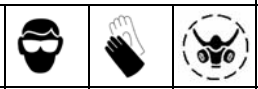
MATERIAL SAFETY DATA SHEET

MSDS-001

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, 2001/58 & 1272/2008/EC Standards | MSDS Revision: 3.0 | MSDS Revision Date: 05/15/2012

1. PRODUCT IDENTIFICATION

1.1	Product Name:	**SOLTRON® ENZYME FUEL TREATMENT**
1.2	Chemical Name:	Petroleum Distillates
1.3	Synonyms:	SP016, SP001, SP005, SP055
1.4	Trade Names:	Soltron Enzyme Fuel Treatment
1.5	Product Use:	Fuel additive
1.6	Manufacturer's Name:	Solpower Corporation
1.7	Manufacturer's Address:	307 E . 22ND Street, San Pedro, CA 90731 USA
1.8	Business Phone:	+1 (310) 548-4456 / Technical Support +1 (818) 865-9176
1.9	Emergency Phone:	**INFOTRAC +1 (800) 535-5053**
1.10	Other Product Names:	Xbee® Enzyme Fuel Treatment

CHEMICAL RESPONSE CARD:	33
RESPONSE TEAM PPE:	
WHMIS:	
HEALTH:	1
FLAMMABILITY:	2
REACTIVITY:	0
PERSONAL PROTECTION:	B

2. HAZARD IDENTIFICATION

2.1 Hazard Identification:

This product is classified as a HAZARDOUS SUBSTANCE but not as DANGEROUS GOODS according to the classification criteria of NOHSC: 1088 (2004) and ADG Code (Australia). Combustible liquid.

WARNING! COMBUSTIBLE LIQUID.

Hazard Statements (H): H227 – Combustible liquid.

Precautionary Statements (P): P210 - Keep away from flames and hot surfaces – No Smoking. P280 – Wear protective gloves/eye protection/face protection. P370+P378 – In case of fire, use dry chemical, foam, carbon dioxide or water fog to extinguish fire. P403+P235 – Store in a well-ventilated place. Keep cool. P501 – Dispose of contents/container to an authorized treatment, storage, or disposal facility (TSDF).

2.2 Routes of Entry:	Inhalation:	YES	Absorption:	YES	Ingestion:	YES

2.3 Effects of Exposure:

EYES: May cause irritation, redness and tearing. Vapors may be irritating to the eyes.

SKIN: May cause irritation, defatting, drying and cracking of skin. Prolonged and repeated contact may lead to dermatitis.

INGESTION: May cause a burning sensation of the mouth and throat, abdominal pain, gastrointestinal irritation, nausea, vomiting and diarrhea. May also cause kidney damage, cardiac arrhythmia and Central Nervous System effects (see inhalation). Aspiration of material into the lungs may cause chemical pneumonitis, which can be fatal. Can be fatal if inhaled or ingested.

INHALATION: Vapors may be irritating to nose, throat and respiratory tract. Excessive inhalation of vapors may cause kidney damage, cardiac arrhythmia and Central Nervous System effects including dizziness, weakness, fatigue, nausea, headache and possible unconsciousness.

2.4 Symptoms of Exposure:

EYES: Irritation, redness, swelling and tearing.

SKIN: Irritation, defatting, drying and cracking of skin.

INGESTION: Burning sensation of the mouth and throat, abdominal pain, gastrointestinal irritation, nausea, vomiting and diarrhea.

INHALATION: Irritation to nose, throat and respiratory tract, dizziness, coughing, wheezing, weakness, fatigue, nausea, headache and possible unconsciousness.

2.5 Acute Health Effects:

EYES: May cause irritation, redness and tearing. Vapors may be irritating to the eyes. Risk of conjunctivitis

SKIN: May cause irritation, defatting, drying and cracking of skin. Prolonged and repeated contact may lead to dermatitis.

INGESTION: May cause a burning sensation of the mouth and throat, abdominal pain, gastrointestinal irritation, nausea, vomiting and diarrhea. May also cause kidney damage, cardiac arrhythmia and Central Nervous System effects (see inhalation). Aspiration of material into the lungs may cause chemical pneumonitis, which can be fatal.

INHALATION: Vapors may be irritating to nose, throat and respiratory tract. Excessive inhalation of vapors may cause kidney damage, cardiac arrhythmia and Central Nervous System effects including dizziness, weakness, fatigue, nausea, headache and possible unconsciousness.

2.6 Chronic Health Effects:

Prolonged or repeated skin contact may lead to dermatitis.

2.7 Target Organs:

None reported by the manufacturer.

NA = Not Available; ND = Not Determined; NE = Not Established; C = Ceiling Limit; See Section 16 for Additional Definitions of Terms Used

NOTE: all WHMIS required information is included. It is located in appropriate sections based on the ANSI Z400.1-2010 format.

3. COMPOSITION & INGREDIENTS

CHEMICAL NAME(S)	CAS No.	RTECS No.	EINECS No.	%	EXPOSURE LIMITS IN AIR (mg/m³) ACGIH ppm TLV	ACGIH ppm STEL	NOHSC ppm ES-TWA	NOHSC ppm ES-STEL	NOHSC ppm ES-PEAK	OSHA ppm PEL	OSHA ppm STEL	OSHA ppm IDLH	OTHER
ALIPHATIC PETROLEUM DISTILLATES	64742-47-8	OA5504000	265-149-8	60-100	NE	NE	NF	NF	NF	500	NE	NE	
PROPRIETARY ORGANIC COMPOUNDS	NA	NA	NA	0.1-1.0	NE	NE	NF	NF	NF	NE	NE	NE	

4. FIRST AID MEASURES

4.1 First Aid:

EYES: Immediately flush eyes with plenty of running water for at least 15 minutes, lifting upper and lower lids, occasionally. If irritation persists, repeat flushing. Get medical attention.

SKIN: Wash thoroughly with soap and water. If irritation persists, seek medical attention. Remove contaminated clothing and wash before reuse.

INGESTION: Do not induce vomiting. Have conscious person rinse out mouth with water, then drink 1 or 2 glasses of water. Never give an unconscious person anything to ingest. If vomiting spontaneously occurs, have victim lean forward with head down to avoid breathing in the vomitus (vapors from vomit) into the lungs. Rinse out mouth and administer more water. Guard against aspiration into the lungs. Aspiration of material into lungs due to vomiting may cause chemical pneumonitis which can be fatal. Get immediate medical attention.

INHALATION: Remove affected person to fresh air. If breathing if difficult, administer oxygen. If breathing stops give artificial respiration. Keep person warm, quiet and get medical attention.

4.2 Medical Conditions Aggravated by Exposure:

None reported by the manufacturer.

5. FIREFIGHTING MEASURES

5.1 Flashpoint & Method:

65.5 – 73.8 °C (150.0 – 165.0 °F), TCC

5.2 Autoignition Temperature:

215.5 °C (420 °F)

5.3 Flammability Limits: Lower Explosive Limit (LEL): **0.9** Upper Explosive Limit (UEL): **6.0**

5.4 Fire & Explosion Hazards:

This material can burn but will not readily ignite. This material will release vapors when heated above the flash point temperature that can ignite when exposed to a source of ignition. In enclosed spaces, heated vapor can ignite with explosive force. Mists or sprays may burn at temperatures below the flash point. Carbon dioxide, carbon monoxide, smoke, fumes, unburned hydrocarbons and trace oxides of sulfur and nitrogen. Also, depending upon the conditions of use, low concentrations of hydrogen sulfide can be released.

5.5 Extinguishing Methods:

Dry chemical, foam, carbon dioxide, and water fog.

5.6 Firefighting Procedures:

Keep containers cool until well after the fire is out. Use water spray to cool fire-exposed surfaces and to protect personal. Avoid spraying water directly into storage containers because of danger of boilover. Prevent runoff from fire control or dilution from entering sewers, drains, drinking water supply, or any natural waterway. Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies.

6. ACCIDENTAL RELEASE MEASURES

6.1	Spills: **Small Spills: Absorb onto vermiculite, floor sweep or other absorbent material. Place into containers for disposal.** **Large Spills: Eliminate all ignition sources (e.g., flares, flames, pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from the spill area until clean-up has been completed. Stop spill at source. Prevent from entering drains, sewers, streams or other bodies of water. Prevent from spreading. If runoff occurs, notify authorities as required. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated soil, absorbent and other materials to containers for disposal. Per good environmental practices, prevent run-off to sewers, streams and other bodies of water. Stop the spill at its source. Cover sewer grates and dike the spill. Absorb spilled material onto absorbents. Shovel absorbed material into containers for disposal. Close container tightly and dispose of properly.**

7. HANDLING & STORAGE INFORMATION

7.1	Work & Hygiene Practices: **Wear gloves, glasses and self-contained mask. Warn about risk of vapor inhalation. Wash hands with water and soap immediately after handling then rinse in case of contact. When using, do not eat, drink or smoke.**
7.2	Storage & Handling: **Use and keep away from flame, heat sources and functioning electrical devices. Use in a well ventilated area. Store in original packaging. Keep out of reach of children. Do not store in temperatures above 50°C. Keep out of direct sunlight.**
7.3	Special Precautions: **Do not spray on a naked flame or any incandescent material. When using do not smoke. Avoid breathing vapors or spray mists. Avoid any contact.**

8. EXPOSURE CONTROLS & PERSONAL PROTECTION

8.1	Ventilation & Engineering Controls: **Avoid breathing the vapors generated by this product. Use in a well-ventilated location (e.g., local exhaust ventilation, fans. Do not eat, drink, or smoke while handling this product. Ensure that safety shower, hand washing sink and eye bath are near work area.**
8.2	Respiratory Protection: **Use respiratory protection (e.g., organic vapor-acid gas cartridge respirator). Use only protection authorized by 29 CFR §1910.134, applicable U.S. State regulations, or the Canadian CAS Standard Z94.4-93 and applicable standards of Canadian Provinces, EC member states, or Australia.**
8.3	Eye Protection: **Safety goggles.**
8.4	Hand Protection: **Solvent resistant or other impervious gloves. Wear boots, clothing with long sleeves, etc. as appropriate.**
8.5	Body Protection: **Wear protective clothing (e.g., apron)**

9. PHYSICAL & CHEMICAL PROPERTIES

9.1	Density:	**0.804 - 0.815 g/cm³ @ 15°C**
9.2	Boiling Point:	**300 °F**
9.3	Melting Point:	**ND**
9.4	Evaporation Rate:	**< 0.10 (n-butyl acetate = 1.0)**
9.5	Vapor Pressure:	**0.10 mm Hg @ 20 °C**
9.6	Molecular Weight:	**NA**
9.7	Appearance & Color:	**Colorless transparent liquid. Mild paraffin odor.**
9.8	Odor Threshold:	**NA**
9.9	Solubility:	**Negligible.**
9.10	pH	**ND**
9.11	Viscosity:	**1.8 cSt @ 40 °C**
9.12	Other Information:	**Vapor Density > 5.0 (air = 1.0); 804.0 g/L**

10. STABILITY & REACTIVITY

10.1	Stability:	**This product is chemically stable under normal conditions of storage and use.**
10.2	Hazardous Decomposition Products:	**Fumes, smoke, carbon monoxide, and trace hydrocarbons.**
10.3	Hazardous Polymerization:	**Will not occur.**
10.4	Conditions to Avoid:	**Do not exposure this product to temperatures above 140°C.**
10.5	Incompatible Substances:	**Strong oxidizing agents.**

11. TOXICOLOGICAL INFORMATION

11.1	Toxicity Data: **None reported by the manufacturer.**	
11.2	Acute Toxicity: **None reported by the manufacturer.**	
11.3	Chronic Toxicity: **None reported by the manufacturer.**	
11.4	Suspected Carcinogen: **No**	
11.5	Reproductive Toxicity:	
	Mutagenicity:	**This product is not reported to cause mutagenic effects in humans.**
	Embryotoxicity:	**This product is not reported to cause embryotoxic effects in humans.**
	Teratogenicity:	**This product is not reported to cause teratogenic effects in humans.**
	Reproductive Toxicity:	**This product is not reported to cause reproductive harm in humans.**
11.6	Irritancy of Product:	**See section 3.3**
11.7	Biological Exposure Indices:	**NA**
11.8	Physician Recommendations:	**Treat symptomatically.**

12. ECOLOGICAL INFORMATION

12.1	Environmental Stability: **Analysis for ecological effects has not been conducted on this product. However, if spilled, this product and any contaminated soil or water may be harmful to human, animal, and aquatic life. Also, the coating action associated with petroleum and petroleum products can be harmful or fatal to aquatic life and waterfowl.**
12.2	Effect on Plants & Animals: **An environmental fate analysis has not been conducted on this specific product. However, plants and animals may experience harmful or fatal effects when coated with petroleum-based products.**
12.3	Effect on Aquatic Life: **Petroleum-based (mineral) lube oils will normally float on water. In stagnant or slow-flowing waterways, an oil layer can cover a large surface area. As a result, this oil layer might limit or eliminate natural atmospheric oxygen transport into the water. With time, if not removed, oxygen depletion in the waterway can result in a loss of marine life or create an anaerobic environment.**

13. DISPOSAL CONSIDERATIONS

13.1	Waste Disposal: **Dispose of in a safe matter, in accordance with local and national regulations.**
13.2	Special Considerations: **U.S. EPA Characteristic Waste (Flammable) – D001**

14. TRANSPORTATION INFORMATION

The basic description (proper shipping name, hazard class & division, ID Number, packing group) is shown for each mode of transportation. Additional descriptive information may be required by 49 CFR, IATA/ICAO, IMDG and the CTDGR.

14.1	49 CFR (GND): **NOT REGULATED [49 CFR 173.150 (f)(2)]** **NOT REGULATED IN NON-BULK PACKAGINGS HAVING VOLUMETRIC CAPACITY ≤ 450 L (119 U.S. GLS)**
14.2	IATA (AIR): **NOT REGULATED** **NOT REGULATED IN NON-BULK PACKAGINGS HAVING VOLUMETRIC CAPACITY ≤ 450 L (119 U.S. GLS)**
14.3	IMDG (OCN): **NOT REGULATED** **NOT REGULATED IN NON-BULK PACKAGINGS HAVING VOLUMETRIC CAPACITY ≤ 450 L (119 U.S. GLS)**
14.4	TDGR (Canadian GND): **NOT REGULATED**
14.5	ADR/RID (EU): **NOT REGULATED**
14.6	MEXICO (SCT): **NOT REGULATED**
14.7	ADGR (AUS): **NOT REGULATED**

15. REGULATORY INFORMATION

15.1	SARA Reporting Requirements: **This product does not contain any substances subject to SARA reporting requirements.**
15.2	SARA Threshold Planning Quantity: **NA**
15.3	TSCA Inventory Status: **The components of this product are listed on the TSCA inventory.**
15.4	CERCLA Reportable Quantity (RQ): **NA**
15.5	Other Federal Requirements: **NA**
15.6	Other Canadian Regulations **All chemical substances of this product are listed on the CEPA DSL/NDSL or are exempt from list requirements. This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.**
15.7	State Regulatory Information: **NA**
15.8	67/548/EEC (European Union) Requirements: **The primary componentsof this product is not listed in Annex I of EU Directive 67/548/EEC.** **Flammable (F). Risk Phrases (R): 10 - Flammable. Safety Phrases (S): 9-16-33 - Keep container in a well-ventilated place. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.** **Aliphatic petroleum distillates: (Xn) Harmful. Risk Phrases (R): 65 Harmful. May cause lung damage if swallowed.** **WARNING! COMBUSTIBLE LIQUID.** **Hazard Statements (H): H227 – Combustible liquid.** **Precautionary Statements (P): P210 - Keep away from flames and hot surfaces – No Smoking. P280 – Wear protective gloves/eye protection/face protection. P370+P378 – In case of fire, use dry chemical, foam, carbon dioxide or water fog to extinguish fire. P403+P235 – Store in a well-ventilated place. Keep cool. P501 – Dispose of contents/container to an authorized treatment, storage, or disposal facility (TSDF).**

16. OTHER INFORMATION

16.1	Other Information: **NA**
16.2	Terms & Definitions: **Please see last page of this MSDS.**
16.3	Disclaimer: **This Material Safety Data Sheet is offered pursuant to OSHA's Hazard Communication Standard, 29 CFR §1910.1200. Other government regulations must be reviewed for applicability to this product. To the best of ShipMate's & Solpower Corporation's knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness is not guaranteed and no warranties of any type, either expressed or implied, are provided. The information contained herein relates only to the specific product(s). If this product(s) is combined with other materials, all component properties must be considered. Data may be changed from time to time. Be sure to consult the latest edition.**
16.4	Prepared for: **Solpower Corporation** **307 E. 22nd Street** **San Pedro, CA 90731 USA** **Tel: +1 (310) 548-4456** **Technical Support: +1 (818) 865-9176** **www.solpower.com**
16.5	Prepared by: **ShipMate, Inc.** **P.O. Box 787** **Sisters, OR. 97759 USA** **Tel: +1 (310) 370-3600** **Fax: +1 (310) 370-5700** **E-mail: shipmate@shipmate.com** **http://www.shipmate.com/**

MATERIAL SAFETY DATA SHEET

MSDS-001

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, 2001/58 & 1272/2008/EC Standards | MSDS Revision: 3.0 | MSDS Revision Date: 05/15/2012

DEFINITION OF TERMS

A large number of abbreviations and acronyms appear on a MSDS. Some of these that are commonly used include the following:

GENERAL INFORMATION:

CAS No.	Chemical Abstract Service Number

EXPOSURE LIMITS IN AIR:

ACGIH	American Conference on Governmental Industrial Hygienists
TLV	Threshold Limit Value
OSHA	U.S. Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
IDLH	Immediately Dangerous to Life and Health

FIRST AID MEASURES:

CPR	Cardiopulmonary resuscitation - method in which a person whose heart has stopped receives manual chest compressions and breathing to circulate blood and provide oxygen to the body.

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM: HMIS

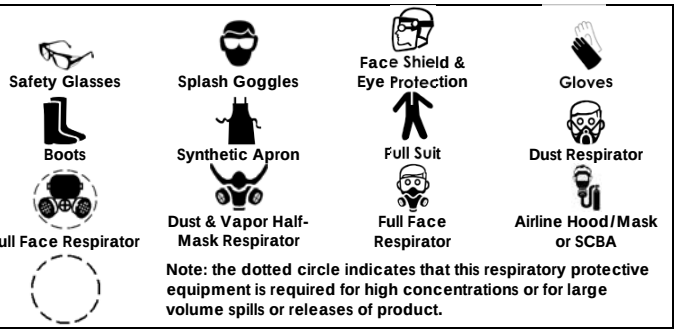
HEALTH, FLAMMABILITY & REACTIVITY RATINGS:

0	Minimal Hazard
1	Slight Hazard
2	Moderate Hazard
3	Severe Hazard
4	Extreme Hazard

HEALTH
FLAMMABILITY
PHYSICAL HAZARDS
PERSONAL PROTECTION

PERSONAL PROTECTION RATINGS:

A	
B	
C	
D	
E	
F	
G	
H	
I	
J	
K	
X	**Consult your supervisor or SOPs for special handling directions.**



Note: the dotted circle indicates that this respiratory protective equipment is required for high concentrations or for large volume spills or releases of product.

OTHER STANDARD ABBREVIATIONS:

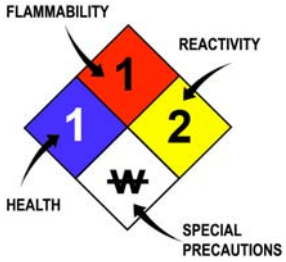
NA	Not Available
NR	No Results
NE	Not Established
ND	Not Determined
ML	Maximum Limit
SCBA	Self-Contained Breathing Apparatus

NATIONAL FIRE PROTECTION ASSOCIATION: NFPA

FLAMMABILITY LIMITS IN AIR:	
Autoignition Temperature	Minimum temperature required to initiate combustion in air with no other source of ignition
LEL	Lower Explosive Limit - lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source
UEL	Upper Explosive Limit - highest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source

HAZARD RATINGS:

0	Minimal Hazard
1	Slight Hazard
2	Moderate Hazard
3	Severe Hazard
4	Extreme Hazard
ACD	Acidic
ALK	Alkaline
COR	Corrosive
W	Use No Water
OX	Oxidizer
TREFOIL	Radioactive



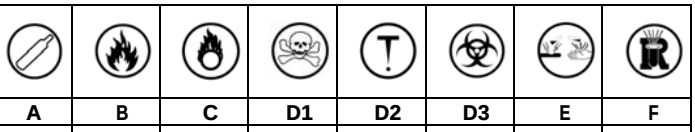
TOXICOLOGICAL INFORMATION:

LD_{50}	Lethal Dose (solids & liquids) which kills 50% of the exposed animals s
LC_{50}	Lethal concentration (gases) which kills 50% of the exposed animal
ppm	Concentration expressed in parts of material per million parts
TD_{lo}	Lowest dose to cause a symptom
TCLo	Lowest concentration to cause a symptom
TD_{lo}, LD_{lo}, & LD_o or TC, TC_o, LC_{lo}, & LC_o	Lowest dose (or concentration) to cause lethal or toxic effects
IARC	International Agency for Research on Cancer
NTP	National Toxicology Program
RTECS	Registry of Toxic Effects of Chemical Substances
BCF	Bioconcentration Factor
TL_m	Median threshold limit
log K_{OW} or log K_{OC}	Coefficient of Oil/Water Distribution

REGULATORY INFORMATION:

WHMIS	Canadian Workplace Hazardous Material Information System
DOT	U.S. Department of Transportation
TC	Transport Canada
EPA	U.S. Environmental Protection Agency
DSL	Canadian Domestic Substance List
NDSL	Canadian Non-Domestic Substance List
PSL	Canadian Priority Substances List
TSCA	U.S. Toxic Substance Control Act
EU	European Union (European Union Directive 67/548/EEC)
WGK	Wassergefährdungsklassen (German Water Hazard Class)

WORKPLACE HAZARDOUS MATERIALS IDENTIFICATION (WHMIS) SYSTEM:

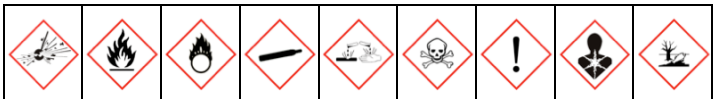


A	B	C	D1	D2	D3	E	F
Compressed	Flammable	Oxidizing	Toxic	Irritation	Infectious	Corrosive	Reactive

EC (67/548/EEC) INFORMATION:

C	E	F	N	O	T+	Xi	Xn
Corrosive	Explosive	Flammable	Harmful	Oxidizing	Toxic	Irritant	Harmful

CLP/GHS (1272/2008/EC) PICTOGRAMS:



GHS01	GHS02	GHS03	GHS04	GHS05	GHS06	GHS07	GHS08	GHS09
Explosive	Flammable	Oxidizer	Pressurized	Corrosive	Toxic	Harmful Irritating	Health Hazard	Environment