



SAFETY DATA SHEET

MaxR300 Diesel Fuel Enhancer

June, 2014

Prepared to U.S. OSHA, CMA, ANSI, Canadian WHMIS, Australian WorkSafe, Japanese Industrial Standard JIS Z 7250:2000, and European Union REACH Regulations

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: MaxR300
CHEMICAL FAMILY NAME: Diesel Fuel Additive
U.N. DANGEROUS GOODS CLASS: See Section 14
SUPPLIER/MANUFACTURER'S NAME: Trans Bio Energy Company
ADDRESS: 1312-D Bunker Ridge Arch
Chesapeake, VA, 23320
BUSINESS PHONE: (757) 436-9266
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FAX NUMBER: (757) 436-9266
DATE OF PREPARATION: June 06, 2014
DATE OF LAST REVISION: New

SECTION 2 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Product Description: This product is a clear to slight amber colored liquid with a slight solvent odor. **Health Hazards:** Exposure can cause irritation to skin, eyes and respiratory tract. Harmful if swallowed. **Flammability Hazards:** This product contains flammable liquid and vapors. **Reactivity Hazards:** Negligible. **Environmental Hazards:** No information available on the environmental effects of this product. **Emergency Considerations:** Emergency responders must wear the proper personal protective equipment (and have appropriate fire-suppression equipment) suitable for the situation to which they are responding.

US DOT SYMBOLS



CANADA (WHMIS) SYMBOLS



EUROPEAN and (GHS) Hazard Symbols



Signal Word: **Danger!**

EU LABELING AND CLASSIFICATION:

Classification of the substance or mixture according to Regulation (EC) No1272/2008

EC# 265-199-0 Annex 1 Index# 649-356-00-4

EC# 201-148-0 Annex 1 Index# 603-108-00-1



According to European Directive 67/548/EEC

Substances not listed either individually or in group entries must be self-classified.

GHS Classifications:

Carcinogen Category 1B
Flammable Category 2
Skin Irritant Category 2
Eye Damage Category 1
STOT SE Category 3
Reproductive Toxicity Category 2
Aspiration Toxicity Category 1

Label Elements:

Pictogram



Signal Word: **Danger!**

Hazard Statement(s):

H226: Flammable liquid and vapor
H304: May be fatal if swallowed and enters airway
H315: Causes skin irritation
H318: Causes serious eye damage
H332: Harmful if inhaled
H335: May cause respiratory irritation
H336: May cause drowsiness or dizziness
H350: May cause cancer

Precautionary Statement(s):

P264: Wash skin after handling
P281: Use personal protective equipment as required

EU Hazard Classification Per Directive 1999/45/EC:

[F] FLAMMABLE, [Xn] HARMFUL, [Xi] IRRITANT

Risk Phrases: R10, Flammable, R20/21: Harmful by inhalation and in contact with skin, R36/37/38: Irritating to eyes, respiratory system and skin, R41: Risk of serious damage to eyes, R46: May cause heritable genetic damage, R65: Harmful, may cause lung damage if swallowed.

Safety phrases: S24/25: Avoid contact with skin and eyes, S45: In case of accident or if you feel unwell, seek medical attention immediately, S53: Avoid exposure.



HEALTH HAZARDS OR RISKS FROM EXPOSURE:

SYMPTOMS OF OVER-EXPOSURE BY ROUTE OF EXPOSURE

The most significant route of over-exposure for this product is by inhalation, skin contact and eye contact.

INHALATION: Vapors may be irritating to the respiratory tract.

SKIN: Repeated or prolonged contact may cause skin irritation.

EYE CONTACT: Contact may irritate the eyes, resulting in redness or watering. Possible eye damage.

INGESTION: Ingestion may cause gastrointestinal irritation with nausea and diarrhea. Aspiration hazard if swallowed and enters the airway.

HEALTH EFFECTS OR RISKS FROM EXPOSURE: An Explanation in Lay Terms. Over-exposure to this product may cause the following health effects:

ACUTE: Excessive exposure may result in eye, skin or respiratory irritation **CHRONIC:** Skin Dermatitis, may cause cancer

SECTION 3 - COMPOSITION and INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS:	CAS #	EINECS #	ICSC #	WT %	HAZARD CLASSIFICATION; RISK PHRASES
Solvent naphtha (petroleum), light aromatic	64742-95-6	265-199-0	Not Listed	85-90%	HAZARD CLASSIFICATION: Carc. Cat 2, Muta. Cat 2, [Xn] Harmful RISK PHRASES: R45, R46, R65
Isobutyl	78-83-1	201-148-0	0113	5-15%	HAZARD CLASSIFICATION: [Xi] Irritant RISK PHRASES: R37/38, R41
CONSTITUENTS IN CAS# 64742-95-6					
1,2,4-Trimethylbenze	95-63-6	202-436-9	1433	<3.2%	HAZARD CLASSIFICATION: [F] Flammable, [Xn] Harmful, [Xi] Irritant, [N] Dangerous to the Environment RISK PHRASES: R10, R20, R36/37/38, R51/53
Xylene	1330-20-7	215-535-7	Not Listed	<2.2%	HAZARD CLASSIFICATION: [F] Flammable, [Xn] Harmful, [Xi] Irritant RISK PHRASES: R10, R20/21, R38
Cumene	98-82-8	202-704-5	0170	<1.1%	HAZARD CLASSIFICATION: [F] Flammable, [Xn] Harmful, [Xi] Irritant, [N] Dangerous to the Environment RISK PHRASES: R10, R65, R37, R51/53
Balance of other ingredients are non-hazardous or less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers).					

NOTE: ALL WHMIS required information is included in appropriate sections based on the ANSI Z400.1-2004 format. This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR, EU Directives and the Japanese Industrial Standard JIS Z 7250: 2000. See Section 2 for full text of Ingredient Risk Phrases and Safety Phrases.



SECTION 4 - FIRST-AID MEASURES

INHALATION: If chemical is inhaled, or breathing is difficult, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention.

SKIN: Wash contacted area with soap and water. Remove exposed or contaminated clothing, taking care not to contaminate eyes. Seek medical attention if irritation develops and persists.

EYE CONTACT: If chemical contacts the eyes, open victim's eyes while under gentle running water. Use sufficient force to open eyelids. Have victim "roll" eyes. Minimum flushing is for 15 minutes. Remove contact lenses, if worn. Seek medical attention if irritation persists.

INGESTION: If chemical is swallowed, call physician or poison control center for most current information. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Victims of chemical exposure must be taken for medical attention. Rescuers should be taken for medical attention, if necessary. Take a copy of the label and MSDS with the victim to the health professional.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Skin disorders may be aggravated by prolonged overexposures to this product.

RECOMMENDATIONS TO PHYSICIANS: Treat symptoms and reduce over-exposure.

SECTION 5 - FIRE-FIGHTING MEASURES

FLASH POINT: 150°F (65°C)

AUTOIGNITION TEMPERATURE: Not Established

FLAMMABLE LIMITS (in air by volume, %): Lower (LEL): Not Established. Upper (UEL): Not Established.

FIRE EXTINGUISHING MATERIALS: Dry chemical, carbon dioxide, foam. Water spray may be used to keep fire exposed containers cool, dilute spills to non-flammable mixtures.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Above flash point, vapor air mixtures are explosive within flammable limits noted above. Vapor can flow along surfaces to distant ignition sources and flash back. Combustion products include carbon monoxide and carbon dioxide.

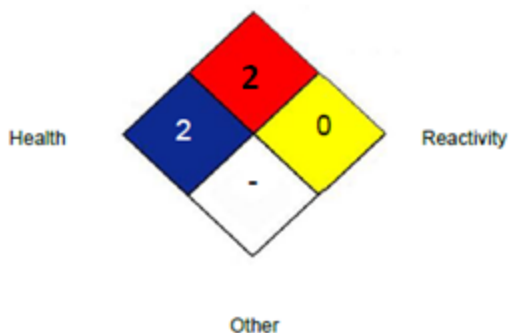
Explosion Sensitivity to Mechanical Impact: Not Sensitive.

Explosion Sensitivity to Static Discharge: Not Sensitive.

SPECIAL FIRE-FIGHTING PROCEDURES: Structural fire-fighters must wear Self-Contained Breathing Apparatus and full protective equipment.



NFPA RATING SYSTEM
Flammability



HMIS RATING SYSTEM

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM	
HEALTH HAZARD (BLUE)	2
FLAMMABILITY HAZARD (RED)	2
PHYSICAL HAZARD (YELLOW)	0
PROTECTIVE EQUIPMENT	
EYES	RESPIRATORY
See Sect. 8	See Sect. 8
HANDS	BODY
See Sect. 8	See Sect. 8
For Routine Industrial Use and Handling Applications	

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate
3 = Serious 4 = Severe * = Chronic hazard

SECTION 6 - ACCIDENTAL RELEASE MEASURES

SPILL RESPONSE:

Trained personnel following pre-planned procedures should handle non-incident releases. Absorb spilled material using polypads or other suitable absorbent material. Place all spill residue in an appropriate container and seal.

Decontaminate the area thoroughly. Do not mix with wastes from other materials. Dispose of in accordance with applicable Federal, State, and local regulatory procedures

SECTION 7 - HANDLING and STORAGE

WORK PRACTICES AND HYGIENE PRACTICES:

Avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product. Avoid breathing vapors generated by this product. Use in a well-ventilated location.

STORAGE AND HANDLING PRACTICES:

Protect against physical damage. Store in a cool, dry well-ventilated location away from heat or ignition sources. Keep out of direct sunlight. Keep containers tightly closed.

SECTION 8 - EXPOSURE CONTROLS - PERSONAL PROTECTION

EXPOSURE LIMITS/GUIDELINES:

Based upon Above listed ingredients

Component Name	CAS Number	ACGIH	OSHA PEL	NIOSH	SWA
Solvent naphtha (petroleum), light aromatic	64742-95-6	5 mg/m ³	5 mg/m ³	5 mg/m ³	5 mg/m ³
Isobutyl	78-83-1	Not Listed	Not Listed	Not Listed	Not Listed
1,2,4-Trimethylbenze	95-63-6	25 ppm	Not Listed	25 ppm	Not Listed
Xylene	1330-20-7	100 ppm	100 ppm	100 ppm	100 ppm
Cumene	98-82-8	50 ppm	Not Listed	50 ppm	Not Listed

Currently, International exposure limits are not established for the components of this product. Please check with competent authority in each country for the most recent limits in place.



VENTILATION AND ENGINEERING CONTROLS: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above. Use local exhaust ventilation, and process enclosure if necessary, to control airborne vapor. Ensure eyewash/safety shower stations are available near areas where this product is used.

RESPIRATORY PROTECTION: A NIOSH approved air-purifying respirator equipped with organic vapor/acid gas cartridge. Use supplied air if hydrogen sulphide is present. Use supplied air respiratory protection if Oxygen levels are below 19.5%, or unknown, during emergency response to a release of this product. If respiratory protection is needed, use only protection authorized in the U.S. Federal OSHA Standard (29 CFR 1910.134), applicable U.S. State regulations, or the Canadian CSA Standard Z94.4-93 and applicable standards of Canadian Provinces. Oxygen levels below 19.16.33% are considered IDLH by OSHA. In such atmospheres, use of a full-facepiece pressure/demand SCBA or a full facepiece, supplied air respirator with auxiliary self-contained air supply is required under OSHA's Respiratory Protection Standard (1910.134-1998).

EYE PROTECTION: Splash goggles or safety glasses with side shields recommended. If necessary, refer to U.S. OSHA 29 CFR 1910.133, Canadian Standards, and the European Standard EN166, Australian Standards, or relevant Japanese Standards.

HAND PROTECTION: Compatible protective gloves recommended. Wash hands after removing gloves. If necessary, refer to U.S. OSHA 29 CFR 1910.138, the European Standard DIN EN 374, the appropriate Standards of Canada, Australian Standards, or relevant Japanese Standards.

BODY PROTECTION: Use body protection appropriate for task. If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards. If a hazard of injury to the feet exists due to falling objects, rolling objects, where objects may pierce the soles of the feet or where employee's feet may be exposed to electrical hazards, use foot protection, as described in U.S. OSHA 29 CFR 1910.136.

SECTION 9 - PHYSICAL and CHEMICAL PROPERTIES

VAPOR DENSITY (AIR = 1):	Not Established
BOILING POINT:	Not Established
FREEZING/MELTING POINT (@ 10 psig):	Not Established
SPECIFIC GRAVITY (air = 1) @ 70°F (21.1°C):	Not Established
pH:	Not Established
SOLUBILITY IN WATER:	Insoluble in water
EVAPORATION RATE (nBuAc = 1):	Not Established
ODOR THRESHOLD:	Not Applicable
VAPOR PRESSURE @ 70°F (21.1°C) (psig):	Not Established
APPEARANCE, ODOR AND COLOR:	Clear to slight amber liquid with a slight solvent odor.

SECTION 10 - STABILITY and REACTIVITY

STABILITY:	Stable
DECOMPOSITION PRODUCTS:	When heated to decomposition, oxides of carbon and asphyxiants are emitted.
CONDITIONS TO AVOID:	Incompatible materials and ignition sources
MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE:	Oxidizing agents.
HAZARDOUS POLYMERIZATION:	Will not occur.



SECTION 11 - TOXICOLOGICAL INFORMATION

TOXICITY DATA:

Acute oral toxicity: Solvent naphtha (petroleum), light aroma. LD50 Oral Rat 8400 mg/kg

SUSPECTED CANCER AGENT:

None of the components are listed as carcinogenic by National Toxicology Program, I.A.R.C. or OSHA tracking the carcinogenic potential of chemical compounds.

CARCINOGENIC EFFECTS: Mixture may contain minor components that may be known to cause cancer or is listed by EU Chemical Commission as a potential cancer causing material.

IRRITANCY OF PRODUCT: This product may irritate skin, respiratory system and eyes

SENSITIZATION OF PRODUCT: This product is not a sensitizer.

REPRODUCTIVE TOXICITY INFORMATION:

Listed below is information concerning the effects of this product on the human reproductive system.

Mutagenicity: Has not been reported to cause mutagenic effects in humans.

Embryotoxicity: Has not been reported to cause embryotoxic effects in humans.

Teratogenicity: Mixture may contain minor components that may cause adverse reproductive and/or developmental effects.

Reproductive Toxicity: An ingredient in this product has been reported to cause adverse reproductive effects in humans.

A mutagen is a chemical which causes permanent changes to genetic material (DNA) such that the changes will propagate through generation lines.

An embryotoxin is a chemical which causes damage to a developing embryo (i.e. within the first eight weeks of pregnancy in humans), but the damage does not propagate across generational lines.

A teratogen is a chemical which causes damage to a developing fetus, but the damage does not propagate across generational lines.

A reproductive toxin is any substance which interferes in any way with the reproductive process.

BIOLOGICAL EXPOSURE INDICES (BEIs):

Currently, Biological Exposure Indices (BEIs) have not been determined for this product.

SECTION 12 - ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

ENVIRONMENTAL FATE: No Data Available

ENVIRONMENTAL TOXICITY: No Data Available.

SECTION 13 - DISPOSAL CONSIDERATIONS

PREPARING WASTES FOR DISPOSAL: Waste disposal must be in accordance with appropriate Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.

RCRA CODE: D001



SECTION 14 - TRANSPORTATION INFORMATION

US DOT, IATA, IMO, ADR:

THIS PRODUCT IS HAZARDOUS AS DEFINED BY THE U.S. DEPARTMENT OF TRANSPORTATION.

PROPER SHIPPING NAME:	Petroleum Distillates, n.o.s (Contains Solvent naphtha (petroleum), light aromatic)
HAZARD CLASS NUMBER and DESCRIPTION:	Class 2 Flammable Liquid
UN IDENTIFICATION NUMBER:	UN1993
PACKING GROUP:	PGII
DOT LABEL(S) REQUIRED:	Flammable Class 2
WARNING	Combustible liquid flash point of 100°F to 200°F
MARINE POLLUTANT:	This product is not classified by the DOT as a Marine Pollutant (as defined by 49 CFR 172.101, Appendix B).

U.S. DEPARTMENT OF TRANSPORTATION (DOT) SHIPPING REGULATIONS:

This product is classified as dangerous goods, per U.S. DOT regulations, under 49 CFR 172.101.

TRANSPORT CANADA, TRANSPORTATION OF DANGEROUS GOODS REGULATIONS:

This product is classified as Dangerous Goods, per regulations of Transport Canada.

INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA):

This product is classified as Dangerous Goods, by rules of IATA:

INTERNATIONAL MARITIME ORGANIZATION (IMO) DESIGNATION:

This product is classified as Dangerous Goods by the International Maritime Organization.

EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR):

This product is classified by the United Nations Economic Commission for Europe to be dangerous goods.

SECTION 15 - REGULATORY INFORMATION

UNITED STATES REGULATIONS

SARA REPORTING REQUIREMENTS:	This product is not subject to the reporting requirements of Sections 302, 304 and 313 of Title III of the Superfund Amendments and Reauthorization Act., as follows: SARA 313: CAS# 95-63-6, CAS# 1330-20-7, CAS# 98-82-8
TSCA:	All components in this product are listed on the US Toxic Substances Control Act (TSCA) inventory of chemicals

SARA 311/312:

Acute Health: Yes **Chronic Health:** Yes **Fire:** Yes **Reactivity:** No

U.S. SARA THRESHOLD PLANNING QUANTITY: There are no specific Threshold Planning Quantities for this gas. The default Federal MSDS submission and inventory requirement filing threshold of 10,000 lb. (4,540 kg) may apply, per 40 CFR 370.20.

U.S. CERCLA REPORTABLE QUANTITY (RQ): CAS# 1330-20-7 100 Lbs., CAS# 98-82-8 5,000 Lbs.

U.S. STATE REGULATORY INFORMATION: This product not listed.



CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): This product does contain a component above the 0.1% level which is listed as a California Proposition 65 chemical. **WARNING:** This product contains an ingredient that is known to the State of California to cause cancer or reproductive harm.

CANADIAN REGULATIONS:

CANADIAN DSL/NDL INVENTORY STATUS: All of the components of this product are on the DSL Inventory

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS: No component of this product is on the CEPA First Priorities Substance Lists.

CANADIAN WHMIS CLASSIFICATION and SYMBOLS: This product is classified as a Class B Division 2 Flammable Liquid and Class D Division 2B Materials having other toxic effects as per the Controlled Product Regulations

EUROPEAN ECONOMIC COMMUNITY INFORMATION:

EU LABELING AND CLASSIFICATION:

Classification of the substance or mixture according to Regulation (EC) No1272/2008. See section 2 for details.

[F] FLAMMABLE, [Xn] HARMFUL, [Xi] IRRITANT

Risk Phrases: R10, Flammable, R20/21: Harmful by inhalation and in contact with skin, R36/37/38: Irritating to eyes, respiratory system and skin, R41: Risk of serious damage to eyes, R46: May cause heritable genetic damage, R65: Harmful, may cause lung damage if swallowed.

Safety Phrases: S24/25: Avoid contact with skin and eyes, S45: In case of accident or if you feel unwell, seek medical attention immediately, S53: Avoid exposure.

AUSTRALIAN INFORMATION FOR PRODUCT:

AUSTRALIAN INVENTORY OF CHEMICAL SUBSTANCES (AICS) STATUS: All components of this product are listed on the AICS.

STANDARD FOR THE UNIFORM SCHEDULING OF DRUGS AND POISONS: Not applicable

JAPANESE INFORMATION FOR PRODUCT:

JAPANESE MINISTER OF INTERNATIONAL TRADE AND INDUSTRY (MITI) STATUS: The components of this product are not listed as Class I Specified Chemical Substances, Class II Specified Chemical Substances, or Designated Chemical Substances by the Japanese MITI.

INTERNATIONAL CHEMICAL INVENTORIES:

Listing of the components on individual country Chemical Inventories is as follows:

Asia-Pac:	Listed or exempt
Australian Inventory of Chemical Substances (AICS):	Listed or exempt
Korean Existing Chemicals List (ECL):	Listed or exempt
Japanese Existing National Inventory of Chemical Substances (ENCS):	Listed or exempt
Philippines Inventory of Chemicals and Chemical Substances (PICCS):	Listed or exempt
Swiss Giftliste List of Toxic Substances:	Listed or exempt
U.S. TSCA:	Listed or exempt



SECTION 16 - OTHER INFORMATION

PREPARED BY: Mike Dyson

MSDS Authoring PLUS

Disclaimer: The information in this MSDS relates to the product as sold, and to the best of our knowledge, such information is believed to be accurate and reliable at the time this document was prepared. However, no representation, warranty, or guarantee, either expressed or implied, is made as to its accuracy, reliability, or completeness. It is the responsibility of the user of this product to determine if this product is suitable for their intended purpose, to include both safety and regulatory perspectives.