Racor Division of Parker Hannifin
MATERIAL SAFETY DATA SHEET

Racor Diesel Biocide

Part Number(s):
ADT 2116 (16 oz.)
ADT 2201 (1 gal.)
ADT 2405 (5 gal.)
ADT 2555 (55 gal.)

Revision date: 11/3/2006

Phone 1-800-344-3286

Racor Division
3400 Finch Rd.
Modesto, CA 95354

24 Hour Emergency Phone: (800) 535-5053

SECTION 1 — *OSHA HAZARD CLASSIFICATIONS*

Toxic if swallowed. Combustible. Highly toxic by inhalation of mist. Corrosive to eyes and skin. Sensitizer.

SECTION 2 — *HAZARDOUS COMPONENTS*

Chemical Name	*CAS Number*	*% by Weight*	*TLV*
Diethylene glycol monomethyl ether	111-77-3	86	Not available.

Racor reports the component(s) listed above as known OSHA hazardous material(s) contained in this product.

SECTION 3 — *FIRST AID INFORMATION*

Eye Exposure: **Flush immediately with copious amounts of tap water or normal saline (minimum of 15 minutes). Take exposed individual to a health care professional, preferably an ophthalmologist, for further evaluation.**

Skin Exposure: **Wash exposed area with plenty of water. Repeat washing. Remove contaminated clothing and wash thoroughly before reuse. If irritation persists consult a health care professional.**

Inhalation: **If exposure by inhalation is suspected, immediately move exposed individual to fresh air. If individual experiences nausea, headache, dizziness, has difficulty in breathing or is cyanotic, seek a health care professional immediately.**

Ingestion: **DO NOT INDUCE VOMITING. Rinse with copious amounts of water or milk, first. Irrigate the esophagus and dilute stomach contents by slowly giving one (1) to two (2) glasses of water or milk. Avoid giving alcohol or alcohol related products. In cases where the individual is semi-comatose, comatose or convulsing, DO NOT GIVE FLUIDS BY MOUTH. In case of intentional ingestion of the product seek medical assistance immediately; take individual to nearest medical facility.**

SECTION 4 — *PRIMARY ROUTES OF EXPOSURE*

1. Effects from Acute Exposure:

Eye Exposure: **Very hazardous in case of eye contact (irritant, corrosive). Inflammation of the eye is characterized by redness, watering, and itching.**

Skin Exposure: **Very hazardous in case of skin contact (sensitizer). Hazardous in case of skin contact (corrosive, irritant). Skin contact may produce burns. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.**

Inhalation: **May be harmful if inhaled. Do not breathe spray mists of the undiluted product. Effects will depend upon solution strength and length of time of exposure.**

Ingestion: **Ingestion is not expected to be a primary route of exposure.**

2. Effects from Chronic Exposure:

Chronic feeding studies on the active ingredient did not reveal any significant adverse effects.

SECTION 5 *Toxicological Information*

Acute Effects:

Not tested. Expected to be toxic by oral ingestion, non-toxic by dermal exposure and highly toxic by inhalation of mists.

Irritant / Sensitization Effects:

Very hazardous in case of eye contact (irritant, corrosive). Inflammation of the eye is characterized by redness, watering, and itching.
Very hazardous in case of skin contact (sensitizer). Hazardous in case of skin contact (corrosive, irritant). Skin contact may produce burns. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.
May be harmful if inhaled. Do not breathe spray mists of the undiluted product. Effects will depend upon solution strength and length of time of exposure.

Carcinogenic Potential:

Not tested by Racor . Not shown as a carcinogen by OSHA, IARC, or NTP.
Mutagenicity testing and 52-week rat studies on the active ingredients show no evidence of carcinogenic effects.

Target Organs Effects:

May cause damage to the following organs: upper respiratory tract, skin, eyes.

Other Health Effects:

Inhalation toxicity was conducted with the technical grade material under misting conditions with a 4-hour exposure under controlled misting conditions. Normal use of this product under non-misting conditions should not present an occupational hazard.

SECTION 6 *Environmental Toxicological Information*

No information available.

SECTION 7 *Physical and Chemical Properties*

Appearance	**Clear amber liquid**
Odor	**Slight.**
Density	**1.03 g/cm^3**
Flash Point	**Closed cup: 70°C (158°F). (Tagliabue.)**
Melting/Freezing Point	**<-30°C (-22°F)**
Boiling Point	**>100°C (212°F)**
Solubility	**Dispersible in cold water. Dispersible in hot water.**
pH (Neat)	**Not available.**
pH (100 ppm in water)	**6 - 7**
Vapor Pressure	**Not available.**
o/w Partition Coefficient	**Not available.**
Oxidizing/Reducing Properties	**Not available.**
Viscosity	**Not available.**

Additional pH Information ..... **Not available.**

NOTE: The physical data presented above are typical values and should not be construed as specifications.

SECTION 8 *Fire and Explosion Information*

Flammable Limits ..... **Not available.**

Extinguishing Media ..... **Water fog, carbon dioxide, foam, dry chemical.**

Special Firefighting Procedures ..... **Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.**

SECTION 9 *Reactivity Information*

Stability ..... **Do not heat and/or store above 50C as decomposition may increase packaging pressure.**

Incompatibility ..... **Strong acids, strong oxidizers, strong bases. Extended heating at high temperatures.**

Hazardous Decomposition Products ..... **Cyanide salts are formed when product contacts strong alkali. Thermal decomposition of product can produce toxic vapors of hydrogen cyanide and sulfur dioxide. Contact with fire may generate oxides or sulfur, nitrogen and carbon.**

SECTION 10 *Handling Precautions*

Rubber gloves, safety glasses or goggles and body protective clothing and shoes are required.
When splashing can occur, a neoprene apron or neoprene rain suit and a face shield are advisable.
Eye-wash fountains in the work place are strongly recommended.
Respiratory protection is required for work areas where misting may occur. A comprehensive respiratory protection program is needed when respirators must be used.
The handling precautions for this product are based on the characteristics of the neat product unless otherwise specified.

SECTION 11 *Satisfactory Materials of Construction*

304 Stainless steel
316 Stainless steel
Aluminum 5052 H34
Polyethylene - crosslink
Polyethylene - high density
Polyethylene - low density
Polypropylene
Rehau Tubing
Neoprene
Silicone rubber
6/6 Nylon
Teflon
Pharmed Tubing
FRP
Norprene
Dow Sillastic Tube
NOTE: With respect to all other materials not listed above, user should be aware that use of such materials with this product may be hazardous and result in damages to such materials and other property and personal injuries. No data concerning such materials not listed above should be implied by the user.

SECTION 12 ***Spill, Leak, and Disposal Procedures***

SPILL AND LEAK RESPONSE GUIDELINES:

Important: Before responding to a spill or leak of this product, review each section of this MSDS. Follow the recommendations given in the Handling Precautions sections. Check the Fire and Explosion Data section to determine if the use of non-sparking tools is merited. Insure that spilled or leaked product does not come into contact with materials listed as incompatible. If irritating fumes are present, consider evacuation of enclosed areas.

Initially minimize area affected by the spill or leak. Block any potential routes to water systems (e.g., sewers, streams, lakes, etc.). Based on the product's toxicological and chemical properties, and on the size and location of the spill or leak, assess the impact on contaminated environments (e.g. water systems, ground, air equipment, etc.). There are no methods available to completely eliminate any toxicity this product may have on aquatic environments. Minimize adverse effects on these environments. Buckman Laboratories, Inc. can be contacted for technical assistance. Determine if federal, state, and/or local release notification is required (see Regulatory Classifications section of this MSDS). Recover as much of the pure product as possible into appropriate containers. Later, determine if this recovered product can be used for its intended purpose. Address clean-up of contaminated environments. Spill or leak residuals may have to be collected and disposed of. Clay, soil, or commercially available absorbents may be used to recover any material that can not readily be recovered as pure product. Flushing residual material to an industrial sewer, if present at the site of a spill or leak incident, may be acceptable if authorized approval is obtained. If product and/or spill/leak residuals are flushed to an industrial sewer, insure that they do not come into contact with incompatible materials. Contact the person(s) responsible for the operation of your facility's industrial sewer system prior to intentionally flushing or pumping spills or leaks of this product to the industrial sewer.

DISPOSAL GUIDELINES

Note: Follow federal, state, and local regulations governing the disposal of waste materials.

Neat Product: Contact your Racor representative or Racor at (800) 535-5053.

Contaminated Materials: Determine if waste containing this product can be handled by available industrial effluent system or other on-site waste management unit. If off-site management is required, contact a company experienced in industrial waste management. This product is not specifically listed in 40 CFR 261 as a Resource Conservation and Recovery Act (RCRA) hazardous waste. However, spill or leak residuals may meet the criteria of a characteristic hazardous waste under this Act. Check the characteristics of the material to be disposed of and/or the physical and reactivity data given in this MSDS for the neat product.

Container Disposal: Empty containers, as defined by appropriate sections of the RCRA, are not RCRA hazardous wastes. However, insure proper management of any residuals remaining in container.

SECTION 13 ***Transportation and Shipping Information***

DOT Shipping Information:

UN2922 , CORROSIVE LIQUID, TOXIC, N.O.S., (2-(Thiocyanomethylthio)benzothiazole, Methylene bis(thiocyanate)) , Class 8, (6.1), P.G. III , (ERG Guide 154)

IMO/IMDG Shipping Information:

UN2922 , CORROSIVE LIQUID, TOXIC, N.O.S., (2-(Thiocyanomethylthio)benzothiazole, Methylene bis(thiocyanate)) , Class 8, (6.1), P.G. III , MARINE POLLUTANT (EmS No. F-A, S-B , ERG Guide 154, HazMat Code 4936015)

IATA Shipping Information:

UN2922 , CORROSIVE LIQUID, TOXIC, N.O.S., (2-(Thiocyanomethylthio)benzothiazole, Methylene bis(thiocyanate)) , Class 8, (6.1), P.G. III , (ERG Guide 154, ERG Code 8P)

Unless otherwise stated, the shipping information provided above applies only to non-bulk containers of this product. Proper shipping name and general shipping information may vary depending on packaging and mode of shipment. All products shipped from Buckman locations have been properly packaged and labeled according to appropriate hazardous materials shipping regulations. If any alteration of packaging, product, or mode of transportation is further intended, different shipping information, including but not limited to proper shipping name, RQ designation, and labeling may apply. For further information pertaining to the shipping requirements for this product, contact Racor's Shipping Department

SECTION 14 ***Regulatory Information***

The following Regulations are known to apply to the use and disposal of this product. Additional Federal, State and Local regulations may also be applicable.

SARA (Superfund Amendments and Reauthorization Act)

SARA 302 Extremely Hazardous Substances List ...

No components of this product are listed.

SARA 312 Hazard Category ...

Fire Hazard, Immediate (Acute) Health Hazard

SARA 313 Toxic Chemicals List ...

This product contains the following toxic chemical(s) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372 :

Diethylene glycol monomethyl ether

CERCLA (Comprehensive Environmental Response, Compensation and Liability Act)

No components of this product are present above the *de minimus* levels.

RCRA (Resource Conversation and Recovery Act) Listed Hazardous Waste

No components of this product are listed.

CWA (Clean Water Act) Listed Substances

No components of this product are listed.

FDA (Food and Drug Administration)

This product is approved under the following FDA (21 CFR) sections : 176.300.

TSCA (Toxic Substances Control Act) Applicability

All components may not be listed on the TSCA Inventory. Registered pesticides are exempt from the requirements of TSCA.

FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act)

This product is a registered pesticide. EPA Reg. No. 1448-171

HMIS/NPCA Rating ... Health **3** Flammability **2** Reactivity **1**

NFPA Ratings ..... Health **3** Flammability **2** Reactivity **1**

State Regulations

Various State Right To Know Acts ...

Non-proprietary hazardous chemicals are listed in Section 2 of this MSDS. Should you require further information on specific proprietary or inert ingredients please contact Buckman Laboratories' Regulatory Affairs Department.

The information on this Material Safety Data Sheet reflects the latest information and data that we have on hazards, properties, and handling of this product under the recommended conditions of use. Any use of this product or method of application which is not described in the Data Sheet is the responsibility of the user. This Material Data Safety Sheet was prepared to comply with the OSHA Hazard Communication regulations. While some components are claimed Trade Secret under OSHA Hazard Communication regulations, all known OSHA hazards associated with the Trade Secret component(s), if contained in this product, are fully disclosed.

Buckman Laboratories, Inc. warrants that this product conforms to its chemical description and is reasonably fit for the purpose referred to in the directions for use when used in accordance with the directions under normal conditions. Buyer assumes the risk of any use contrary to such directions.

Seller makes no other warranty or representation of any kind, express or implied, concerning the product, including NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS OF THE GOODS FOR ANY OTHER PARTICULAR PURPOSE. No such warranties shall be implied by law and no agent of seller is authorized to alter this warranty in any way except in writing with a specific reference to this warranty.

The exclusive remedy against seller shall be in a claim for damages not to exceed the purchase price of the product, without

regard to whether such a claim is based upon breach of warranty or tort.

Any controversy or claim arising out or relating to this contract, or breach thereof, shall be settle by arbitration in accordance with the commercial arbitration rules of the American Arbitration Association, and judgement upon the rendered by the Arbitrator(s) may be entered in any court having jurisdiction thereof.