	Rat	>2500 mg/kg	1 hour
	LD50 Dermal	Rabbit	>2000 mg/kg	
	LD50 Oral	Rat	490 mg/kg	
	LD50 Inhalation	Rat	>340 mg/m ³ hr	

Product/ingredient name Result Species Dose Exposure

Conclusion/Summary : Not available.

Chronic toxicity

Conclusion/Summary : Not available.



Carcinogenicity

Conclusion/Summary : Not available.

Mutagenicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Classification

naphthalene A4 2B - - Possible -

Product/ingredient name ACGIH IARC EPA NIOSH NTP OSHA

SECTION XII: Ecological information

Environmental Effects (Ecotoxicological Data):

Component	Ecotoxicity – Fish Species Data	Daphnia	Ecotoxicity – Fresh Water Algae Data
solvent naphtha (petroleum), heavy arom.	Acute LC50 2 to 5 mg / L over 96 hours	Acute LC50 3 to 10 mg / L over 48 hours	Acute LC50 1 to 3 mg / L over 72 hours
naphthalene	Acute LC50 1.8 mg / L over 96 hours	Acute EC50 1.96 mg/L Fresh water over 48 hours	-

Environmental Fate: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic 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. Empty containers should be recycled or disposed of through an approved waste management facility.

SECTION XIV: Transport Information

Department of Transport (U.S.):

Regulated under DOT

TDG (Canada):

Not Regulated under TDG.

DOT Proper Shipping Name:

Combustible liquid, n.o.s. (solvent naphtha (petroleum), heavy arom., Light ends of Polyethylbenzene Residue)

DOT Hazard Class:

3

NA Number:

NA1993

Packing Group:

III

DOT Labels: Primary:

Combustible liquid.

Subsidiary:

None required

DOT Placards:


None required



Marine Pollutant: Yes

TDG (Canada): Not Regulated under TDG.
TDG Proper Shipping Name: Not Regulated under TDG.
Marine Pollutant: Yes
Reportable Quantity: Naphthalene 100 lbs, Xylene 100 lbs
Shipping Containers: Steel Drums UN1A1/Y/100

SECTION XV: Regulatory Information

HCS Classification	Combustible liquid Toxic material Irritating material Carcinogen Target organ effects
U.S. Federal regulations	TSCA 4(a) final test rules: naphthalene TSCA 8(a) PAIR: naphthalene United States inventory (TSCA 8b): All components are listed or exempted. TSCA 12(b) one-time export: naphthalene 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: naphthalene SARA 311/312 MSDS distribution - chemical inventory - hazard identification: naphthalene: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard Clean Water Act (CWA) 307: naphthalene; ethylbenzene; toluene Clean Water Act (CWA) 311: naphthalene; ethylbenzene; toluene Clean Air Act (CAA) 112 accidental release prevention: No products were found. Clean Air Act (CAA) 112 regulated flammable substances: No products were found. Clean Air Act (CAA) 112 regulated toxic substances: No products were found.
Canada (WHMIS)	Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F). Class D-2A: Material causing other toxic effects (Very toxic). This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.
EU Regulations	 <p>Risk Phrases: R40- Limited evidence of a carcinogenic effect. R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic Environment Safety Phrases: S36/37- Wear suitable protective clothing and gloves. S61- Avoid release to the environment. Refer to special instructions/safety data sheet</p>



SECTION XVI Other Information

HMIS Information

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

Revision Information

Prepared by: Maryn Research

Phone: 1-403-252-2239

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Supersedes: -

Revision: 1

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