MATERIAL SAFETY DATA SHEET

Revised – 29/08/2013

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product: MaxR100
Manufacturer: Trans Bio Energy Company
Address: 1312-D Bunker Ridge Arch, Chesapeake, VA, 23320
Telephone: (613) 724 3755
Emergency: (757) 436 9266

SECTION 11: HAZARDOUS INGREDIENTS /IDENTITY INFORMATION

U.S. OSHA hazard communication standard:
Product assessed in accordance with OSHA 29 CFR 1910.1200 and determined NOT to be HAZARDOUS. The materials in this product are not known to be carcinogenic or contain no greater than 0.1% carcinogenic compounds which would require reporting under OSHA hazard communication standards 29 CFR 1910.1200.

TSCA inventory status:	**All components registered.**
ACGIH:	**Not listed.**
Blending refrigeration oil:	**5mg/M³**
Additive package:	**EP & anti wear proprietary blend – considered to be Trade Secret according to applicable Federal Regulations**

SECTION 111: PHYSICAL & CHEMICAL CHARACTERISTICS

Specific gravity:	**0.993**
Vapor pressure:	**mm Hg 1**
Pour point - ASTM D97:	**-15°C / -5°F**
Vapor density:	**1**
Floc point ASHREA 86:	**-60°C**
Solubility in water:	**Insoluble**
Copper corrosion – ASTM D92:	**1A**
Appearance & odor:	**Wheat; mild oily odor**

SECTION IV: FIRE & EXPLOSION HAZARD DATA

Fire point: - COC:	**157°C / 316°F**
Flammable limits, LEL, UEL:	**Not applicable**
Extinguishing media:	**Carbon dioxide, dry chemicals, foam, fog sand & earth**
Special firefighting procedures:	**Use standard procedures & precautions for oil fire. Avoid spreading with flooding water. Avoid breathing vapors.**

Unusual fire and explosion hazards:	**None – treat as lubricating oil. Stable. No explosion hazard.**
Transportation data:	**NA# 1268; UN# 1268; National Motor Freight**
Classification:	**65**

SECTION V: REACTIVITY DATA

Stability: Stable – typical of lubricating oils; avoid fire / flash point.
Incompatibility (avoid): Strong oxidizing and reducing agents.
Hazardous decomposition or byproducts: When burning, may form carbon monoxide (typical or organic lubricants).
Hazardous polymerization: None known.

SECTION VI: HEALTH AND HAZARD DATA

Inhalation: Possible
Skin: Unlikely
Ingestion: Unlikely
Carcinogenicity: NTP - Not listed; IARC monographs – Not listed; OSHA regulated - No
Health hazards (acute & chronic): As below

Effects of over exposure – conditions to avoid

Eyes – Typical for hydrocarbon lubricants - can cause some transient irritation and burning sensation when splashed in the eye or when the unprotected eyes are exposed to oil mists (see Emergency and First Aid Procedures: See section VIII – Special Protection)

Skin contact – Typical for hydrocarbon lubricants, skin exposure is not likely to result in absorption of harmful amounts. The dermal LD50 has not been determined.

Skin absorption – Typical for hydrocarbon lubricants, prolonged and repeated immersion can cause some transient, burning sensation, de-fatting and dermatitis in some people (see Emergency and First Aid Procedures: See Section VIII – Special protection)

Ingestion – Typical of hydrocarbon lubricants, ingestion of large amounts can result in diarrhea, nausea, cramps and weakness. Avoid conditions leading to aspiration of the ingested material into the lungs. (See Emergency and First Aid Protection)

Inhalation – Typical of hydrocarbon lubricants: mists can cause some transient irritation to upper respiratory tract (See Emergency and First Aid Procedures: See Section VIII – Special Protection)

Emergency and First Aid Procedures

Eyes – Wash eyes immediately for 15 minutes. Consult physician if irritation persists.

Skin – Wash with soap and water after contact. If irritation persists, consult a physician. For high pressure injection under the skin – see physician immediately.

Inhalation – Remove exposed person to fresh air. If a large amount has been inhaled, administer oxygen. If toxic symptoms are observed, get medical attention. If victim has stopped breathing, give artificial respiration.

Ingestion – If swallowed, drink water but do not induce vomiting. Seek medical attention.

SECTION VII: PRECAUTIONS FOR SAFE HANDLING

Steps to be taken in case material is released or spilled – As with typical hydrocarbon lubricants, if material is spilled or released to the environment, steps should be taken to contain liquids and control discharges to streams under conditions acceptable to appropriate local, State and Federal regulatory agencies. Apply absorbent material (e.g. sawdust) and sweep up and place waste in a suitable and properly labeled container for disposal.

Waste disposal method – Disposal must meet all Federal, State and local regulations. Because this is a non-hazardous oil base – recycling should be strongly encouraged. Otherwise, dispose in accordance to regulations appropriate for waste oil. For any questions, contact to specific regulatory agency.

Precautions to be taken in handling and storage – Good safety practices and use precautions typical for other hydrocarbon lubricants.

Other precautions – Keep away from open flames or sparks. Do not weld or heat empty containers. Keep out of reach of children. Keep container closed when not in use. Store in original container. Keep off foodstuffs. Avoid eye contact. Avoid repeated and / or prolonged skin contact. Wash thoroughly after handling. Avoid breathing oil mists.

SECTION VIII: CONTROL MEASURES

Respiratory protection – None normally needed. As with other hydrocarbon lubricants, if respiratory irritation is experienced, review engineering controls to assure adequate ventilation. In emergencies or upsets, use NIOSH approved mist respirator.

Ventilation – Local exhaust – As with hydrocarbon lubricants, use good general ventilation sufficient to prevent respiratory irritation.

Protective gloves – As with other hydrocarbon lubricants and good safety practices, if sensitive skin, it is recommended to use rubber gloves in handling.

Eye protection – As with other hydrocarbon lubricants and good safety practices in an operating plant, it is recommended to wear safety glasses specified for handling hydrocarbon lubricants by the company management in Standard Operating Procedures.

Other protective clothing or equipment – Industrial site clothing is preferred.

Work /hygienic practices – Normal good personal hygiene practices; avoid eye contact; breathing mist; wash hands.

SECTION 1X: TRANSPORTATION

LAND (DOT) : Not Regulated for Land Transport
LAND (TDG) : Not Regulated for Land Transport
SEA (IMDG) : Not Regulated for Sea Transport according to IMDG-Code
AIR (IATA) : Not Regulated for Air Transport